



ENVISIONING AND PRACTICING SUSTAINABILITY TRANSITIONS

A CROSS-CASE COMPARISON
OF FIVE DUTCH ECOVILLAGES

Msc thesis research project
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**INDUSTRIAL
ECOLOGY**
INNOVATIVE BY NATURE

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Dutch Research Institute for Transitions
Erasmus

Envisioning and practicing sustainability transitions

A cross-case comparison of five Dutch ecovillages

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Figure on front page: ecovillage Ithaca, source: <http://ecovillageithaca.org/live/neighborhoods/>

EXECUTIVE SUMMARY

With their holistic approach to creating a sustainable society, ecovillages can demonstrate the multidimensional challenges that mainstream society will face when aspiring to accomplish similar decrease in environmental impact. In ecovillages, the inhabitants attempt to implement a new paradigm of sustainability, community and empowerment, they can therefore give insight into the human dimensions of a sustainable society. The experiences of ecovillages with new types of governance structures, decision-making methods and tools for communication and collaboration seem important to societal and sustainability transitions.

In this thesis ecovillages are studied as social innovation initiatives, addressing the following research question: *“How do Dutch ecovillages envision and practice sustainability transitions, and what tools are used for collaboration, communication and decision-making to realise their community ambitions?”* Frameworks are developed, based on a literature review, to conceptualise and analyse the vision and practices in ecovillages, and their implications for sustainability transitions. The conceptual framework is based on transformative social innovation theory and adds elements of other vision theories. Transformative social innovation is understood as a change in social relations, involving new ways of doing, organising, framing and knowing, as well as challenging, altering or replacing existing institutions. The effects of a vision on the actions of an initiative are conceptualised as motivation, inspiration and direction. Reflection on vision and actions are analysed in terms of interpretative flexibility and adaptive capacity. The transformative impact of an ecovillage on its social context is qualitatively analysed on the levels of ambition, potential and actual impact.

Empirically, this thesis builds on a comparison of five case-studies of Dutch ecovillages. These case-studies are based on two in-depth, qualitative interviews per case-study, a discussion session at the Dutch ecovillage network event and document review. The analytical framework is applied to analyse how their vision and actions are interrelated and how the initiatives view their transformative impact in terms of ambition, potential and impact. The focus is placed on their tools for collaboration, communication and decision-making. After the case-study data analysis a cross -case comparison is made and the empirical findings are discussed.

Through the empirical research and discussion, an answer to the research question can be given: First, the cases have varying methods for decision-making and different organisational structures, e.g. sociocracy or holarchy. They ascribe similar positive effects like fairness, equality and high involvement to these methods but they lay a different emphasis on aspects like either efficiency and goal-oriented structures or active, positive attitudes and full support of decisions. All cases run into some issues when implementing their decision-making method. For instance, truly following the strict meeting structures, remaining issues of power and peer pressure and long and frequent meetings.

Second, it can be said that Dutch ecovillages employ different manners of envisioning; utilising their vision in the decision-making process in different ways and having different processes of developing their vision. Some cases use their vision very directly by checking all proposals to the vision, others only reflect unconsciously on the vision. Regarding the development of the vision, there seem to be two different ways practiced. In some cases the vision was developed by the initiators before they looked

for the rest of their group and in these cases the vision is not much open for change or reformulation. Other cases change and develop their vision over time based on experiences or with new group compositions.

Third, it can be stated that the cases have different tools for collaboration and communication and they have varying opinions about these tools. All ascribe positive effects to meeting tools like a facilitator, specific meeting structures and methods like non-violent communication. Not all cases value personal development or group connection practices.

The cases view their impact on sustainability transitions differently. First, one of the cases did not at all have the ambition to actively work on their transformative impact on society. Of the other cases, some had this ambition, but did not include it in their vision and again others had this ambition and included it explicitly in their vision. Second, all cases ascribe transformative potential to their practices. For example, all said that their experiments with new decision-making methods and organisational structures, as well as with tools for communication and collaboration, offer important experiences that can be useful to governments and companies. On top of this, the cases all view that their projects have the potential to inspire many individuals to change their way of life towards sustainability. Third, some of the cases view they have already had transformative impacts, in the form of elements of their ecovillage being adopted by companies, building methods being replicated in the mainstream building sector as well as more acknowledgement by institutions, more media attention and local governments being more open to collaboration with citizen-initiated initiatives for sustainable living.

The relevance of the social innovations practiced in Dutch ecovillages to sustainability transitions are multiple:

First, from my empirical findings it can be stated that Dutch ecovillages view they have already had transformative impacts, in the form of elements of their ecovillage being adopted by companies, building methods being replicated in the mainstream building sector and local governments being more open to collaboration with innovative, citizen-initiated initiatives for sustainable living.

Second, the social innovation experiments with new decision-making methods and organisational structures, as well as with tools for communication and collaboration, offer important experiences that can be useful to governments and companies and correlate with their recent increased interest in participatory and more co-produced processes.

Third, ecovillages recognize that their visions and the success of translating these to actions and a physical reality have reinforced their believes that their ideals can solve many issues in society, which makes them relevant examples for sustainable development.

Fourth, ecovillages can function as kickstarter to other innovative, sustainable companies or technologies. Also, scaling up ecovillages can allow more citizens to live sustainably as well as enhances the chance of ecovillage practices being adopted by companies and governments.

Lastly, ecovillages have the potential to inspire many individuals to change their way of life towards sustainability.

Future research recommendations are made based on the findings and on the analytical framework that is developed in for this research. For the research questions recommended, quantitative research or research involving participant observation is necessary. For example to study if the decision-making methods and organisational structures employed actually lead to more effectiveness, equality and involvement. In view of my analytical framework, there are two aspects to this framework which can be explored more in future research, regarding Dutch ecovillages and other niche innovations. First, in-depth research into the relation between the vision and the practices and the feedback between the two would be valuable. In this case, looking also at failed initiatives will provide valuable evidence for which methods are most succesful. Second, quantitative research into the transformative impact and potential of ecovillages would be valuable to better understand the role of ecovillages in sustainability transitions. Once this role is more clear, actions can be undertaken to further support the influence of ecovillages on creating more sustainability in society. More questions and topics for future research are recommended in the discussion section.

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1. INTRODUCTION

CONTEXT

Over the past decades an increasing amount of scientific evidence has shown the threats of resource extraction, greenhouse gas emissions and climate change to human society as we know it. Biodiversity loss, groundwater contamination, soil pollution and extreme weather events are signs of our society facing severe threats for future continuation (Vitousek et al., 1997). On top of this, economic crises are showing flaws in our economic system and civil protests are demonstrating dissatisfaction with governments, while depression, loneliness and detachment are plaguing individuals. This all shows that the global society is in need of change if we wish to ensure a good future for generations to come. Where in the past mostly eco-efficiency optimisations were deemed necessary to achieve change, there is now a broader understanding that achieving a sustainable society requires a fundamental and systemic change in institutions and structures, i.e. a sustainability transition (Haxeltine et al., 2016). Sustainable development in the form of transitions is acknowledged as the course of action by many governments and policy goals have been set to stimulate this transition (UN, 2016; Rijksoverheid, 2016).

With their holistic approach to creating a sustainable society, ecovillages can demonstrate the multidimensional challenges that mainstream society will face when aspiring to accomplish similar decrease in impact (Boyer, 2016). Sustainability is the ultimate goal in all their activities; they are literally being the change they seek in the world (Ergas, 2010). The experiences of ecovillages with new types of governance structures, decision-making methods and tools for communication and group connection seem important to societal and sustainability transitions. Ecovillages are a relatively young concept, with research only starting from 2000 and no existing academic research on Dutch ecovillages (Wagner, 2012). This makes the topic highly relevant for transition research, both because of their potential for offering holistically sustainable solutions and because little research currently exists.

In academic literature social innovations are identified as crucial to achieving a sustainability transition. Former EU president Barroso acknowledges that “*if encouraged and valued, social innovation can bring immediate solutions to the pressing social issues citizens are confronted with*” (Hubert, 2012, vi). All around the world social innovation initiatives are started by citizens exploring new ways of working and organising human life as well as trying out new social relations and social values (Kemp et al., 2015, pg. 11). Academic research can help with enabling transition by performing empirical studies of social innovation initiatives. A key to understanding these initiatives may lie in the concept known as Transformative Social Innovation (TSI). TSI is described as “*a process of change in social relations, involving new ways of doing, organising, framing and/or knowing, that challenge, alter and/or replace dominant institutions and structures*” (Haxeltine et al., 2016a, pg. 5). Understanding of the conditions under which social innovations can contribute to transformative change is deemed vital to enabling transition (Kemp et al., 2015). TSI theory in combination with other transition theories can help me in researching innovations in Dutch ecovillages and their potential contribution to the societal transition to sustainability.

“Social innovations are interesting because they are based on different ways of doing, thinking and interaction which may hold answers to the challenges in society, ...” (Kemp et al., 2015, pg. 7)

This thesis is written as part of the master program Industrial Ecology. The field of Industrial Ecology (IE) attempts to provide a new conceptual framework for understanding the impacts of industrial systems on the environment (Garner and Keoleian, 1995). With this new framework, strategies to reduce the environmental impact of products and processes associated with industrial systems can be identified and implemented with the ultimate goal of sustainable development. The field of IE is relatively young and still broadening. So far, there has been a strong emphasis on top-down, technology-driven perspectives on sustainability. Recently, a need for understanding of bottom-up initiatives and an integration of social sciences in their approach to sustainable development has been acknowledged (Tukker et al., 2010). By studying social innovation in ecovillages to identify their potential relevance to sustainability development, I am answering to this gap.

Tukker et al. (2010, pg. 13) emphasize that *“research on the formulation and implementation of effective change management for sustainable consumption should be treated as an area of priority attention for industrial ecologists”*.

My thesis research is performed at the Dutch research institute for transitions (Drift). Drift is coordinating the European research project called TRANSIT. The TRANSIT project is aimed at improving our understanding of how social innovation can help achieve empowerment and societal transformation. They try to accomplish this by developing a theory for transformative social innovation and carrying out in-depth case-studies of twenty transnational networks of social innovation initiatives and 80 local social innovation initiatives. At Drift, dr. Flor Avelino acts as my supervisor. Dr. ir. Jaco Quist is my supervisor from the TU Delft, faculty of Technology, Policy and Management, with dr. ir. Udo Pesch from the same faculty as my second supervisor.

ECOVILLAGES

The Global Ecovillage Network (GEN) provides a definition for an ecovillage, saying that: *“an ecovillage is an intentional or traditional community using local participatory processes to holistically integrate ecological, economic, social, and cultural dimensions of sustainability in order to regenerate social and natural environments”*. The term ecovillage appeared since the 1990s, with research papers starting only in the 2000s. Quoting the ECOVILLAGES research project, Wagner (2012, pg. 127) states that *“Ecovillages can be seen as an alternative to the individualistic, consumerist and commodified systems that many cities currently are”*.

The motivation for initiators and inhabitants of ecovillages is their decision and committal to reverse the current disintegration of supportive social/cultural structures and to stop the rise of environmentally degrading practices of modern society (GEN, 2016). Ecovillages embrace *“a holistic approach to sustainability encompassing the Social, Cultural, Ecological and Economic dimensions of human existence”* (ibid).

Ecovillages have a much lower environmental impact than the current standard. For example, consumption at Dancing Rabbit ecovillage is less than 10% of the national American average (Boyer, 2016). Ecovillages also offer an alternative way of living together in a close community, which can help relieve negative effects of the disintegration of supportive social/cultural structures in western countries. Many mental and physical health dysfunctions, amongst which depression is most apparent, have been associated with loneliness and social relationship deficits (Tiikkainen & Heikkinen, 2005; Blai, 2010; Heinrich & Gullone, 2006). Evidence has also shown that ways of self-organisation and decision-making implemented in ecovillages lead to higher human productivity and organisational well-being (Pel et al., 2016).

RELEVANCE AND RESEARCH GAPS

One of the current obstacles to wide-spread sustainable development is thought to be the gap between knowledge and action: despite a high degree of knowledge about sustainable techniques and awareness of unsustainable lifeforms, lifestyle patterns and economic structures remain unchanged (Kunze, 2012). Ecovillages provide experiments of knowledge being turned into direct action and can therefore provide relevant lessons for society. More importantly, they can provide insight in how to translate a vision into action. In ecovillages, the inhabitants attempt to implement a new paradigm, of sustainability, community and empowerment, they can therefore also give insight into the human dimensions of a sustainable society (Schyndel Kasper, 2008).

One of the most important innovation of ecovillages is deemed to be their integration of multiple (social) innovations, which has enabled the possibility of a holistically sustainable community. According to Boyer (2016) & Kunze (2012), ecovillages present an excellent research field to study how existing innovations are combined in a holistic community through social innovations such as collective governance, consensus decision-making and individual empowerment. Through collective ownership the governance structures and social principles are different from mainstream practices and enable sustainable innovation implementations which otherwise would not have an equal impact. Collective ownership can be more successful if a well-functioning governance system is in place, which is better achievable if participators have the necessary (social) skills and competences. This would mean that potential for sustainable living resides in human cooperation and empathy (Boyer, 2016). Successful collective and equal decision-making depends on system-innovation in ownership structures and on social tools for conflict resolution (Kunze & Avelino, 2015a). This demonstrates the importance of social innovations for achieving a sustainability transition and the relevance of ecovillage research.

“The most significant innovation of the ecovillage movement seems to be their space of ‘holistic laboratories’ because synergies between branches like ecology and governance, agriculture and community building, as well as personal growth and economy can create new innovations.” (Kunze & Avelino, 2015b, pg. 5)

In current ecovillage literature little to no research exists on how ecovillages translate their visions into actions. There is also little research into their organisational structures and methods for communication, decision-making, self-development or group connection and the effects they experience because of these. Boyer (2015; 2016), Schyndel Kasper (2008) and Kunze (2012) all provide a short overview of some meeting practices and conflict resolution methods, but more elaboration is needed. The methods and practices do hold great potential to contribute to societal transformation since, as Kunze (2012) and Boyer (2015) point out, especially social innovations are needed to achieve a sustainability transition.

Pickerell (2012) points at the lack of open discussion about failure or negative effects of eco-initiatives or specific techniques they apply. Most studies focus on the potential of eco-initiatives for sustainable development, without mentioning the barriers these initiatives faced when they were implementing their innovations. Innovation studies also provide little feedback to the social innovation initiatives they studied. I believe initiatives can benefit from the research performed on social innovation and transitions. A research gap presents itself here in the form of providing information on difficulties in ecovillages and providing feedback to the initiatives under study.

A last research gap is more theoretical and concerns the existing frameworks with

which empirical phenomena of transition and social innovation are studied. A better understanding of the social dimensions to sustainability and what role the vision plays in decision-making and actions of innovation initiatives is valuable. This role of the vision is not included in existing frameworks, although the TRANSIT project includes this in their ongoing research on narratives of change and critical turning points of local initiatives (Haxeltine et al., 2016a).



Figure 1.1 Combining the research relevance, gaps and opportunity into a research question (own image).

RESEARCH QUESTION

To address the research gaps, relevance and opportunity summarized in figure 1.1, I formulated a research question and sub-questions for my master thesis project. I believe that by answering the research question I will be able to provide applicable knowledge from experimental places. This knowledge can inform other organisations and policy makers, inspire individuals and organisations and serve as feedback for the ecovillages.

How do Dutch ecovillages envision and practice sustainability transitions, and what tools are used for collaboration, communication and decision-making to realise their community ambitions?

1. How can I study the envisioning and practicing of sustainability transitions in Dutch ecovillages?
2. What are the narratives and visions of Dutch ecovillages and which tools for collaboration, communication and decision-making do they employ?
3. How are the visions and practices of Dutch ecovillages related?
4. How do Dutch ecovillages view their sustainability transition impact?
5. What are differences and similarities between Dutch ecovillages in terms of their envisioning and practicing of sustainability transitions?

SCOPE AND BOUNDARIES

Since the focus of my analysis lies on Dutch ecovillages, the scope of my research is restricted to the Netherlands. A qualitative approach to the research will be taken, which will allow for an open investigation and the process of gathering and evaluating information is not strictly linear. Many case-studies into ecovillages are qualitative in their nature (e.g. Boyer, 2015; 2016; Kunze, 2012; Schyndel Kasper, 2010; Ergas, 2010). I will focus on established ecovillages and I will leave out ecovillage initiatives that have nothing physical in place. I will focus on social innovations and I will therefore not study their technical innovations or quantitatively analyse their sustainability performance.



2. LITERATURE REVIEW

In search for an answer to my first sub question “*How can I study the envisioning and practicing of sustainability transitions in Dutch ecovillages?*” I performed a literature review on transition- and ecovillage literature. This chapter presents the main findings from this literature review and provides some reflections on the usefulness of different theories and frameworks for my research.

The chapter begins with a review of the concepts of societal transition and social innovation, as these are central elements in my thesis research. This is followed by an analysis of the transformative social innovation framework which is developed in the TRANSIT project. After this, I reflect on the usefulness of several other frameworks and theories with which transitions are often studied and compare them to the framework developed in the TRANSIT project. My literature review then continues with a review and comparison of the concepts of visions and narratives in transition literature. The chapter is concluded with a review of existing ecovillage literature.

SOCIETAL TRANSITIONS

The concept of sustainable development was officially inaugurated with the 'Agenda 21' at the UN Earth Summit in 1992. It portrayed a global commitment to changing our current, unsustainable society. In recent years there has been a shift in emphasis of the concept of sustainable development; changing from eco-efficiency optimization work to an understanding that achieving a sustainable society requires a fundamental and systemic change in institutions and structures. In other words, a societal transition. A common agreement in transition studies is that the current persistent problems are symptoms of an unsustainable society where the challenges are interlinked and run through all our social and economic systems. To be able to successfully deal with these problems transformative change and ultimately a societal transition towards sustainability is deemed necessary (Grin et al., 2010).

Transition theory is the leading approach to understand and study societal transformations. A transition is defined as *"a nonlinear processes of social change in which a societal system is structurally transformed"* (Grin et al., 2010; de Haan & Rotmans, 2011; Geels & Schot, 2007; Loorbach, 2007). Grin et al. (2010, pg. 4) argue that a transition is the result of co-evolution: *"when the interaction between societal subsystems influences the dynamics of individual subsystems, leading to irreversible patterns of change"*. Transitions are said to be decentral responses to persistent, complex problems that are the result of flaws in societal structures (Rotmans and Loorbach, 2009). A transition does not necessarily have to result in a sustainable society, therefore, Grin et al. (2010, pg. 1) define a 'sustainability transition' as a *"radical transformation towards a sustainable society as a response to a number of persistent problems confronting contemporary modern societies"*.

"A transition creates a new standard, a new 'normal', which can either replace or co-exist with an old 'normal'" (Kemp et al., 2015, pg. 5).

Both societal transition and system innovation refer to a transformation at higher levels of aggregation than a regular innovation, like a new product or technology. These 'higher' innovations involve changes in the structural and institutional conditions, which allow new innovations to become embedded in a broader societal context (Avelino, 2011). There is a difference between system innovations and societal transitions: where system innovation refers to transformations within specific subsystems of a society, an actual transition consists of several system innovations at different levels in society and happens over a longer period of time (Loorbach & Rotmans, 2010).

Grin et al. (2010) identify five characteristics of transitions: 1) Transitions are co-evolutionary processes requiring multiple changes in sociotechnical systems. 2) Transitions are multi-actor processes involving interactions between a variety of agents of different sizes and from different areas of society. 3) Transitions are radical systemic shifts – radical referring to the scope of change and not the speed. 4) Transitions are long term processes, sometimes involving rapid change after breakthroughs but generally the process of new socio-technical systems to emerging lasts 40-50 years. 5) Transitions are macroscopic and involve entire socio-technical systems.

SOCIAL INNOVATION

SOCIAL INNOVATION AS A DISCIPLINARY FIELD

Innovation is a key concept in transition theory. Social innovation is one type of innovation that until recently was studied much less than technological innovation in relation to transitions. Even though social innovation existed long before technological innovation as a socio-political or reforming concept, theoretical elaborations of this concept have started only recently. Howaldt et al. (2014) argue that phenomena of social change are predominantly studied in connection with technological innovation, within the prevailing paradigm of a social-technical system. However, they continue, a social innovation does not manifest itself (solely) in the medium of technological artefacts, nor is it an effect of a technological innovation. Social innovation is an independent type of innovation, clearly distinguished from technological innovation. In light of the increasingly failing technology-oriented paradigm shaped by the industrial society, a need has arisen for theories of social change which envision social innovation as a concept in itself (Howaldt et al., 2014). Because, as Have & Rubalcaba (2016, pg. 2) frame it, *“social innovation refers to a large revitalization of the social aspects involved in any kind of innovation, technological innovation included”*.

Have & Rubalcaba (2016) analysed social innovation (SI) as an emerging area of innovation studies. The social innovation field is used by four intellectual communities, namely: 1) community psychology, 2) creativity research, 3) social and societal challenges and 4) local development. These four clusters can be seen as schools of thought on social innovation, which each focus on alternate aspects such as the role of governance, empowerment, a technological- or an economic dimension. The core elements to social innovation that they all share are: 1) a change in social relations or systems or structures, and 2) this change aims to solve a socially relevant problem which has been identified as a shared goal (Have & Rubalcaba, 2016, pg. 1932).

“The focus on new social relations and mobilization-participation within a changing macro socio-economic environment, and resulting social impact is somewhat of a common ground ... to those contributing to the handbook of social innovation” (Have & Rubalcaba, 2016, pg. 1925).

PERSPECTIVES ON SOCIAL INNOVATION

Social innovations are different from technical innovations because they are innovations which are *“new responses to pressing social demands by means which affect the process of social interactions”* (Bureau of European Policy Advisors, 2011). Haxeltine et al. (2013) identify two common elements that set social innovation apart from other types of innovation, which are 1) new social relationships and 2) new social value creation. Moulaert et al. (2005) propose three interacting dimensions to social innovation; satisfaction of human needs that are presently unmet, changes in social relations and increasing socio-political capability and access to resources (empowerment). Three classes of innovation are said to form the sphere of social innovation. These are regulative innovations, normative innovations and cultural innovations (Heiscula, 2007). This led Heiscula (2007, pg. 59) to formulate the following definition of social innovation: *“...changes in the cultural, normative or regulative structures of the society which enhance its collective power resources and improves its social performance”*. Social innovation is only systems changing when it alters perceptions, behaviour and structures permanently (Pol & Ville, 2009, pg. 879).

Other definitions of social innovation involve social practices or the social impact.

Hochgerner (2011) for example defines social innovation as the new combination of social practices. Cajaiba-Santana (2014) have a slightly different approach where they see social innovation as new social practices that are achieved through a re-configuration of how goals are currently achieved. Pol & Ville (2009) emphasize another aspect of social innovation and see a social innovation as an idea with the potential to improve either the quality or quantity of life. This more out-come oriented perspective focusing on the social impacts of a social innovation is also adopted by international organisations, such as the OECD and the European Commission (Have & Rubalcaba, 2016). Callon (2007) has a very broad definition and sees social innovation as new ways of interactions between economy and society. This wide range of conceptualisations of social innovation shows it is a complex, multifaceted phenomenon that spans many different types of activities.

Within the context of the TRANSIT project, social innovation is defined as: “*Changes in social relations, involving new ways of doing, organising, knowing and framing*” (see figure 2.1) (Haxeltine et al. 2016a, pg. 19). An example of social innovation is when citizens jointly own a set of solar panels in the form of a cooperative. By organising themselves in such a way, they create new relations between citizens, energy users and energy producers. Once there are new social relations for doing things differently, one can speak of a social innovation. This involves a new way of doing, namely using solar panels, new ways of organising, namely producing and consuming solar energy locally, new ways of knowing, namely the competence of using and maintaining solar panels, and new ways of framing, namely that the issue of energy prices and climate change is seen as something which they can individually change (Avelino et al., 2015). This definition of social innovation is the one I will use in my thesis.

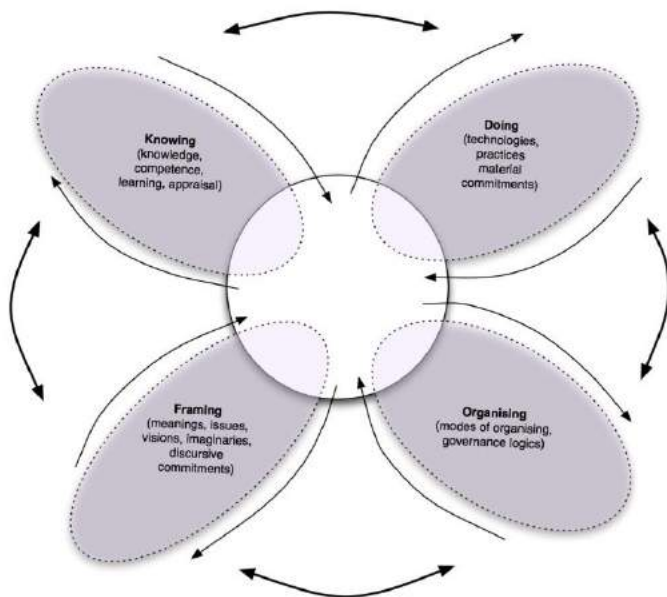


Figure 2.1 The four dimensions that make-up new social relations in the definition of social innovation developed in the TRANSIT project, which are new ways in knowing, doing, framing and organising (Haxeltine et al., 2015, pg. 12).

Literature describes three different perspectives to look at social innovation. It can be an agentic centred perspective, where social innovation is believed to be created through the actions of specific individuals (Cajaiba-Santana, 2014). In the second perspective the external structural context is perceived to determine social innovation, where change is caused by external factors such as technological innovation or social structures. A third perspective combines the previous two, believing that collective action and the structural context co-evolve interactively while creating social innovation (ibid). Human activity and the social structures are now recursively related (Shove et al., 2012; Giddens, 1984). This third perspective on social innovation is the most popular in recent years (Cajaiba-Santana, 2014).

Shove et al. (2012, pg.3) write “Activities are shaped and enabled by structures of rule and meanings, and these structures are, at the same time, reproduced in the flow of human action. This flow is neither the conscious, voluntary purpose of human actors, nor the determining force of given social structures”.

SOCIAL INNOVATION INITIATIVES

Individuals that are unsatisfied with the current system can be search for contexts that can fulfil their needs. They try to create these contexts by starting so-called social innovation initiatives (SI-initiatives). These initiatives are providing experiments, learning and impetus for possible sustainability transitions (Avelino et al., 2015). Within the TRANSIT project, a social innovation initiatives is defined as “*an initiative by people in which there are new social relations for doing things differently*” (Kemp et al., 2015, pg. 7). A search for new forms of trust, new forms of cooperation and a search for reciprocity and autonomy as well as respect for the environment are recurring themes amongst social innovation initiatives (Kemp et al., 2015, pg. 10). The initiatives are not a pure civil society or grassroots phenomenon, actors such as scientists, governments and business are involved in various roles and levels of influence, making social innovation (initiatives) co-produced and co-created (Pel et al., 2016).

With a vision for change the question of how to effectively organize and run a social innovation initiatives becomes unavoidable. For the initiative to be successful it is important that underlying values to the vision are agreed upon and lived up to. In the TRANSIT project (Pel et al., 2016, pg. 7) “*effective internal governance, the ability to make decisions, communicate and act in a way that supports the realization of the mission/purpose, is therefore an essential condition for transformative social innovation*”. As social innovation initiatives are seeking to bring about transformative change in society, their governance systems are already organized in a way portraying their vision for society. The case-studies studied in the TRANSIT project were found to organise their internal decision-making in ways that are empowering, empathic, effective and authentic. They practice more participatory and decentralized forms of organisation and a great commitment to transparency (Pel et al., 2016, pg. 7).

Studying governance in social innovation initiatives can be of great value as it can not only serve as inspiration and experience for other organisations or even governments, they can also increase human productivity and organisational well-being. These innovative ways of governance fit more with personal values of employees and create authenticity, empowerment, purpose and collective intelligence, which in turn are seen as sources of productivity and well-being (Pel et al., 2016, pg. 11).

ECOVILLAGES AS SOCIAL INNOVATION INITIATIVES

Ecovillages are a type of social innovation initiative as they apply new types of social relations for doing things differently. For example, participatory decision-making is very important in an ecovillage, they use alternative financial and ownership models, they have radically different building methods and have innovative infrastructures for providing clean water and energy. This all shows that they have new ways of framing, doing, knowing and organising, a prerequisite for social innovation. This makes ecovillages a good example of a social innovation initiative.

TRANSFORMATIVE SOCIAL INNOVATION

When looking at the transformative aspect of social innovation, its relevance for transition theory is brought to light. A social innovation can be called transformative

when it contributes to transformative societal change, by challenging, adjusting and/or providing alternatives to the dominant systems, power structures and institutions in society (Haxeltine et al., 2016a; Avelino et al., 2014; Kemp et al., 2015). This means that transformative social innovation is also of a deeply political nature (Pel et al., 2016). The TRANSIT project proposes three levels at which social innovation can be transformative: through 1) ambition, which comprehends the vision, aims and mission behind the innovation, 2) potential, when they are working on something which will likely replace a dominant institution, and 3) impact, which is actual evidence of the change that a social innovation has caused (Wittmayer, 2015a).

“Transformative social innovation can be understood in three distinct ways: 1) as a type of social innovation, 2) as a social innovation with the intention to contribute to transition or 3) as the process through which social innovation contributes to societal transformation” (Avelino et al., 2015, pg. 5).

TRANSFORMATIVE SOCIAL INNOVATION FRAMEWORK

Within the TRANSIT project they are developing a framework for analysing transformative social innovation (TSI), with the aim of developing a theory on TSI. Within the TRANSIT project, practices are conceptualized as ‘the things’ SI-initiatives do, in terms of knowing, doing organising and framing. These practices result from/into new social relations and this total can be called social innovation (see figure 2.1). Important to note here is that, contrary to other literature on social innovation, social innovation is not seen as the result of new practices, but of new social relations, which in turn can cause new practices but not necessarily (Haxeltine et al., 2016a). Agency is viewed as distributed, and being neither wholly situated at the level of actors or practices. The performance of practices is conceptualized as intrinsically bound up with institutionalized traditions, this is consistent with recent versions of institutional theories. There are four ways in which an actor can engage with institutional change, they can: enact an institution in a different way, make novel choices about which institution to enact, use resources differently or use new resources, take advantage of contingency and context dependence in resource accumulation (Haxeltine et al., 2016b).

The TSI framework takes into account that a social innovation can never be transformative in itself, it is the multi-dimensional and co-evolutionary interactions of social innovation processes with dynamics of existing practices that can cause transformations. The TSI framework acknowledges that social innovations can have unintended consequences and implications, which might lead to non-sustainable transformations (Haxeltine et al., 2015). By acknowledging this possibility and denying that a social innovation can be transformative in itself, space is made to study the unintended effects of social innovation and to objectively study its potential contribution to societal transition.

On these foundations, the framework for TSI has some central elements, divided into three groups: 1) SI and SI-agency, 2) TSI, coevolution and context and 3) TSI-agency and (dis)empowerment. The central elements can be seen in figure 2.2. The cognitive map of mutual influence between TSI and its socio-material context is illustrated in figure 2.3 which is a diagram from the TRANSIT project. It can be seen that agency can influence the context in three distinct ways: challenging, altering and replacing. Challenging means to question the legitimacy of dominant institutions. Altering means to change or supplement an existing institution. Replacing means to completely replace an existing dominant institution with a new institution. When the influence of agency on institutions does not involve *dominant* institutions the change is not sufficient to be called a TSI (Haxeltine et al., 2016a).

Social innovation and the agents of social innovation (section 4.1)

- **Social innovation (SI)** – changes in social relations, involving new ways of doing, organising, framing and/or knowing.
- **Social innovation agents (SI-agents)** – agents that are engaged in social innovation, with a focus on individuals, SI-initiatives, SI-networks and/or SI-fields.

Transformative social innovation, coevolution and the socio-material context (4.2)

- **A socio-material context** – that includes institutions, resources and practices; and processes of structuration that result in varying degrees of institutionalisation across the context.
- **Transformative change (TC)** – change that challenges, alters and/or replaces established (and/or dominant) institutions in (parts of) the socio-material context.
- **Transformative social innovation (TSI)** – and the ‘TSI-journey’ which challenges, alters and/or replaces established (and/or dominant) institutions in the socio-material context.
- **The perspective of coevolution** – as a metaprocess occurring between some form/s of situated novelty (e.g. SI) and (parts of) the socio-material context.
- **Institutional Logics (ILs)** – which both regularize behaviour and at the same time enable agency and change; may be contested, multiple, and/or overlapping
- **Strategic Action Field (SAF)** – as the ‘web’ of socio-material relations and institutional arrangements through which the emergence and unfolding of a TSI ‘journey’ takes place.

TSI-agency and (Dis)Empowerment (4.3)

- **TSI-agency** – capacity of SI-agents to contribute to transformative change.
- **Transformative impact, potential and ambition** – as different levels in the extent to which SI-agents contribute to transformative change.
- **(Dis) Empowerment** – process in which SI-agents gain a sense of autonomy, relatedness, competence, impact and meaning.
- **Narratives of change** –discourses about (transformative) change and innovation.

Figure 2.2 The central elements of the conceptual framework for TSI as developed in the TRANSIT project (Haxeltine et al., 2016b, pg. 25).

The TSI theory is currently developed up to a point where twelve propositions, clustered in four groups, are central and function as a framework for case-studies. The four groups of propositions can also be seen in figure 2.3 (Haxeltine et al., 2016a).

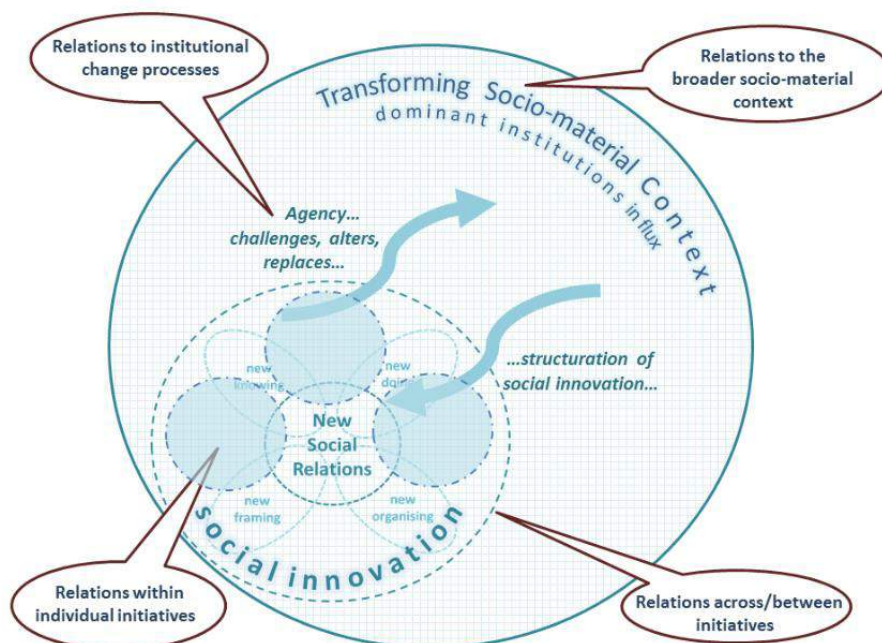


Figure 2.3 Cognitive map of the mutual influence model of TSI and the positioning of the four groups of propositions within the cognitive map (Haxeltine et al., 2016a, pg. 11).

OTHER TRANSITION LITERATURE

In this section I reflect on the usefulness of several other transition frameworks and theories to my study and compare them to the TSI-framework. Explanations of the frameworks and theories can be found in Appendix A.

THE MULTI-LEVEL PERSPECTIVE

The multi-level analysis perspective (MLP) is based on analysis of a socio-technical system, as can also be seen in figure 2.4. Since I wish to study social innovations, using the socio-technical perspective of MLP is not the most obvious choice. Where the MLP is not very clear on the analysis of individual agency or the social aspects in innovation niches, the TSI framework can potentially fill these gaps (Avelino et al., forthcoming). Also, the conceptualisation of a social context in the TSI framework is more in line with my research question on only social innovation than a socio-technical context. On top of this, MLP analysis conceptualizes the context of an innovation in a niche as consisting of several layers where the TSI framework does not identify separate levels in the context. For my particular study this 'simplified' conceptualization of the context will be enable me to position the social innovations in the context, without having to focus on with which levels they interact in what ways. Also, the dynamics involved in social innovation processes, the focus of my research, cannot be assumed to be the same as those involved in a technological regime shift as described with the MLP (Haxeltine et al., 2016b).

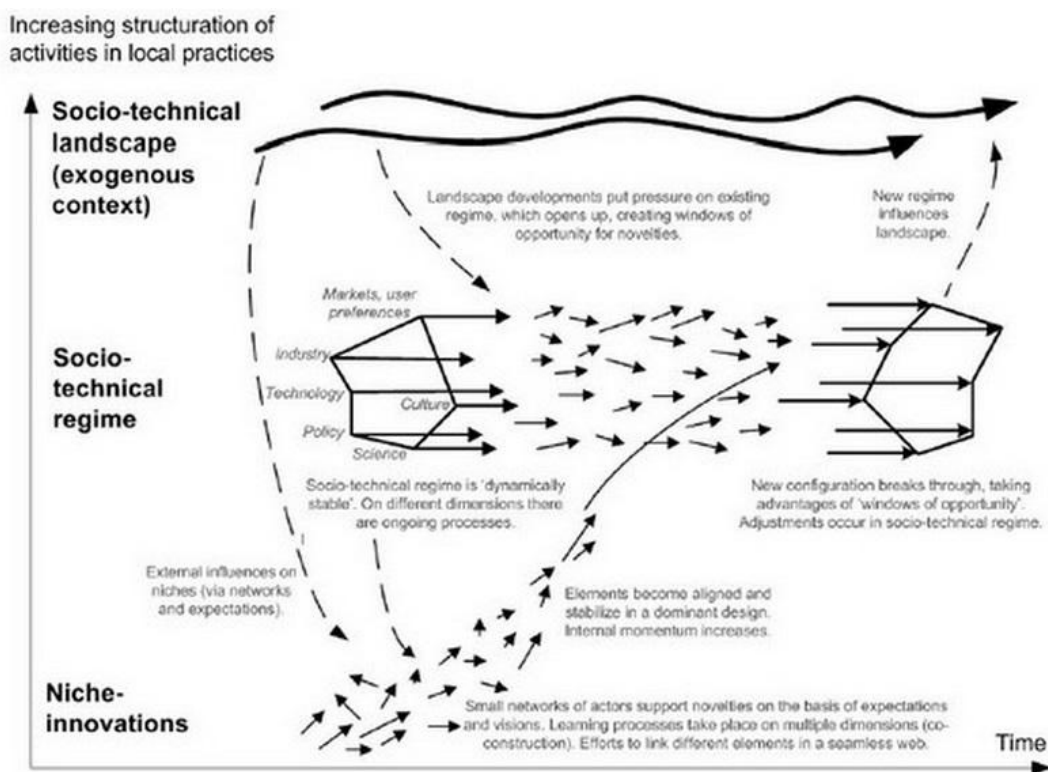


Figure 2.4 Illustration of the multi-level perspective framework (Geels & Schot, 2007).

TRANSITION MANAGEMENT

Transition management (TM) is specifically designed as a policy tool, it therefor acts as a theory which can help support and develop the initiative under study. The aim of my research is not to help ecovillages or lay out the best future steps for them. My research focusses on mapping that which is currently done or has been done in the past. This is why, even though aspects of TM, like for example vision analysis, are certainly of relevance to my study, it do not believe it the best option to serve as the main analytical framework for my research.

STRATEGIC NICHE MANAGEMENT

Strategic niche management (SNM) offers relevant concepts for my particular study, however this research model is also not the most applicable as analytical framework for my study for several reasons. SNM is not very applicable to radical innovations since it was originally developed to study market-based, technological innovations. A radical innovation has more distinctive characteristics and a different development process (Seyfang, 2016). However, SNM has been applied by studies on grassroots innovations, e.g. Boyer (2015). As the name implies, SNM is focused on scaling up a niche or analysing aspects to niches which influence its potential to scale-up. My research question is centered around mapping and understanding practices that are happening in Dutch ecovillages, not aiming to help them scale-up, therefore, SNM is not the most obvious choice for my research.

SOCIAL LEARNING SYSTEMS

Following social learning systems (SLS) theory, an ecovillage could be identified as a community of practice (CoP). Studying ecovillages as a CoP could be interesting as it might bring to light recommendations to enhance the learning potential or the exchange and interaction with other CoPs. SLS theory is focussed on the learning energy to the joint enterprise, the depth of social capital and the degree of self-awareness about the shared repertoire and it studies boundaries to the CoP. All of this is studied in order to be able to stimulate social learning which in turn can increase the potential and success of the CoP and increase its contribution to societal transition. Increasing the potential and success of Dutch ecovillages is not a direct goal of my research, making SLS theory not the most obvious choice. I therefore believe that, even though ecovillages are an interesting example of CoPs and SLS theory could be a very valuable research method, it is not the most suitable theory for my particular research.

GRASSROOTS INNOVATIONS

Several aspects to grassroots innovations (GI) make it an interesting idea for my research on ecovillages, which are a radical, bottom-up innovation. For example: GI focusses on more radical, ideological community innovation and GI play in a social context and are therefore concerned largely (but not exclusively) with social innovation. GI theory, however, is focussed mainly on how an innovation can diffuse into the regime, which is not the focus of my study. GI theory has elaborate models of niche-regime interaction, which can be very helpful for the type of innovation like ecovillages, however, it is not very applicable to my specific research question. This brings me to the conclusion that I could describe ecovillages as grassroots innovations, however, since I wish to focus on social aspects of ecovillages, the TSI framework will be more suitable.

SOCIAL PRACTICES

One could argue that practice theory is a suitable theory to help answer my research question on social innovations in ecovillages. I agree with this, however, the TSI framework goes a step beyond this theory and will for several reasons better enable me to answer my research question. In the TSI framework, an innovation is conceptualised as a change in social relations. This distinctly places the emphasis on social interactions, which is a prime focus of my research. Social practice theory, in the framework developed by Shove et al. (2008), see figure 2.5, looks only at the elements skill, image and stuff. It thereby does not fully acknowledge social interaction between people, an element which I specifically emphasize on in my research question. Social interaction, social relations and organisation of practices are crucial for ecovillage innovations as inhabitants work with high levels of cooperation.

The TSI framework includes the elements of knowing, doing, framing and organising to new social relations. These elements largely overlap with the elements in practice theory as developed by Shove et al. (2008); doing correlates to skill, as well as stuff, knowing correlates partly to skill and framing correlates to image. The element of organising is not represented in practice theory but is in my opinion a crucial element to (new) practices. The emphasize of the TSI framework on social innovation as new relations as well as the extra element of organising are also very relevant for my study, which focusses on new methods for collaboration, communication, and decision-making. This extra concept in addition to the emphasis on social innovation as new social relations, makes the TSI framework in my opinion more applicable to my particular study than practice theory.

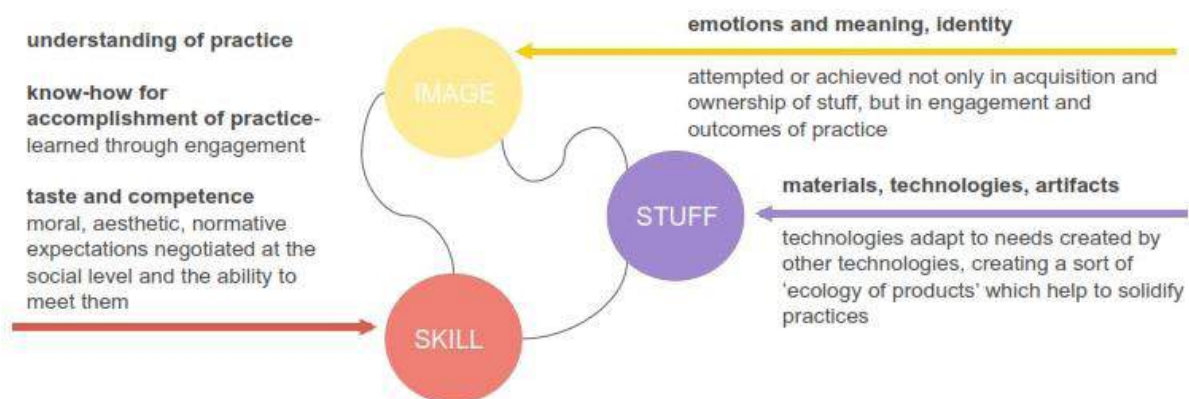


Figure 2.5 Stuff-Image-Skill model with elaboration (Shove et al., 2008).

VISIONS AND NARRATIVES

Part of my research is to study how ecovillages envision transformative social innovation. To do so, I will need a conceptual and analytical framework which can help me to study how ecovillages envision. With envisioning I mean the way in which they see the current context, what problems they identify in this current state, what they think the world should look like in the future and how to achieve this. Most transition theories and frameworks touch upon the element of visions.

In transition literature there is a division in studies using the concept vision and studies using the concept narratives to study how social innovation initiatives envision. In this chapter I will analyse both concepts and discuss their applicability to my particular research in order to come to a conceptual and analytical framework for my empirical research in the next chapter.

VISIONS

Sustainable future visions are regarded as very important for sustainable technology development, system innovations towards sustainability and in transition management. When a system or regime experiences recurring problems, opportunities for visions based on alternative worldviews or different expectations about possibilities emerge (Quist, 2007). Within the field of transition management, visions are referred to as *“a framework for formulating short-term objectives and evaluating existing policy... these visions must be appealing and imaginative and be supported by a broad range of actors”* (Rotmans et al., 2001, pg. 23). A vision is different from a pathway in that it does not describe exactly what to do but instead functions as a mental framework with which an individual can evaluate their actions. A vision is different from a dream, since visionaries actually envision themselves making a difference, where dreamers merely dream about things being different (Helm, 2009).

Van der Helm (2009) proposes a theoretical framework for visionary approaches. In a vision, very particular claims are made about the future, which van der Helm divides in three aspects to help understand the vision: future, ideal and desire for deliberate change. The vision always talks about the future, it refers to something that is not (yet) existing. The vision refers to an ideal future, meaning that it is set apart from the utopian tradition in that a vision respects contextual and historical uncertainties. Lastly, behind all visions there is the underlying assumption that the vision is needed in order to (help) direct actions into the desired future. The vision is used to direct change. All visions include these three aspects, they are what makes it a vision and based on this the following definition of a vision is formulated:

“We could see a vision as the more or less explicit claim or expression of a future that is idealised in order to mobilise present potential to move into the direction of this future” (Helm, 2009, pg. 100).

Visions as a concept become meaningful when they function as a theory of change, because a future vision does not have any conceptual meaning without the possibility of change. A vision as theory of change serves as an ideational and transformative instrument; pulling in a desired direction and transforming existing structures. The change in a vision assumes two aspects: 1) change is ideational, meaning that the vision seeks to influence human thinking, behaviour and physical reality simply by proposing ideas of what could be. 2) Change is transformational, meaning that the change will replace existing structures with new structures (Helm, 2009). To assure a

functioning of the vision as ideational and transformative instrument, i.e. as a theory of change, a vision needs to have the capacity to motivate, inspire and give direction to those who are committed to the vision (Helm, 2009). Only with these three functional dimensions can the vision work as an instrument to pull in the desired direction and transform existing structures.

Smith et al. (2005) argue that there are three factors of influence to the consistency and robustness of a vision: 1) the degree of interpretative flexibility, 2) the adaptive capacity of the vision to new developments and 3) the coalition of stakeholders supporting the vision. Visions and actor networks can influence each other which is why the two aspects ‘flexibility and stability’ are crucial to a successful vision. Flexibility is needed in terms of 1) adaptive capacity and 2) interpretative flexibility. Without stability in a vision, guidance, orientation and the extent to which the vision is shared among actors can diminish (Quist, 2007). Smith et al. (2005) also propose functions of a vision, they propose five functions that a vision can have for system innovations and transitions, which can be seen in figure 2.6. A vision can either have been generated by the actors of an initiative themselves, often as first step of the initiative, or the vision can be actively generated to support an already existing initiative. This second method is applied in for example backcasting and sometimes in TM and SNM.

(1) Mapping a ‘possibility space’	Visions identify a realm of plausible alternatives for socio-technical systems providing societal functions
(2) Providing a heuristic	Visions act as problem-defining tools by pointing to the technical, institutional and behavioural problems that need to be resolved
(3) Providing a stable frame for target-setting and monitoring progress	Visions stabilise technical and other innovative activity by serving as a common reference point for actors collaborating on its realisations
(4) Providing a metaphor for building actor-networks	Visions specify relevant actors (including and excluding) acting as symbols that bind together communities of interest and of practices
(5) Providing a narrative for focusing capital and other resources	Visions become an emblem that is employed in the marshalling of resources from outside an incipient regime’s core membership

Figure 2.6 Functions of visions for future system innovations (Quist, 2007, pg. 40).

Berkhout (2006) rejects visions as a guidance as they are often portrayed in transition literature, he instead defines visions more as proposals/bids. They require interpretative flexibility so that actors can align the vision with their own interests, worldview and value systems. This means that involvement of new actors may lead to modification of the vision. A diffusion of the vision can be successful if it is attractive to a wide range of actors, or if it is backed by a powerful actor or group of actors which can enforce support of the vision on others. This means that insight into the vision of a group of actors within a niche can show the potential of growth of the niche (Berkhout, 2006).

NARRATIVES

Narratives can be a different way to talk about the future than visions. Narratives of the future are, according to Raven & Elahi (2015, pg. 50) “*subjective depictions of possibilities yet to be realised*”. At the core of a narrative lies a telos, which is the intent or purposefulness of the story being told. The telos is conveyed to the audience through the content and the form of the narrative. The content consists of the research data that informs a scenario, where the form is the narrative delivery system or output, through which the content is presented (Wittmayer et al., 2015c). Narratives can play three different (related) roles in social change processes, they: 1) can trigger

imagination, 2) are expressions of (counter) cultures and 3) are resources for empowerment (Wittmayer et al., 2015b). Narratives provide devices for ordering temporal sequences, which is an important source of agency and reflexivity: “*the capacity of breaking with the dominance of the past over the future*” (ibid, pg. 6; citing Beck et al. 2003:12).

The narrative approach can help explain social change since it spans different levels of analysis: studying the mutual influence processes between community-, organisational- and personal stories. Narratives are always deeply informed by cultural values and assumptions, which means that culture shapes the narratives, however narratives simultaneously facilitate the motion in culture through evolution in narratives. Knowing this, narratives can help reveal the assumptions and broader worldview of an initiative (Wittmayer et al., 2015c). Counter-narratives are an instrument through which social movements “*struggle against pre-existing cultural and institutional narratives and the structures of meaning and power they convey*” (Wittmayer et al., 2015b, pg. 7; quoting Davies, 2002:25). A counter-narrative differs from current beliefs and symbols but simultaneously appeals to current values and expectations.

An important distinction is to be made between a story (a plot) and a narrative. A story is like the plan or outline; “*it is a sequence of events in time and space*”. The narrative is “*an account of some or all of those events from one (or more) points of view*” (Raven & Elahi, 2015). A story or plot is universal and can be retold in different contexts, whereas the narrative is a function of the subjectivity of the narrator. A narrative will always be partial, in completeness and objectivity. Apart from the story and the narrative, there is also a story-world which is the contextual time and space to the story. When there is a difference between the story-world of the narrative and the actual world of the audience, cognitive entanglement can be achieved, which gives a narrative its rhetorical power (ibid).

Wittmayer et al. (2015c) made a review of literature on narratives and metaphors. They focus on narratives of change, which are a specific type of narrative. Narratives of change are treated as “*modes of resistance to existing structures of power*” (ibid, citing Squire et al. 2008, pg. 4). They write that discourses in society give meaning to physical and social realities and consist of several linguistic devices, amongst which are metaphors, narratives and storylines. A narrative is different from other linguistic devices in that it portrays past events in a meaningful sequence, similar but not identical to a plot with a beginning, middle and end. Metaphors in a story make it possible for people to conceptualise something unknown as something known. Both narratives and metaphors are generative, which enables actors to interpret them and give meaning to specific phenomena. It is these generative paradigms, made up by narratives and metaphors that drive and motivate social innovation according to Wittmayer et al. (ibid).

In TSI theory they use the concept of narrative of change (NoC) defined as: “*sets of ideas, concepts, metaphors, discourses or storylines about change and innovation*” (Wittmayer et al., 2015b, pg. 2). A NoC is a discourse about (transformative) change or innovation and can help in understanding how social change is driven. A NoC can be on the level of society, of SI-initiatives or of SI-actors. This narrative connects their small innovation to a broader context and orders the events of an initiative in a sequence leading to a goal. In the TRANSIT project they take a constructivist approach to narrative analysis which allows to study 1) the narrative content, 2) social production of narratives and 3) their role in social change processes (ibid, Haxeltine et al., 2016a).

A narrative of change is seen as “a discursive form which positions actors in a context and orders events or activities in a (temporal) sequence towards a goal or future” (Wittmayer et al., 2015b, pg. 5).

In TSI theory they understand a NoC to consist of three elements: 1) *the context*, in which the status-quo and desired goal/future are described, 2) *the actors*, which describes who is considered to be involved and 3) *the plot*, which describes how change should occur according to the initiative, giving a sequence of events and activities as well as a plan to challenge and transform current givens. These three elements of a NoC subsequently reveal ideas of initiatives about *why* the world has to change, *who* has the power to do so and *how* this can be done. Through this distinct formulation of problems and change the narrative plays a role in sense making and the construction of meaning for those who support the narrative (Wittmayer et al., 2015b). Three levels of narrative of change can be identified in an initiative; local, network and societal. For my research mainly the local narrative, concerning change on the level of the local initiative will be relevant to understand how a narrative is translated into action on a local level.

Wittmayer et al. (2015c) conclude with insights from narrative literature that are relevant to the TSI framework. The first of which is that narratives can function as vehicles of explanation. By studying the narratives of actors, academics can better understand the practices in which these actors are engaged. This can help with several things, such as linking individual experience to collective narrative, linking the collective narrative with the broader context and understanding the generative nature of the narrative. Narrative literature can, according to Wittmayer et al. (ibid) also help in developing the methodology for understanding text and actions of an initiative. By paying attention to the sequences of actions and to how language and images are used to communicate meaning, a better understanding of the initiative can be gained. Using a narrative approach is therefore helpful to achieve an explanation of a social innovation, which is exactly what the TSI framework is aimed at. A narrative can also capture the complex interactions between agency, changing contexts, time, event sequences and changing identities. This helps develop an understanding of the interaction between social innovation and societal transformations (ibid).

IMPLICATIONS FOR MY THESIS

Having studied the vision and narrative concepts, I can now discuss their differences and similarities and determine which concept, or what combination, would be most applicable to my particular research.

A vision is in the context of transition studies mostly used as a means to achieve transition. Often, the vision is formulated as part of a framework. I do not, within the scope of my thesis, wish to aid the ecovillages in the transition by shaping a vision for them. When visions are already in place, they are studied on their potential to help the initiative grow. The vision is judged on aspects such as flexibility, adaptability and stability as well as its functional dimensions of inspiration, motivation and guidance. The concept of a narrative is in the context of transition studies much more used as a means to understand and explain the framing, actions and practices of an initiative. It is not used to estimate their chance of success and neither is a narrative formed as part of a transition strategy. It can however be used to understand the interaction with societal transformation. A similarity between the two concepts lies in the fact that they both acknowledge the need for tension or interaction with other, co-existing visions. For my particular research it will also be very relevant to study the interaction of the local, ecovillage visions/narratives, with the surrounding regime vision/narrative. It will allow me to study the possible contribution of ecovillages to societal transition.

Vision literature offers good guidance to study the functioning and potential of the vision, whereas narrative literature offers clear guidance to study the content of the narrative and vision. Both are relevant for my own research, as I wish to study how the ecovillages envision TSI. Analysing the narrative of change of the ecovillages will allow me to analyse the assumptions, values and explanations that the initiative uses for their innovative practices. Analysing how this narrative has helped them achieve certain actions asks for concepts of vision literature. It is after all the vision functioning as ideational and transformative instrument that drives the action of actors. I therefore propose to combine elements from vision and narrative literature

From narrative literature I will take the concept of narrative of change, to help me explain the SI at the ecovillages. I will cover the aspects to a narrative of change as presented in TSI theory; context, actors and plot. I will view the plot as the story; as the sequence of events in time and space, as viewed by the initiative. The context is equal to the story-world. The *telos* is not a distinct part of the narrative but is implicit in the overall narrative and it is part of the explanation of the occurring SI. I will view the vision of an ecovillage as part of their narrative of change, it is that part which is *“the more or less explicit claim or expression of a future that is idealised in order to mobilise present potential to move into the direction of this future”* (Helm, 2008, pg. 100). Focussing not merely on the vision, as standard in transition studies, but on the overarching concept of a narrative allows me to get a better understanding of the currently performed actions at the initiatives, the reasons and drivers behind these actions and of actions performed in the past.

There are two aspects from vision literature which I wish to incorporate in the NoC framework of TSI, to study the functioning of the vision and narrative. Van der Helm (2009) proposes that for a vision to work as a theory of change, i.e. as an ideational and transformative instrument, it needs to have the functional dimensions to motivate, inspire and give direction. Only then can the vision work as an instrument to pull in the desired direction and transform existing structures. Smith (2007) and Quist (2007) propose factors that are crucial to a successful vision, influencing the consistency and robustness of the vision: the degree of interpretative flexibility and the adaptive capacity to new developments. Only when these are both sufficient, the vision is open for reinterpretation and reformulations whilst still covering the goals and different meanings of the actors. I propose to include these two aspects and the three functional dimensions in a conceptual framework for my research.

ECOVILLAGE LITERATURE

The Global Ecovillage Network (GEN), as well as the Research in Community network and the Community Research webpage, provide bibliographies of literature on ecovillages. One literature review of ecovillage literature has been published in 2012, which comprehends a total of 59 relevant studies on ecovillages. In recent years, several case-studies on existing ecovillages have been performed and published. In this section, I will provide an overview of current literature on ecovillages.

ECOVILLAGES

The term 'ecovillage' first came into use during the early 1990s, with the first papers on ecovillages only appearing in 2000. Research on ecovillages can therefore be called a quite young phenomenon. However, it builds on a more extensive body of literature on community research (Wagner, 2012).

In the past decades the amount of ecovillages and ecovillage attempts has risen substantially, showing the rising demand and popularity of this movement. At the global ecovillage network there are currently over 500 ecovillages registered and the estimate for worldwide ecovillages lies between 4000 and 5000 (Kasper Schyndel, 2008; Kunze & Avelino, 2015a). The eco-footprint of an ecovillage in Germany is 28-42% of German average, and in the UK it is only 21.5-37% of national average (Kunze & Avelino, 2015a). At Dancing Rabbit ecovillage in the USA, resource consumption is even less than 10% of the American average (Boyer, 2016). The approach of ecovillages can be called holistic for daily life, including consumption, economic activity, infrastructure, planning, organisation and governance. Living in an ecovillage is seen as a way of achieving increased life-quality, not through technology or material luxury but through communality.

Ecovillages have the fundamental intention for innovation and change for sustainability, they use for this innovation the term 'new culture'. At their basis is the will to create "*a new culture for cooperation, trust and unity in diversity*" and to reinvent relationship in this modern world of alienation (Kunze & Avelino, 2015a, pg. 3). Wagner et al. (2012) also view ecovillages as an example of a 'culture of sustainability' (Wagner et al., 2012). Ecovillages should not be seen as an entity with an end state: they are in a constant creation process by their members, which is different from most regular organisations. Calling an ecovillage a process and not a finished product entails that it has the built-in potential for change (Schyndel Kasper, 2008). They do not just wish to address the ecological crisis but wish to reverse the social crisis too, which they define as: alienation of the individual, breakdown of the family, marginalization of weaker society members, material inequalities and discrimination (Avelino & Kunze, 2009). Insight in how these personal, daily life style transformations in ecovillages interact with societal wide ambitions and strategies for sustainable development could help enable this development.

"It's not supposed to be a utopia, just come here and see the good intentions" (Quote from inhabitant of ecovillage in USA, Schyndel Kasper, 2008, pg. 20)

Ecovillages have a different approach to sustainable development than dominant institutions of the past decades. Climate action policies have been using an 'Attitude-Behavior-Choice' approach that assumes that lowering the environmental impact can be achieved by modifying individual preferences, and consequently their behavior and consumption choices. This is now challenged by a different perspective where it is believed that environmental and ecosystem trends can be altered by a shift in the

entire moral paradigm (Boyer, 2016). A development of how humans think of themselves and in relation to others causes an evolution in ethics, or in other words, a paradigm shift. In ecovillages, they attempt to implement a new paradigm, which has an expanded notion of community. Ecovillages can therefore give insight into the human dimensions of a sustainable society (Schyndel Kasper, 2008). Orr (2004, quoted by Schyndel Kasper, 2008, pg. 26) states that the human mind is the ultimate object of ecological design, writing that the point of ecological design is *“not just about houses or water or any particular system, but it is about how we think”*.

“Ecovillages can demonstrate the multidimensional challenges which mainstream communities will face when aspiring to accomplish similar savings and they can provide an ethnographic account of sustainable practices” (Boyer, 2016, pg.2).

ECOVILLAGES AS INTENTIONAL COMMUNITIES

Ecovillages can be identified as a specific form of Intentional Community (IC). An IC is defined as *“a group of people who have chosen to live together with common purpose whilst working together to create a lifestyle that reflects their shared core values”* (Avelino & Kunze, 2009, pg. 2). Efforts towards intentional community living have existed for hundreds of years. The most common motivations for IC formation are religious, longing for political and economic reform or self-fulfillment. Ecovillages are set apart from other ICs by their explicit emphasis on ecology and their holistic approach (Schyndel Kasper, 2008). The ecovillage movement is set apart from earlier ecological commune movements because they do not center on what they reject, but they built around positive values. Ecovillage inhabitants often do not ‘step out’ of regular society in exchange for a simple rural life in close contact with nature. They are also not isolated islands, but rather a multinational connected network wishing to contribute to the society wide dialogue and process of societal transition toward sustainability (Kunze & Avelino, 2015b). Ecovillages are said to be part of the 4th wave of intentional communities, which aim to integrate with broader society, in contrast to earlier waves of ICs which all withdrew from society (Ergas, 2010, quoting Schehr, 1997). They also attempt to combine individual freedom and self-realization with communality, to prevent the oppressive, manipulative danger communities sometimes pose. Ecovillages are reinvented as pluralistic communities of sharing and welfare, with a unity in diversity (Kunze, 2012).

According to Kunze (ibid) a key to bringing knowledge into action can be found in the social dimension of sustainability: the challenge lies in exploring social principles for more appropriate ways of living. Understanding processes of creation and construction of social structures and values for sustainability is crucial. Intentional communities present a field where people experiment with these processes (ibid).

Intentional communities can provide insight into how social movements emerge. Social movement literature argues that a social movement is more than an attempt to change markets or states, but that it is about changing personal relations, beliefs and ways of living which cannot be mediated by markets or states. The ecovillage movement demonstrates how people self-organize beyond markets and states to respond to societal and sustainability challenges (Avelino & Kunze, 2009). As social movement, ecovillages challenge institutional, organisational and cultural authority. They also confront ideological differences from the dominant culture that determines status in terms of material possessions which causes polluting and depleting extraction of natural resources. The ecovillage movement can be identified as part of the broader environmental movement, which tries to mitigate problematic environmental conditions. The ecovillage movement is also similar to a ‘voluntary simplicity movement’ in which individuals downshift their lifestyle as a response to consumerism and materialism.

This movement is rich in cultural and human capital, being well networked and educated, however, they are labelled financially poor by the dominant regime (Ergas, 2010).

By their experimental way of developing ecologically and socially sustainable living conditions, intentional communities, and ecovillages in specific, can offer empirical answers to questions on the relation between sustainable lifestyle and social organisational structures (Avelino & Kunze, 2009, quoting Kunze, 2009). ICs have the potential to transform society towards more sustainability in at least three ways, as identified by Kunze (2012): 1) ecological footprint, 2) responding to broader societal problems and 3) as living laboratories in all areas of life. ICs have a distinct socio-political dimension as they: 1) are founded on the basis of an alternative version of society, 2) search and explore new ways of living with people and nature, 3) develop group-building qualities through common aims, communal living and a derived lifestyle and 4) strive for a transformation of society (ibid).

ECOVILLAGES AS NICHE AND GRASSROOTS INNOVATION

Ecovillages have previously been studied from the perspective of a grassroots innovation (GI) and that of a radical niche (e.g. Boyer, 2015; Forrest & Wiek, 2015). Ecovillages are a radical niche for alternative construction, social governance and resource management. They can be seen as a cluster of niches since they explore various niche-innovations, including technological, economic and social innovations. Being a cluster of niches covering practices in all areas of life, ecovillages can be seen as a holistic transition experiment. Since ecovillages are a radical niche the actors are not in a powerful position, however, they still hold the potential to influence societal transformation (Boyer, 2015). This uncovers the potential of radical niches, which Haxeltine et al. (2016c) point at, stating that if a system is locked-in, innovation in many different 'places' of the system can be of great importance: meaning that radical niche innovation will also be necessary to shift the system to a more sustainable system.

A GI differs from a regular niche innovation in that it is a response to an ideological need. In addition to this, it draws from a fragile resource base, which makes it vulnerable to forces outside its control. This causes a substantial focus of GIs on self-maintenance and intrinsic benefits, making diffusion a challenge (Boyer, 2015). It is clear that ecovillages are a fragile GI as roughly 95% of all ecovillage attempts fail in the first five years (Christian, 2003). Their fragile position is slightly relieved through their trans-national niche network (the Global Ecovillage Network) through which their influence bypasses local regimes and their resource base is enlarged (Avelino & Kunze, 2009). Boyer (2015) argues, in his paper on GI and urban sustainability, that niche replication of ecovillages currently seems independent of the urban development regime as it evades these structures and replicates only within the ecovillage niche. Should the ecovillage movement wish to scale-up it will have to expand elements of the ecovillage to a broader audience.

CONTRIBUTION OF RESEARCHERS

"Academic research can help by collecting applicable knowledge from experimental places, which calls for trans-disciplinary approaches and transformation research" (Wagner, 2012, pg. 87).

From their literature review, Wagner et al. (2012) conclude that most studies into ecovillages are performed from a social sciences and humanities perspectives. The three main types of papers cover: perspectives of individuals, sociological investigations and ethnological/cultural investigations. Overall the most studied aspect to ecovillages

was the construction of a vision/mission in an ecovillage, comprising their goals, intentions and ideals. After this, qualitative evaluations of whether goals had been achieved and an analysis of the possible transferability to other social context were studied most frequently. Economic studies and studies on the impact on and interactions with its surrounding region are practically non-existent. There are also little studies performed from a perspective of natural sciences, since ecovillages are primarily viewed as social communities. All performed case-studies on ecovillages include interviews and participant observation (ibid).

Wagner et al. (ibid) position research of communities between practice and theory, functioning as creator and transmitter of knowledge around societal transformation (illustrated in figure 2.7). They state that ecovillages provide a good opportunity for academic research into achieving sustainability and societal transformation. Also, they bring attention to the limited amount of interaction between pioneers of change and scientists, despite their shared contribution to societal transformations.

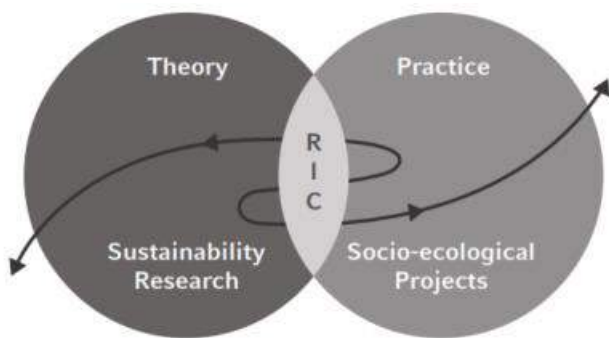


Figure 2.7 Diagram depicting the position and function of research in communities (RIC), illustrating the current small overlap of pioneers of change in practice and science (Wagner et al., 2012, pg.95).

For ecovillages specific, the empirical phenomenon allows for studies into a number of relevant issues for a sustainability transition. Avelino & Kunze (2009) identify the following research topics: 1) radical change beyond functional/socio-technical innovation, 2) multi-functional interaction of innovations, 3) social dimension of community building, 4) dynamics of self-governed citizen initiatives and 5) the role of transnational networks and social movements. Kunze & Avelino (2015a) also identify possibilities for future research into ecovillages, based on previous literature and their own case-studies. For example, to study the dynamics of social innovation and societal transformation (see figure 2.8). Pickerell (2012) notes that in theorizing ecovillages, academics can take a broad and reflexive role which inhabitants cannot. They can examine practices and patterns and link them to understand why ecovillages develop as they do. This type of research can help wider society understand the relevance of ecovillages for transforming how mainstream society lives and it can help ecovillage participants reflect on how they do things (ibid).

Pickerell (2012) points at the lack of open discussion about failure of some eco-attempts, as a critique to academia. Transparent discussion can facilitate understanding that eco-building is a constant and dynamic learning process. Pickerell also poses the question, which academia should keep in their minds whilst studying ecovillages, of how to retain critical inquiry without undermining the initiatives which you wish to support. As sympathetic academic one might avoid confronting particular problems occurring in ecovillages (ibid).

As ecovillages consist of innovations that are as isolated innovations not necessarily unique or sustainable, one of their biggest innovation can be said to be the social innovation of their governance structure and principles. Through collective ownership the governance structures and social principles are different from the regime and

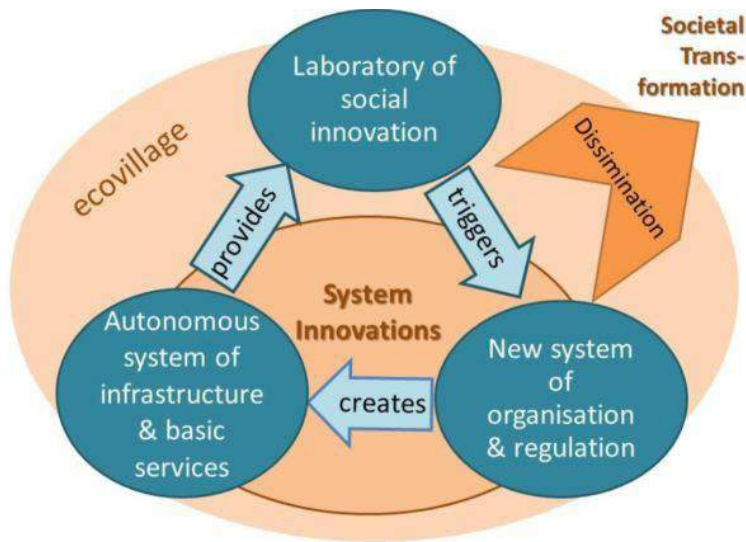


Figure 2.8 Ecovillage dynamic of social innovation towards societal transformation. (Kunze & Avelino, 2015a, pg. 112).

enable sustainable innovation implementations which otherwise would not have an equal impact. Collective ownership can only be successful if a well-functioning governance system is in place, which is only achievable if participators have the necessary (social) skills and competences. This would mean that potential for sustainable living resides in human cooperation and empathy (Boyer, 2016). Successful collective and equal decision-making depends on system-innovation in ownership structures and on social tools for conflict resolution (Kunze & Avelino, 2015a). Empirical data of experiments with collective governance is necessary to understand this better and provides a research opportunity for academia.

CASE-STUDY ECOVILLAGE RESEARCH

SOCIAL TECHNOLOGIES

Social innovations of communication and conflict-resolution in ecovillages were specifically analysed in two of the papers I read (Kunze & Avelino, 2015a; Boyer, 2016). Case-studies were performed at ecovillage Tamera, ecovillage Schloss Tempelhof, Dancing Rabbit ecovillage, ecovillage of Ithaca and Los Angeles eco-village (other ecovillages were studied anonymously). One of the most renowned communication innovation in ecovillages is called 'the forum' which is a tool created to enable transparency with true motivations and wishes of individuals. Other facilitation tools used include: non-violent communication, dragon dreaming, dialogue methods and possibility management (Kunze & Avelino, 2015a).

Ashlock (2010) published a report on lessons learned from the ecovillage movement, in which he concludes that ecovillages are pioneering techniques of intense collaboration and are thereby inventing what he calls 'social technologies'. These are methods to help a group progress smoothly and equally to a decision. Several methods exist, some have already been named above, others include: anonymous polling graph, consensus cards, key questions and different levels of communication. A vision document as a starting point for a community is deemed crucial, as it should make cooperation possible through common goals. According to the findings, the vision must provide the force of conviction but also have the strength of flexibility (ibid).

Schyndel Kasper (2008) focused in their case-study on the meeting practices at an ecovillage under study. She determined that through clear roles, circular seating, a moment of individual centering, reminders of the overall mission and an evaluation of the meeting at the end contributed to efficient meetings with a clear sense of purpose.

Other conventions through which social interaction was organised were regular community meals, work projects and group activities (ibid). What is special in ecovillages is that many socially innovative practices are implemented simultaneously, this is called 'bundling' in practice theory by Shove. As isolated practices these technologies, skills and environmental goals are not necessarily novel or inherently sustainable. Yet, when an ecovillage is studied as a site for bundling social practices it becomes apparent that the development of social competences of interpersonal communication and conflict resolution are critical (Boyer, 2016).

Individual empowerment is a main pillar of the ecovillages that were under study, it comprehends self-responsibility and self-organisation. The ecovillages believe that individual empowerment is necessary to achieve self-sufficiency, making sure the future of a village is not dictated by outside forces. Individual empowerment does require work on a personal level as people need to develop social competences and emotional intelligence. The GEN provides education for these skills and all local ecovillages have weekly or monthly sessions to improve individual social competences. Individual empowerment is strived for under the motto 'change the world by changing yourself', where changing means learning new skills (Kunze & Avelino, 2015b).

The ecovillages also have different approaches of ensuring that its inhabitants live conform the ecological and social mission statements of the community. For example, at Dancing Rabbit ecovillage there are six ecological covenants in place, restricting consumption behaviour. Inhabitants have to comply with these rules, however, the covenants are open for constant iteration. Boyer (2016) concludes from several case-studies that individual preferences, strong environmental rules as well as the use of sustainable materials are all needed to ensure intrinsically sustainable living, on top of which interpersonal communication and conflict resolution investments are crucial.

DECISION-MAKING

Consensus decision-making is employed in all ecovillages under study and they provide examples of how this relatively controversial method can actually work in small to large groups. Successful consensus decision-making seems to depend on system innovation in ownership structures, a shared vision and on social tools of conflict resolution (Kunze & Avelino, 2015a). Many ecovillages employ consensus decision-making as a commitment to ensure that the final course of action is supported by everyone and addresses all concerns. Consensus decision-making avoids a division into 'camps' on two sides of an argument. With consensus decision-making, disagreement is treasured as it can lead to fruitful innovation (as well as intense frustration) and will make the final proposal better. In order for consensus decision-making to work, participants have to discard the mentality to 'win the argument'. Everyone has to enter the process wanting to find a common ground which will give the best solution for the group as a whole (Ashlock, 2010).

Sociocracy is a governance method which uses another method of decision-making that is often employed by ecovillages. Sociocracy places the emphasize on equality and efficiency, through the use of consent decision-making (See appendix M for an explanation of sociocracy). Christian (2013a) wrote an article on how sociocracy can help communities, stating that sociocracy can create more harmony and good-will compared to consensus decision-making. As sociocracy employs plan-implement-evaluate loops, the pressure of creating a good proposal the first time is less high and participants can be more creative and have more confidence. Sociocracy can provide transparency, equivalence and effectiveness (ibid).

Christian (2013a) states that a community consists of three reinforcing aspects which can influence good governance, see figure 2.9. These three aspects are effective project management, good process and communication skills and community glue (ibid). The overarching governance structure describes with which model decisions are being made. This could for example be consensus decision-making or sociocracy. Examples of community glue are group activities, bonding circles etc. They are activities which create sharing and enjoyable moments, these stimulate oxytocin release in the participants, which is a hormone that amongst other things increases feelings of trust and gratitude towards each other. Good communication skills affect the way in which people talk with each other, process skills is about how members gather together. Examples of this are non-violent communication or restorative cycles. Effective project management is necessary to maintain the community and includes things like property treatment, the finances, legal entity's etc. (ibid)



Figure 2.9 Three aspects to a community which reinforce good governance (Image adapted from Christian, 2013a, pg. 1).

Ecovillages employ a range of different power structures and can even have several different power structures within one ecovillage. For example, they may have the structure of a municipality for the community as a whole, the structure of a non-profit for some organisations within the community and the structure of a regular business in the enterprises of individuals living in the community. An ecovillage can also give rise to power imbalances, this can be either structurally (for example when one person owns the land) or non-structurally (which is a question of personality or competence). An ecovillage often attracts a lot of visionary people, also called 'cultural creatives'. For these people it can be difficult to conform to the norms of the group once the ecovillage is actually established. Another risk is that of equality, this is an important goal for many ecovillages, however it should not just exert pressure to conform to the mean; people should remain able to out-achieve others (Christian, 2013a).

SCALING-UP

Ecovillages all have a different approach in the start-up phase of their project. For example, Dancing Rabbit ecovillage specifically looked for a site with no zoning or subdivision regulations. Contrary to this, the ecovillage of Ithaca first acquired a piece of land and subsequently went through an 11 month process to craft a 'special land use district'. The Los Angeles eco-village retrofitted an existing neighbourhood (Boyer, 2015). At Tamera ecovillage a group of German people acquired a degraded piece of land in Portugal to evade strict building regulations in Germany, however they are currently still 'fighting' for permission to build more houses on the land than standard in the region (Kunze & Avelino, 2015a). There are pros and cons for each approach and literature provides no conclusion on which is better than the other.

Kunze & Avelino (2015b) as well as Boyer (2015) argue that there are three main tendencies with which ecovillage practices are or can be scaled-up into mainstream society: 1) retrofitting existing villages along the same lines as an ecovillage, 2) the use of tools like communal decision-making and self-organized energy supply in broader society and 3) the 1000s of yearly visitors in ecovillages spread aspects of the ecovillage culture.

Studies also showed that through networking and information dissemination as well as the provision of a platform of support and exchange, the Global Ecovillage Network (GEN) is actively supporting and spreading ecovillage knowledge. The GEN presents findings of local ecovillages to the UN and the EU, receiving funding in return and obtaining an advisory status for the UN. They are currently working on an EU-funded two year research project called clips (clips, 2017). Local ecovillages disseminate their knowledge through seminars, conferences, workshops, collaborations with the surrounding region, documentaries etc. (Kunze & Avelino, 2015a). Kunze & Avelino (ibid) identify the retrofitting of existing villages into ecovillages as the most promising opportunity for mainstreaming, scaling-up and multiplying the ecovillage model. Forrest & Wiek (2015) published an article on the success factors for community transition, they concluded that a wide range of factors is influential to this, amongst which are community governance, organisation and management. Also, the existing community governance (the surrounding municipality or province) has to be involved and has to approve of the community in order for it to be successful.

DUTCH ECOVILLAGES AND THE ECOVILLAGE NETWORK

As I wish to perform my research on ecovillages in the Netherlands, I will now have a closer look at the ecovillage field in the Netherlands. The Dutch Ecovillage Network is a local division of the GEN and currently has 23 eco-initiatives enlisted. These initiatives are spread over almost all parts of the Netherlands. The 23 initiatives are subdivided in groups depending on their state; dream, initiative, under construction, existing, transforming or over. The Dutch ecovillage network was officially founded in March 2015, as a partner foundation to GEN-Europe and GEN itself. Their mission is to be a Dutch partnership that supports the network and individuals who strive for a sustainable lifestyle. Their vision is a world in which individuals and communities shape their lives from their own strength, with authenticity, truly sustainable and with love, and through that inspire others. The Dutch ecovillage network has 7 main goals, which are to help gain finances, subsidies and land, to lobby the government, to advice and mediate, to educate, research and develop, to help with vision formulation and collaboration, to communicate and to organise a festival, help exchange experience and knowledge and plan network events (Ecodorpennetwerk, 2016a).

The Dutch ecovillage network is organised with sociocracy. All decisions are made with consent and several circles deal with different domains of the foundation. For example their 'learning' circle has as goal to prove the social value of ecovillages in the transition to a sustainable Netherlands. People outside the board can also be in these circles. Ecovillages and other community initiatives can subscribe to the network for a one-time fee of 100 euros. On their website they provide an overview of all registered ecovillages in the Netherlands with links to their websites. They have a calendar for all future events and provide blogposts with news on ecovillages. They organize an ecovillage network event twice a year at which ecovillages gather to exchange experiences and attend lectures and workshops. They give a yearly the Ecovillage Design Education (EDE) training, which can give you the Gaia Education Certificate as EDE designer. They also provide a self-assessment tool online, for ecovillages to assess different aspects of their community (Ecodorpennetwerk, 2016b; 2016c).

The Dutch ecovillage network supports ecovillages by providing resources, training, schedules for 'meewerkdagen', news and organising events such as the ecovillage festival (Ecodorpennetwerk.nl, 2016). The most recent festival was held at 'Ecodorp Bergen' on September 17th 2016 and consisted of many workshops, group meetings and diner, music, dancing and tours around the ecovillage. Members of several Dutch ecovillages were present as well as people interested in starting their own initiatives, generally interested civilians and interested neighbors of ecovillage Bergen (own observation). Together we participated in a global movement started by GEN, which has as mission to make all local ecovillages visible to the outside world by taking pictures of 'human butterflies' in each ecovillage and posting them online (the butterfly is the symbol of GEN). In figure 2.10 the picture taken at ecovillage Bergen can be seen.

As far as I could find, little to no academic research on Dutch ecovillages has been performed. As part of the case-study into the global ecovillage network at the TRANSIT research project, a case-study has been conducted of ecodorp Bergen which is as yet unpublished.



Figure 2.10 Picture of the human butterfly taken at the Dutch ecovillage festival in ecovillage Bergen (Dutch ecovillage network, 2016).



3. RESEARCH DESIGN

In this chapter I will explain the research design which I developed to answer my research question. The chapter starts with the development of my conceptual and analytical frameworks and sets of questions to guide the empirical research. After this I provide an explanation of the research methodology that I will use. This is followed by an explanation of the data collection- and analysis process for my empirical research and the case-study selection.

CONCEPTUAL FRAMEWORK

In the previous chapter comprising my literature review I indicated the differences and similarities between the TSI framework as developed in the TRANSIT project and other transition theories and frameworks. I also looked at the differences and similarities between vision and narrative literature and discussed its implications for my thesis. I will now use these insights to develop my own conceptual framework. To position my research in transition literature I will mostly make use of the TSI framework developed within the TRANSIT project as a conceptual framework. This TSI framework is the most recent development in transition research and is especially developed to study social innovation. Ecovillages are a good example of social innovation as ecovillages demonstrate many small social innovations as well as the overarching innovation of a sustainable community. One of the case-studies of the TRANSIT project is also on the global ecovillage network. The transformative aspect to ecovillages is demonstrated by the way in which ecovillages challenge, alter and replace existing structures and institutions, e.g. by challenging planning regulations of local governments.

I believe the TSI framework to be very suitable to answer my research question for several reasons. First, the conceptualisation of social innovation described in the TSI framework fits with my research focus. Since I want to focus my study on new forms of collaboration, communication and decision-making in ecovillages, which entail high levels of cooperation and different forms of governance, the added elements, with respect to practice theory, of new 'social relations' and 'new ways of organising' are a crucial aspect to the innovations. Other reasons for choosing the TSI framework were already discussed and can be found in chapter 2.

To study the envisioning of TSI in the ecovillages, I will use the concept of Narratives of Change (NoC) developed in the TSI framework and extend it with insights from other vision literature. The NoC perspective is helpful in understanding the narrative of an initiative and the narrative that brought about their vision. The NoC perspective is also helpful in understanding why things are done the way they are in an initiative as it studies how the initiative describes the plot, actors and context for change. To better understand the functioning of the vision within an ecovillage and how the vision has helped in realizing social innovations in ecovillages I will include two aspects from vision literature. These are 1) the three functional dimensions as proposed by van der Helm (2009); inspiration, motivation and direction, and 2) the two factors crucial to the success of a vision as proposed by Smith et al. (2005) and Quist (2007); the degree of interpretative flexibility and the adaptive capacity to new developments.

I can position my research in the four groups of propositions of the TSI framework, which can be seen in figure 2.3. My research will focus mainly on relations within individual initiatives as this can provide me with answers to how ecovillages are practicing and envisioning TSI. I will not touch upon relations across or between initiatives, but I will make a comparative analysis between the case-studies. When I study the transformative potential of the techniques applied and the visions realised at the case-studies, sub-question 4, I address the propositions regarding relations to broader socio-material context and relations to institutional change processes.

A conceptual framework to analyse specific methods of collaboration, communication and decision-making is hard to find in existing literature. In my literature review I did come across some studies on ecovillages where these methods were discussed. For example, Christian (2013) divides good governance of a community into three aspects;

community glue, good process and communication skills and effective project management (see figure 2.9). An explanation of this model was given in the previous chapter. These three aspects are according to Christian (2013) crucial reinforcing aspects to a community and they ensure good governance. The overarching governance structure describes with which model decisions are being made. I will use this typology as a starting point for my research. With my research I hope to achieve a more specific typology of the different types of process and communication skills.

ANALYTICAL FRAMEWORK

My conceptual framework has led me to develop my own analytical framework, pictured in figure 3.3, for answering my research question.

The framework illustrates the internal dynamics of a SI-initiative and its transformative relation with the context. In the framework, a SI-initiative is central. It is surrounded by the social context; this is where transformations and societal transitions can occur. With their NoC a SI-initiative explains why they think change is necessary (the context), who should be or is involved in that change (the actors) and how the change should occur (the plot). The vision explains what the desired end goal is of their initiative; what they strive for with their actions. The actions are their daily practices, including their (social) innovations in for example their organisational structure or decision-making method. The vision can influence these actions in three ways; by giving motivation, inspiration and/or direction (Helm, 2009), the narrative also influences actions. The actions give feedback to the narrative and possibly vision, and confirm or challenge these. This feedback is enhanced if there is interpretative flexibility and adaptive capacity in the cycle (Smith et al., 2005).

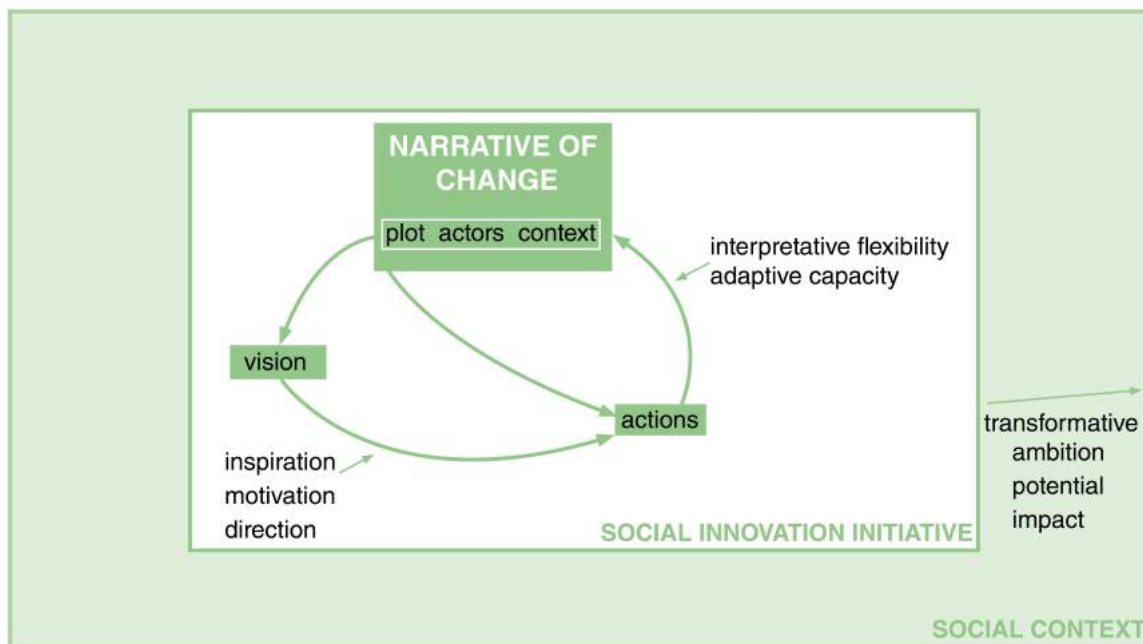


Figure 3.3 Analytical framework developed to help answer my research question (own image).

The SI-initiative can have a transformative relation with this context in three levels as defined in the TSI framework, either through their ambition, their potential or through actual impact (Wittmayer et al., 2015a). An initiative can be transformative through ambition when they hold the vision, aims or mission to achieve or contribute to specific transformative changes. Transformative potential arises when an initiative holds an object, idea, activity and/or qualities which seems to have the ability to challenge, alter or replace existing institutions in a specific context. An initiative has transformative impact when there is actual evidence of the initiative having achieved a transformative change in their context (Haxeltine et al., 2016, pg. 31). Within the SI-initiative there is a constant cycle of mutually influencing aspects which determine the qualities of the TSI. This cycle consists of the shared narrative of change, the therefrom arising vision and the actual actions.

The framework covers the main aspects I will need to answer my research question. It allows me to see how ecovillages envision and practice TSI and it allows me to

understand how the visions and narratives help in realizing actual actions and in the development of the initiative as a whole. It also allows me to study the role of the SI-initiative in societal transition.

SPECIFIC ANALYTICAL QUESTIONS

To be able to apply this main analytical framework on my case-studies, I will first have to perform specific analyses on different aspects in the framework. There are four types of specific analyses that I will engage in for each of the cases: the development of A) an overview of the narrative and vision, B) an overview of the social innovation, C) an overview of specific methods for collaboration, communication and decision-making, and D) an overview of how the initiative itself thinks of their transformative impact. For these specific analyses, I have developed four sets of questions to guide my empirical research. These sets of questions are related to the overall analytical framework, but are more practical in that they describe which precise information I will need to gather with my empirical research. They will allow for comparable results between the ecovillages under study.

A) QUESTIONS TO STUDY NARRATIVE AND VISION

Within the TRANSIT project, it is believed that narratives of change (NoC) are part and parcel of social innovations, in at least two ways: 1) they convey alternative ways of doing, organising, framing and/or knowing, and they promote social relations supporting them and 2) they constitute alternative ways of framing the world (Wittmayer et al., 2015b). Based on the earlier explained principles of a NoC, Wittmayer et al. (ibid) present a method for reconstructing and analysing narratives of change, which can be seen in Appendix B. I moderated this method to fit my research; as proposed in the conceptual framework on visions, I will include aspects to study the vision as part of the narrative of change. First of all I wish to study how and which vision or core principles have arising from the narrative. On top of this, I wish to study if and how this vision has the capacity to motivate, inspire and give directions as well as the degree of interpretative flexibility and the adaptive capacity to new developments. I therefore propose to add a fourth and fifth element to the framework developed at TRANSIT, which deals with aspects of the narrative (see table 3.1). The aspects to the vision will be studied qualitatively, in terms of how the actors themselves perceive it. This will be in part triangulated with document review.

(1) Content of the narrative

Context	What past and current problems and societal challenges are framed in the NoC? What desired future or goal is described, lending purpose to proposed actions?
Actors	NWho are the individual, organisational and sector-level actors driving and/or hindering change?
Plot	What events, experiences or activities lead to the desired future and in what sequence? Which activities by the initiative and other actors are driving and/or hindering change?

(2) Role of the narrative

	What role do the social innovation actors ascribe to the narrative they share and narratives and others?
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(3) Production of the narrative

	What kind of narrative practices does the initiative engage in? How central are narrative practices to the activities of the SI-initiative?
--	--

(4) Vision arising from the narrative	
What?	Which vision is formulated by the ecovillage and what are the core principles or values of this vision?
How?	How did this vision arise from the narrative and how does it reinforce the narrative and support actions and decisions?
(5) Aspects of the vision	
Effect	How does the vision motivate those committed to the vision? How does the vision inspire those committed to the vision? How does the vision provide direction to those committed to it?
Consistency & Robustness	How is interpretative flexibility ensured through the content, role, production and effect of the vision/narrative? How is adaptive capacity of the vision/narrative to new developments ensured?

Table 3.1 Set of questions A, to study the narrative of change and vision of an initiative.

According to the TSI framework, each initiative has a narrative for different levels: one for the individual, the initiative and for the societal level. It will be relevant for me to acknowledge these different levels of the narrative, to understand if they focus their action on a specific level of narrative, or evenly distributed amongst all.

B) QUESTIONS TO STUDY SOCIAL INNOVATION

To study social innovation at the ecovillage case-studies, I will use the TSI framework for social innovation. Social innovation is defined as changes in social relations. The new relations are described by four aspects knowing, doing, framing and organising (Haxeltine et al., 2016a). These aspects can be studied empirically for each ecovillage to provide insight into the functioning of the new social relations. Wittmayer et al. (2015c) provide examples of what the four aspects encompass; this overview can be found in Appendix C. However, as I wish to focus my research on the methods for collaboration, communication and decision-making applied in ecovillages I will narrow down the analysis of all SI activities in this overview. I will focus on the elements to each of the four aspects that contribute to or support these methods. This mainly entails that I will not lay an emphasis on the technologies, materials and resources used in the ecovillages. Taking this in account, I have developed some questions that can help in collecting information on social innovation in the ecovillages (see table 3.2).

(1) Knowing	
Views	What are new ways of knowing or interpreting within the initiative?
Production	How is knowledge supporting the initiative produced; do they use website, training, blogs, expositions, etc.? How do they learn? How do they develop and maintain competence?
Evaluation	Is competence and knowledge evaluated and monitored and how? Is knowledge and competence shared amongst the inhabitants or are there knowledge/skill 'monopolies'?
(2) Doing	
Practices	SIs are created and maintained through practices, what are essential, novel practices to the ecovillage? Which hard commitment, values and or principles are in place for performing certain practices or attending certain activities?
Interaction	How are ecovillage inhabitants interacting with each other? (communal activities, regular gatherings, etc.)
Change	Which strategies do they have to grow or scale the TSI and to influence change processes?

(3) Organising	
Structure	What type of governance and decision-making are employed?
Daily organisation	What is the system of responsibilities and task distribution? How are external contacts managed?
Legal Forms	What are the legal forms and how is the ownership managed?
(4) Framing*	
	* This aspect is covered in the narrative and vision framework

Table 3.2 Set of questions B, to study the social innovation in ecovillages.

C) QUESTIONS TO STUDY METHODS FOR COLLABORATION, COMMUNICATION AND DECISION-MAKING

On top of the questions to study social innovation in general, I will need a set of questions to study the specific methods for collaboration, communication and decision-making that are in use. As explained earlier, I will use the framework of Christian (2013) as starting point and focus only on the governance type and the process and communication skills. For these process and communication skills I hope to develop my own, more specific typology after conducting empirical research. I have formulated questions that have to be answered by the empirical research, regarding the governance and process and communication skills (see table 3.3).

(1) Governance	
Over-arching structure	What is the overarching structure with which the ecovillage is managed? What are principles to this structure? (How does it work)
Process	How was this governance type chosen and has it evolved over time?
Contribution	In what way does it contribute to achieving the vision or how has it in the past?
(2) Process and communication skills	
Methods	Which methods/practices are employed to improve communication? How do they work? Which methods/practices are employed to improve the process of the meetings? Are the methods viewed as successful, who decides which methods to employ?
Group gathering	How do members gather together? (is it obligatory for everyone, how often, with which purpose, etc.?)
Process	Did some methods or processes change over time? Are the skills picked up by every member or is there an adaption period with new members?

Table 3.3 Set of questions C, to study the specific methods for collaboration, communication and decision-making applied in ecovillages.

D) QUESTIONS TO STUDY TRANSFORMATIVE IMPACT

My fifth sub question to my research question refers to how ecovillages view their transformative impact towards more sustainability. I will study this qualitatively, since I do not wish to make predictive statements about the transformativeness of an initiative which is in my opinion a quality that can only be attributed to an initiative after the events have taken place. The aim of this sub question is to create an image of how the ecovillages view their interaction with the societal transition, in terms of ambition, potential and impact. The set of questions is therefor also based on these three levels

at which a SI-initiative can interact in a transformative manner with its context, see table 3.4 (Wittmayer et al., 2015a; Haxeltine et al., 2016).

(1) Ambition
How do they envision to be contributing to the societal transition? (in which ways/ through which means) Where / on whom do they think their experiences could have an influence? How do they view the role of new types of organisation and decision-making in the societal transition?
(2) Potential
What are innovative aspects to the initiative that they view as having potential to alter the current society?
(3) Impact
Have they experienced any people or projects which got inspired or were initiated because of their examples?

Table 3.4 Set of questions D, to study the transformative impact.

METHODOLOGY

I will take a case-study approach to answer my research question, because I deem this the most suited approach for the nature of my question. Grin et al. (2010, pg. 99) note that case-studies allow 'detailed process tracing' and 'exploration of patterns', which is important for investigating transition phenomena. Yin (2003, pg. 9) recommends using case-studies when *"a how or why question is being asked about a contemporary set of events over which the investigator has little or no control"*. Attempting to understand how ecovillages are practicing and envisioning TSI is a 'how' question and asks for an explanatory type of case-study approach. My question is focused on current activities in established ecovillages, which makes it a contemporary set of events. Lastly, the question can only be answered by studying ecovillage's practices and beliefs, which means that I as an investigator will have no control over the events.

I will perform an embedded, multiple case-study analysis, as I wish to provide an overview of several ecovillages in the Netherlands. Yin (2003) also states that a multiple case-study can produce more robust results, since conclusions arrived at from independent cases are stronger and findings originating from several cases of differing context are more generalizable. In an embedded case-study approach there are multiple units of analysis within one case-study. The unit of analysis for the study will be: envisioning and practicing of TSI in Dutch established ecovillages, focused on collaboration, communication and decision-making methods. To collect case-study data I will perform document review and interviews and I will organise a discussion session at the Dutch ecovillage network event to discuss my preliminary findings with Dutch ecovillages. This will give me feedback on my findings and may present some additional points of discussion.

I will follow the method for an embedded case-study as proposed by Yin (2003), see figure 3.1. This method consists of three phases. The first phase, 'define & design', focuses on developing a research question and analytical frameworks and making a case selection. The second phase is where the data collection and analysis of the single case-studies happens, using the earlier developed analytical frameworks. The last phase is for analysis and conclusion, where the cases are being compared and discussed.

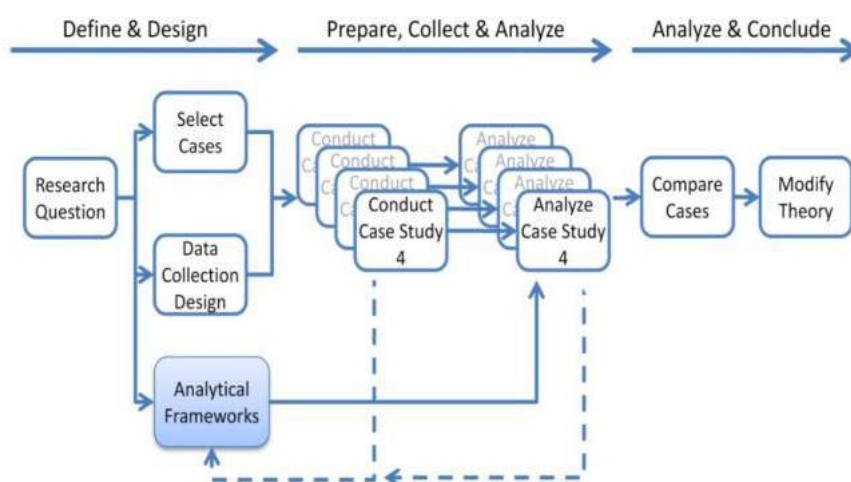


Figure 3.1 An overview of the process of an embedded, multiple case-study method as proposed by Yin (2003, pg. 50).

DATA COLLECTION DESIGN

SINGLE CASE-STUDIES

For the single case-studies I performed document review and interviews, with emphasize on the interviews. The data was gathered on the basis of the sets of questions presented earlier. Site visits were part of the case-studies in order to conduct the interviews whilst simultaneously gaining experience of the community and place. In-depth analysis of primary sources produced detailed familiarity with the case, which was valuable also to properly conduct the interviews.

Document review allows insights into the external representation of the ecovillage by itself (primary documents) and by others (secondary documents). This method is a good source of information about how other actors perceive, analyse and think about the ecovillage (Wittmayer et al., 2015a).

Interviews as research method are critical in case-study analysis because through interviews actor-specific insights can be gained about for example the narratives, daily practices, their accounts of processes, changes, their understanding of the context, the relations between actors in the ecovillage and outside the initiative. On top of this, Wittmayer et al. (2015c) point out that information about social innovation might only to a very limited extend be available as written information, which makes assumptions expressed in interviews about these innovation relevant additional sources of information. I will conduct two extensive interviews for each case, with community members that are closely involved and familiar with the ecovillage yet have a different position in the village. The interviews will follow an interview guideline developed prior to the interview. As qualitative analysis is not a linear process, this guideline and interviews are an iterative process. The interviews will be recorded and a transcript will be written afterwards, which can be used for analysis of the interview.

Participant observation as a method refers to participant observations in the immediate environment of the initiative. Participant observation can have a number of different forms, such as: short site visits, participation in meetings or longer stays as part of the group. It can lead to various types of data, such as field notes, episodic interviews, photography, material objects, etc. As a research method, participant observation gives a close view of process and dynamics, of relations in the initiative, of actor's identities and motivations and it can position actors in their initiatives (Wittmayer et al., 2015a, pg. 20). A danger of in-depth participation in the case is getting so absorbed by the group of people under study that you lose the ability to reflect critically. Therefore, a good balance between proximity and distance has to be maintained (Sørgaard Jørgensen et al., 2014, pg. 21).

Within the scope of my thesis I will not be able to use participant observation to describe and analyse the daily practices of social techniques applied in ecovillages. Due to the limited time span of my thesis and the extensive amount of practices in ecovillages, participant observation was not the most optimal type of data collection for my particular research question and the type of research project. Future research could benefit from participant observation, more on this in the discussion.

INTERVIEW GUIDELINES

To gather qualitative data, a semi-structured interview seems a good approach. A semi-structured interview can be defined as “*an interview whose purpose is to obtain descriptions of the life world of the interviewee with respect to interpreting the meaning of the described phenomena*” (Kvale, 1996, pg. 5). An interview-guide can help in such a type of interview, this describes the themes that the interview should cover and what I would like to learn from the interview. However, during the interview, it is important to ask follow-up questions when needed instead of sticking to the guide very strictly. Due to inevitable normativity of interviews, it is necessary to perform interviews with different types of actors within one initiative, this can limit the normativity of the data gathered from the interviews. Also, data from interviews can be triangulated with data from document review (Kvale, 1996).

I have interviewed two inhabitants of each ecovillage, which have a slightly different role in the ecovillage. I asked the two inhabitants relatively similar questions, as the reason for this double interview was mostly to limit normativity by overcoming individual points of view. On top of interviewing two inhabitants of each ecovillage, I interviewed one of the initiators of the Dutch ecovillage network. This allowed me to gain an overview of the Dutch ecovillages and gave me inspiration for more specific questions in my ecovillage-interviews. Prior to the interviews, I made two interview guides for these interviews, one for the interview with the ecovillage network member, and the second for the other interviews.

INTERVIEW GUIDELINE 1

This interview guide functioned as a guideline for the interview with a member of the Dutch ecovillage network. The aim of this interview was to get an overview the various organisation structures and decision-making methods applied in Dutch ecovillages, the varying narratives and visions and the varying contribution to societal transformation. Another aim was to get an insight into the role of the network in helping the ecovillages contribute to societal transformation. Lastly, the interview gave me an opportunity to present my plan for an interactive session with several ecovillage members on their differences and similarities. The interview guideline can be found in Appendix D.

INTERVIEW GUIDELINE 2

This interview guide functioned as a guideline for the interview with two members of each ecovillage under study. The aim of the interviews was to threefold; 1) to gain an oversight of their narrative, vision & values, 2) to gain an overview of their organisation structure, decision-making method and tools for communication, self-development and group connection and 3) to gain an impression of how they view their current and potential contribution to societal transition.

The interview guideline starts with a short introduction to the interview, including my name, the aim of my research and asking for approval to record the interview. This is followed by a question about the specifics of the person being interviewed. After this, four main questions are asked, with some guiding sub questions which can be asked depending on the course of the conversation. The four main questions are: 1) on their vision, 2) on the organisation structure and decision-making method, 3) on practices for self-development, communication and group connection, and 4) on their societal transition contribution. The interview guideline can be found in Appendix E.

CROSS-CASE COMPARISON

After having conducted and analysed the single case-studies, I made an overview of the key aspects of all cases. This allows me to identify differences and similarities

between how the ecovillages envision and practice transformative social innovation. As it is especially interesting to ask the ecovillage members' own opinion on the differences and similarities between the ecovillages and the causes and effects these might have, I organised a session on the Dutch ecovillage network event. Here, roughly 30 ecovillage members and I discussed the differences between the ecovillages on the basis of some preliminary findings of my study. This gave me feedback on my findings and presented some additional points of discussion. It provided the ecovillage inhabitants with insights in how other villages are organised and what different effects they experience because of this. I organised the discussion session around three discussion topics, 1) their organisational structures and decision-making methods, 2) the role of and views on their visions and 3) their methods for communication, self-development and group-connection. A short description and a summary of the main results from this session can be found in Appendix F.

CASE SELECTION

The selection of case-studies is based on criteria relating to my unit of analysis and some practical considerations. My unit of analysis is: envisioning and practicing of TSI in Dutch established ecovillages, focused on collaboration, communication and decision-making. The criteria are described in table 3.5. The number of case-studies is targeted around four ecovillages, to fit my tight time schedule but still enable cross-case comparison.

Criterion	Description
Location	The case-study should be located in the Netherlands.
Ecovillage	The case-study initiative should be identifiable as an ecovillage or a closely related type of community such as an eco-tribe or eco-community. Subscription to the Dutch ecovillage network suffices.
Established	The case-study should be established, meaning that it is not in the initiative phase but that there are physical elements in place, that envisioned practices are in practice, that people actually live in the ecovillage, etc.
Vision	The case-study should have a clear, shared vision.
Governance	The case-study should employ at least one innovative social technique in terms of communication, self-development or collaboration, or have an innovative governing method.
Variety	Amongst the case-studies there should be a variety in stages of completion, age of the community, type of housing and/or type of organisation.
Agreeable	The case-study needs to be willing and able to participate.

Table 3.5 Selection criteria for the case-studies.

On the website of the Dutch ecovillage network a list can be found of ecovillages in the Netherlands. From a total of 23 initiatives linked to the network, around nine are actually existing and the rest are initiatives still looking for a plot of land (Ecodorpennetwerk, 2016d). After evaluating these nine initiatives, I made a selection of five cases that most fit the criteria (see table 3.5). These promising candidates are Ecodorp Bergen, because of their previous collaboration in academic research and Vereniging Aardehuis in Olst, because of their state of ‘completion’. IEWAN is interesting because of the high number of participants and the realization of social housing, ecodorp Boekel is interesting because it is currently constructing the ecovillage and is participating in some (governmental) research programs and de Hobbitstee is interesting because of its relative long existence. Since all of them were willing to cooperate, these are the cases that I selected for my research. A short overview of each of the cases is provided in table 3.6. And a map of their geographical location is depicted in figure 3.4.

Ecovillage	Description
IEWAN	Living community of social-sector apartments constructed out of straw-bales. Initiative started around 2008, construction started in March 2014. The 24 apartments were finished in 2015. Currently there are roughly 50 people living in these apartments.
Ecodorp Bergen	Ecovillage on an old military terrain in North-Holland. Initiative started around 2009, the land was bought in 2013. Land work has been performed, only temporary constructions and renovated facilities are in place. Roughly 10 people are officially a member of the ecovillage.
De Hobbitstee	Eco-community in the north eastern part of the Netherlands. Started as commune in 1969, now turning into an eco-community. No self-built constructions, only conversions of existing buildings Currently 9 adult inhabitants and 6 children.
Ecodorp Boekel	Ecovillage in the eastern part of the Netherlands. The idea came in 2008 and initiative Boekel started around 2013, they moved to the plot in 2015. First land work and experiments with installations have started. Roughly 19 people are currently living there in temporary houses.
Vereniging Aardehuis	Ecovillage in the centre of the Netherlands. Initiative started around 2006, construction started in 2011, finalized in 2015. 12 earthship houses, 11 straw bale houses, 1 communal building. Currently 43 adults and 34 children live in the community.

Table 3.6 Short description of all five case-study ecovillages.



Figure 3.4 Map with the geographical location of the case-study ecovillages.



4. EMPIRICAL RESEARCH

In this chapter the empirical research is presented, comprising the data collection and data analysis steps of my research methodology and providing answers to my second, third and fourth sub questions: *“What are the narratives and visions of Dutch ecovillages and which tools for collaboration, communication and decision-making do they employ?”*, *“How are the visions and practices of Dutch ecovillages related?”* and *“How do Dutch ecovillages view their sustainability transition impact?”*

First, an explanation of my data analysis is provided. After this, five sections with the analysis of the individual case-studies follow.

CASE-STUDY ANALYSIS

I analysed the individual case-studies by filling out the four sets of questions for each case-study, using the interview data. This interview data was triangulated with the document review. The completed sets of questions can be found for each case-study in Appendix D.

To make the results more accessible, I have presented the results in the next sections using quotes and guided by the four ways of social innovation (organising, framing, knowing and doing) and the three levels of transformative impact (ambition, potential and impact). For each case-study I answered the same questions around these concepts, the questions were:

1. In what way does the initiative enact social innovation, in terms of organising, framing, knowing and doing?

1.1 How does the initiative enact social innovation in terms of organising?

1.1.1 What is the effect and the process of development of their governance type and organisational structure?

1.1.2 What is the effect and process of the communication, self-development and group connection tools they employ?

1.2 How does the initiative enact social innovation in terms of framing?

1.2.1 What is their narrative and what role does it play?

1.2.2 What is their vision, how was it formulated and what role does it play?

1.2.3 What are the effects of the vision on the initiative and its development and are interpretative flexibility and adaptive capacity ensured?

1.3 How does the initiative enact social innovation in terms of knowing?

1.4 How does the initiative enact social innovation in terms of doing?

2. To what extent does the initiative view their social innovation to be transformative in terms of ambition, potential and impact?

2.1 What is their transformative ambition?

2.2 How do they view their transformative potential?

2.3 Did they have a transformative impact?

These questions relate to the specific sets of questions I developed in chapter 3 which I used to guide my empirical research. Set A, on the narrative and vision of ecovillages is covered by question 1.2. Set B, on social innovation in ecovillages is covered by questions 1.1, 1.2, 1.3 and 1.4. Set C, on the communication, collaboration and decision-making in ecovillages is covered by question 1.1. Set D, on the transformative impact directly corresponds with question 2.

The quotes from the interviews are referenced by number and the numbering of the interviews can be found in Appendix C. The original Dutch version of all quotes can be found in Appendix E.

***Disclaimer: The analysis of the case-studies is mainly based on interviews with two inhabitants of each ecovillages; the opinions and views of other inhabitants in these ecovillages can differ from what is written in the analysis. Also, the interviews were subject to my interpretation and analysis, which can have led to a different image of the ecovillage than they have themselves.**

SHORT DESCRIPTION OF MAIN METHODS

Several of the cases employ governance and decision-making methods that are not common. In appendix A an extensive explanation is given of some of these methods. Below, are short description of the four main methods that are used is given for readers unfamiliar with these methods.

Sociocracy: Sociocracy is a whole-system self-governance system with a built in decision-making process. Sociocracy means governance by peers and aims to create a harmonious organization based on equivalence, transparency and effectiveness (Christian, 2013b). Sociocracy is a pattern of double-linked decision-making circles existing of small groups of people. Each circle has a particular aim, area of authority and budget. Each circle consists of people with expertise and/or strong stakes about the task of that circle (Sociocracy, 2016).

Holarchy: Holarchy is a governance method based on holacracy, which is in turn very similar to sociocracy. Holarchy and holacracy are more goal-oriented than sociocracy. Holarchy is an adaption of holacracy developed in 'Ecodorp Boekel' and is adapted to better fit community governance. A holarchic organization consists of circles and roles. When a role is simple, it is performed by a single person. If a role is more complex, such as for example the construction of new houses in an ecovillage, it is performed by a circle of people. Within this circle every person takes on a small part of the large role, which creates clearly defined smaller roles. Meetings with holarchy are different from meetings in sociocracy. The meetings are centered around tensions of individual roles. Every role can put a tension on the agenda and the whole group will then help this role to solve their tension (Ecodorpboekel.nl, 2016).

Consensus with unanimity: Consensus decision-making is most commonly known as a decision-making method where everyone in the group has to agree with a decision for it to pass. However, consensus only means that it seeks widespread agreement amongst all group members, not necessarily needing unanimity. More specifically, it actually consists of two parts. The first is *the process* of consensus decision-making, which is the intention to hear from everyone, give opportunities to ask questions, express concerns and modify the proposal. The second part is called the '*decision-rule*', this is the percentage of agreement needed to pass a proposal as well as the conditions to which an objection has to comply for it to be valid. In consensus with unanimity, a 100% agreement is needed, which is sometimes referred to as every individual having the power to block a decision, or 'veto-power'. In a so-called 'principled block' process, the group determines whether a block is valid, based on whether the proposal violates the group's underlying principles or having a rule which requires people who block proposals to co-create a new proposal with the advocates of the old one (Christian, 2012).

Consent: The difference between consent and consensus is mainly one of emphasis on the objection procedure. Consent can be defined as 'having no objections'. Where objections must be reasoned and paramount. Consent does not mean you fully agree, only that you will be able to work toward the aims of the decision, i.e. that you can 'live with it'. In consensus decision-making, all members of a group make all policy decisions. In consent decision-making however, only those who are affected by a policy decision must consent to it being implemented, sometimes even through an elected representative. This creates a governance structure that allows delegation of decisions while preserving equivalence (Sociocracy, 2016).

IEWAN is short for Initiative group Ecological Living in Arnhem and Nijmegen (Initiatiefgroep Ecologisch Wonen in Arnhem en Nijmegen). The initiative started in 2008 with a core group of roughly six people. In 2011 already 300 interested people had registered themselves on the waiting list for one of the apartments in the initiative. Together with 'ORIO architecten' and Talis, the housing association, a design was made for an ecological and communal living complex of 24 living units of different compositions. The plans included on-site waste water treatment and energy production, local and ecological building materials, compact living units, communal spaces and a permaculture garden. On top of the individual living houses, communal spaces, work studios and a central communal building were included in the design. Late 2013 the finances were complete with the help of crowdfunding and a subsidy of the province Gelderland and the city of Nijmegen. In the spring of 2014 construction started, with a contractor and over 200 volunteers. After the wooden skeleton was in place, the straw placement and clay plastering was done solely by the volunteers. In May 2015 the complex was finalized and people started living on the site. Currently, 44 adults and 6 children are living on site (Iewan, 2016a; Iewan, 2016b).

For this case-study interview one and two were conducted. Interview one was with a member who has been involved with IEWAN for roughly three years, interview two was with one of the initiators. Original Dutch quotes can be found in appendix E.

1.1 SOCIAL INNOVATION - ORGANISING

1.1.1 ORGANISATIONAL STRUCTURE AND DECISION-MAKING

The apartment building of IEWAN is officially property of the housing association, IEWAN rents the apartments as a foundation and governs the building. At IEWAN they are organized with a general assembly where all major decisions are made with consensus and multiple workgroups that are responsible for certain domains of action. At the general assembly tasks and deadlines are set for individuals and workgroups. The workgroups are responsible for the execution of things within their domain and have a certain autonomy over decisions. All decisions are made using consensus with unanimity, meaning that everyone has to agree and that one individual can block a proposal using a veto. Individuals or workgroups can bring a proposal to the general assembly, this proposal has to conform a specific step-plan to ensure clarity and efficiency during the general assembly. This step-plan prescribes that the ones making the proposal have to illustrate what the objective of the proposal is, the possible consequences of the proposal, how it fits with the three main principles of IEWAN and the changeability of the proposal after implementation. They also have an online forum on which the proposals are placed at least a week before the general assembly. On this forum, inhabitants can already pose questions so that the actual general assembly will take less time. The forum is not meant for discussions, it is only allowed to ask clarifying questions.

It was decided from the very beginning by the core group of initiative holders to use consensus decision-making. However, they did not implement true consensus right from the start. Only after they noticed that conflicts were arising in their meetings from not following the rules of consensus, they decided to study consensus decision-making more in-depth and practice it accordingly. Later, when the entire group of future inhabitants was formed, they decided again as a group with consensus to use consensus decision-making. The structure of their organisation and meetings did not

change much over time. The only thing which changed was the introduction of the step-plan, by which a proposal had to be drawn-up in order to clarify and speed-up the discussion at the general assembly. In hindsight they reflect that during the building period they sometimes accidentally exerted group pressure to reach consensus because of time pressure on certain decisions. They now have the ambition to prevent this from happening in the future.

They notice that the effect of the organisational structure and decision-making method is that everyone has a say in all major decisions, which creates involvement and support of all actions which in turn creates a feeling of responsibility among all individuals. The semi-autonomous workgroups ensure a certain level of effectiveness and speed in the organisation. At the general assembly, fairness and equality are ensured by appointing a facilitator who manages who is talking. The effect of the decision-making method is said to be great; it changes how people interact and discuss with each other. For example, playing political games such as might occur with majority voting does not occur. Having the option to block any proposal as an individual creates a difference in how people treat each other and listen to each other. It is also said to have contributed to the community feeling since everyone can be who they want to be and still be included in the group and the decision-making. A downside to consensus decision-making is said to be that some members that have a lot of knowledge or competence on a certain topic are still in a kind of power-position over the others. Another downside is the fact that under time pressure for decisions equality and fairness can be jeopardized. The online forum where the proposals are placed before the general assembly has helped to speed up the process at the general assembly. However, not all members use the forum and some other members start arguments on the forum which is actually not allowed.

“When you know that if you really do not want something to happen it will not happen because you can veto that, then you start speaking with each other in a very different way. It is not necessary to convince other people, which makes people interact with each other very differently” (1., Interview 2)

At IEWAN they do not often reach a point where they cannot agree with consensus on a decision. A chairman or facilitator will already notice during the argumentation round in the general assembly if the inhabitants are likely to reach agreement or not. When they notice that they will not reach agreement, they often do not vote yet but ask the workgroup of individual who made a proposal to revise it, so that everyone will agree. During the building period when there was a bit more time pressure on decisions they sometimes asked individuals who did not agree if their objection was really that important or if they would be willing to sacrifice their opinion in order to reach group agreement.

1.1.2 COMMUNICATION AND CONNECTION

At IEWAN they do not have any regular activities in place to improve communication or support self-development. In the beginning they did take several workshops in consensus decision-making and also had an expert sit in on one of their meetings. Self-reflection and an open attitude of the inhabitants are stimulated through one of their core principles, which is to be ‘open’, but the fulfilment of this is left to the individuals. With self-reflection they mean the ability of an individual to acknowledge their shortcomings and to talk about them. At the start of the project they did have a couple of one time group meetings, for instance one on what type of vibe and communication everyone expected or desired and one on everyone’s biggest fears. They currently only have one obligatory group gathering which is the monthly general assembly. The workgroups meet irregularly when they have things to discuss or do.

Inhabitants can meet randomly for diner, at the food cooperation or at the weekly Sunday café. They have a procedure for interpersonal conflicts, which is that the individuals in question are expected to talk about this amongst themselves. When this does not work they can ask for a third person to sit in on their conversation and if that does not resolve the conflict they can find an expert mediator.

“One on one some people might do that, but as a group we do not do so much about self-development, or spirituality. We have some people here in our house who would feel very uncomfortable with that and would then really start to feel alienated.”
(2., Interview 1)

They try to stay aligned as a group by having regular discussions about the interpretation of certain aspects to their vision or principles. At these discussions, they discuss how they want to act in a possible future scenario, for example when children of a couple living in a family apartment leave and this couple then actually lives in a house bigger than they need; should this couple then be asked to move to a smaller apartment. At IEWAN they do not reflect on effects these meetings or the lack of other types of group connection meetings have on the group, since they feel that they are aligned as a group and have no real need for more tools or meetings. New inhabitants seem to pick up the organisational structure and decision-making method easily. Should members notice that communication or decision-making is not going smoothly, everyone has the possibility to start a discussion about this and propose changes or workshops. They feel they should not include any obligatory self-development practices as they know that part of the group would feel very uncomfortable with this. In the early phases they made a conscious decision with the group that self-development would be left to all individuals and not part of the group, as many people did not feel a need for it.

1.2 SOCIAL INNOVATION - FRAMING

1.2.1 NARRATIVE

At IEWAN they define several aspects of current society that would like to see different. They miss the availability of living communally in the social housing sector, with complete management and maintenance in hands of the inhabitants. Believing that this could enhance feelings of safety, social connection and belonging, whilst also increasing a sense of responsibility and involvement in the inhabitants and leading to less maintenance and administration for the housing association. They also miss the availability of ecological housing in the social housing sector as they recognize the big contribution of the building sector to CO2 emission and many other negative environmental effects, whilst not being in the position to get a mortgage to start a private building project. They also see problems of inequality, unfairness and lack of support in common decision-making methods such as majority voting or rule by a small group of people. Lastly, they regret the absence of citizen initiatives, where citizens fight for their desired housing situation.

At IEWAN they wish to see more communal and ecological housing in the social housing sector, where inhabitants are involved in the construction as well as maintenance. They want the building sector to make use of more ecological and local building materials and sustainable installations. This could also result in becoming free from fossil fuels, which is one of their own ambitions. They believe that it is citizens themselves who have to start initiatives to achieve this, in collaboration with the local governments and housing associations. In their opinion, local governments and housing associations should be more open to these types of collaborations, in which they involve inhabitants, where they hand the role of managing the building to the inhabitants and where they create ecological and communal housing. Activities that are needed to reach the

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desired future are the formation of citizen initiatives, negotiations and collaboration with local governments and housing associations, preparedness of these actors to collaborate and establishing a group of future inhabitants with equal organisation and supported decision-making. Holding open days, tours and workshops as well as being published and widely known for their achievements is their way of contributing to this. Aspects to society that are seen as hindering change are 1) housing associations withholding attitude towards communal governance, 2) the unfamiliarity of local governments and housing associations with ecological and communal living and 3) building- and sewage regulations.

“That communal [living] is a bit more common, but especially that ecological building and living will be more common in the social housing sector, that would be nice.” (3., Interview 2)

The role of the narrative was primarily to bring together a likeminded group of people. The small group of initiators all shared the same narrative which made them start IEWAN and it also helped bring together the future inhabitants who shared the worldview and ideas of the initiators. The shared narrative is currently still important when they search for new members, as bond between the current inhabitants and as driver for their actions.

1.2.2 VISION

The vision of IEWAN is to ‘create ecological and social housing in Nijmegen’. Three core principles are attached to this vision: ecological/sustainable, communal/social and open/educational. This vision and the principles arose quite directly from the narrative described above. By noticing the lack of social yet ecological and communal housing, IEWAN formulated the vision to create this. Their core principles also arose from this narrative as they identified a lack of social, communal and ecological living and they wish to inspire others to do what they have done.

The vision was formulated by the group of initiators. They noticed in other initiatives that when first a big group is formed and then the vision, it is much harder to make decisions about the vision and core principles. This is why they decided to formulate the vision before looking for group members. This vision is open for discussion, but they did explicitly look for inhabitants on the basis of this vision, to ensure that they agreed with their vision. With possible future inhabitants they still check what the vision and principles mean to them, to ensure that these are people who understand and agree with the vision.

“According to us it was better to start with the small core group and really specify our plans and establish collaborations. Only when we really started with the design did we start looking for [more] people.” (4., Interview 2)

The vision and the core principles play an active role in their decision-making. The core principles are explicitly mentioned as a check in the step-plan for formulating a new proposal; for every proposal it has to be explained how it fits with these principles. The core principles are also used to check whether a decision in a workgroup or at the general assembly is in line with the vision and narrative. However, they do evaluate now that the principles and vision are very general and can therefore be interpreted in many ways, which sometimes leads to a more fundamental discussion at a general assembly. Since they noticed this, they sometimes take the vision and principles as a separate topic to discuss about. In those meetings they gather together and talk about for example how they live at IEWAN and why, how they interact with each other, what they do and do not want to share, what they wish to realize in the future, which aspects could get more attention, etc.

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“...those core principles are very open in a way, you can interpret them in many different ways. So, this means that we sometimes first have to discuss how a person interprets them, and why did you attach a certain proposal to the core principles and if everyone agrees with this; before you can talk about a change.” (5., Interview 1).

1.2.3 INTERPRETATIVE FLEXIBILITY AND ADAPTIVE CAPACITY

It can be said that the vision and core principles of IEWAN have an effect of both motivation, inspiration and direction. Their core principles motivate them to act accordingly because they have to be met by every proposal and decision. They reflect that in the early stages the vision also motivated them to hold on to their dream in discussions with the local governments and housing associations. The vision and core principles are said to inspire them in that they set goals for future actions; it is clear which aspects to the vision or principles are not yet met sufficiently and these are then addressed. For example, they currently reflect that they could do more on the principle of Social by engaging in socially responsible (‘maatschappelijk verantwoorde’) activities such as how they provided accommodation to a refugee family in the past. The vision also inspired outsiders to join the initiative in early stages. The vision and principles provide direction in several of the ways mentioned above; they set the agenda for future actions and they act as a check to proposals.

Interpretative flexibility is ensured by the broad formulation of the core principles and the resulting constant discussion about the interpretation and fulfilment of these principles. They actively engage in these discussions to clarify and define the group’s interpretation of the vision. There were however some occasions when the interpretative flexibility was too broad and they could not decide an argument before having a fundamental discussion. After such a discussion they did so far always reach agreement on the principles and vision. The initiators believe this can be ascribed to the fact that the principles are very general and the inhabitants were selected on the basis of the vision and principles. Adaptive capacity to developments is supported by the constant and active discussion on possible future scenarios and on the principles, vision and experience of living in the community. This enables them to notice changes in the group dynamic, keep aligning the group and to tackle problems before they have arisen.

“So when we take decisions we come back to the vision and look if the decision fits within the vision. And it is also something we take as a separate topic every now and then, then we will discuss how we live here and why.” (6., Interview 2)

1.3 SOCIAL INNOVATION - KNOWING

The initiators of IEWAN all had experience with communal housing and with consensus decision-making, this served as the basis of their knowledge. They took this experience as a basis for their internal vision, as can be read in the quote below. Once initiating the project they produced their ways of knowing for example by talking to a housing association with experience in communal housing. They also looked at examples of ecological buildings and involved an architect specialized in ecological building. They educated themselves about consensus decision-making and took some workshops.

“We were actually already living in a sort of alternative type of housing. We actually wanted to take the good things of the Refter [their previous communal housing] and we wanted to improve the bad things. So this experience in communal living, that this can also go less well, has had a real influence on how we formulated our vision.” (7., Interview 2)

They currently generate knowledge by sharing information on all aspects of their project, except the decision-making, on their website and other social media. They provided open days as well as cooperation days during construction and invited many volunteers. They now still give tours which are open to everyone and they also give private tours to local governments, housing associations, citizen initiatives looking to start something similar and to other actors. Every Sunday they have an open café in their communal building and they organized a biological and ecological produce cooperation open to everyone. They evaluate their knowledge and views with the open discussions, to evaluate their consensus meetings they had an expert sit a meeting and they monitor their energy production and consumption.

1.4 SOCIAL INNOVATION - DOING

At IEWAN they do many things which are innovative when one relates it to mainstream society. Many of these innovative aspects have already been mentioned. As a summary, it can be stated that their way of collaborating as a citizen initiative with the local government and a housing association to create ecological and communal housing in the social housing sector, in which they are involved in the development, construction and maintenance, is innovative. The organisation or the initiative with ideals of equality in fairness which resulted in the choice for consensus decision-making is also innovative.

"We had to negotiate with the province and municipality and housing associations first, because for them it was all very scary and new. While, as you know, ecological building is not that special actually, it is not strange, but for them it is very strange. So that is why the project took eight years." (8., Interview 1).

2. TRANSFORMATIVE IMPACT

2.1 AMBITION

At IEWAN they have not formulated a transformative ambition in their vision. A transformative ambition can however be detected in one of their three core principles, which is to be open and educational. They want to be educational by giving an impulse to society to start building more sustainably and more communally and they demonstrate how this can be achieved. They also have the ambition to demonstrate that when inhabitants manage their own building they are more involved and the neighbourhood is cleaner and safer. Next to this, they wanted to be an example of a social housing project that is ecological and communal, inspiring the social-housing sector to build more projects like that. They believe that since it is the social-housing sector's job to provide affordable housing, this sector should also take into account additional costs in a house such as the energy and water bills. By building sustainable housing, these additional costs can be reduced which would result in more affordable housing in the social housing sector. By holding tours and providing information to citizens, local governments, housing associations and other actors in society they hope to inspire them to develop more communal and ecological housing.

"Most of the ecological houses are very ecological but only available to people who can buy, who can take a mortgage... whereas we thought that it should be something the housing corporations should take on and especially the social housing sector." (9., Interview 2)

2.2 POTENTIAL

Many aspect to their project are viewed by them as having transformative potential. Amongst these are their methods and materials for ecological building, their on-site

waste water treatment, their on-site energy production, communal living, consensus decision-making or even just meeting with a facilitator, self-governance of inhabitants, citizen initiatives for social housing and the participatory development of social housing. They identify their main potential to transform society as setting an example where all these aspects are combined, that is what makes this project unique according to them.

“The materials that we have used are in themselves not special, a helophyte filter is not special, solar panels are not special, clay plastering is not special, and social housing is in itself not special or self-governing things neither. However, those three things together, that is unique.” (10., Interview 1)

They view their open days and cooperation days during construction as well as their online information and their social networks as providing potential for inspiring people with their innovative ways of doing. They do not view themselves as sufficient experts to inform or train others in their decision-making method of consensus decision-making. They have a long waiting list of potential inhabitants that wish to live at IEWAN, demonstrating that there is great demand for their type of housing. They also notice to be part of a bigger movement happening in society of citizens starting initiatives, of rising interest in ecological building and of political attention to involve citizens.

“It is really something of this time I notice. It coincides very much with the participatory society and the emancipated citizen and, well, people more and more want to undertake things themselves and especially housing associations are, to a certain extent, also pushed to this from politics.” (11., Interview 2)

2.3 IMPACT

They feel that they have had an impact already in several ways. First of all, they were invited to the plot by the municipality and used as the driving force behind development of that area. The municipality had bought the plot but could not get rid of it in the conventional way, which is why they decided to sell them as self-development plots. Once IEWAN had committed to building on the site, more initiatives and individuals dared to follow. Also, because IEWAN profiled themselves strongly as an ecological and communal project, over 80% of the plots developed in the area have now to some extent something ecological and/or communal. On top of this, another initiative is currently developing a similar project of communal and ecological social housing, the housing association is now more willing to cooperate as they had a positive experience with IEWAN. Lastly, two inhabitants of IEWAN have recently started a consultancy bureau to train and advice housing associations, local governments or citizen initiatives that wish to realize something similar to IEWAN.

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ECODORP BERGEN

In 2011 the idea to start an ecovillage arose amongst a small group of people, initiated by Fredjan Twigt. They were inspired by the prospect of a former military plot of land which would soon be sold to the public. They developed plans for the ecovillage, found support and proposed the plan to the municipality along with other parties who wished to purchase the land. In May 2013 they had officially bought the land, which an area of 16 ha that was used as an airport in WOII and as a mobilization complex during the cold war. To realize an ecovillage on this plot of land they have since been busy with sanitizing the ground, removing the concrete slabs, removing many buildings with asbestos and revitalizing the soil (Bergen, 2016a; Bergen 2016b). Currently, there are seven official members and roughly 15 interested members. They are waiting for the municipality to provide permits before they can start living on the plot and built permanent constructions. Their plans include several ecological houses, a communal building, a museum in a remaining bunker, a camp site for sustainable tourism, permaculture gardens, nature areas, bike lending, a give-away shop and more.

For this case-study interview three and four were conducted. Interview three was with a member who has been involved for roughly six years, interview four was with the initiator. Original Dutch quotes can be found in appendix E.

1.1 SOCIAL INNOVATION - ORGANISING

1.1.1 ORGANISATIONAL STRUCTURE AND DECISION-MAKING

At ecovillage Bergen they use sociocracy as governance method; they use it for their organisational structure and for their meeting structure (explanation of sociocracy can be found in Appendix A). They have a top village-circle which consists of representatives and coordinators of all five sub-circles that deal with specific domains (organisation, social, inhabitants, green & building/living). These sub-circles have relative autonomy over this domain: they are responsible for performing or organising activities that fall under their domain, they decide which actions need to happen, how and when these need to happen and who will perform them. In all meetings issues are decided using consent, in strictly structured meetings. Consent differs from consensus in that not everyone has to fully agree to a proposal, but no one should have a overruling objection. The meetings are clearly structured, they start with a check-in round, after this a proposal is being clearly laid down, then a round for questions happens, then two rounds of opinion/arguments happen, then the proposal is possibly adjusted and consent is asked. They always end a meeting with an 'assessment round' where they evaluate how everyone thought the meeting went and what could be improved.

They have two legal forms, a foundation and an association. They founded the support-foundation called 'Steunstichting ecodorp', this foundation owns the land. The ecovillage as an association rents the land from this foundation. They therefor collectively own and manage the land as an association. When individual houses are built, these will remain collective property.

They chose to use sociocracy to structure their organisation and meetings from the very beginning. They did not change anything in the rules of sociocracy as they call it an empty method which is very applicable and only in their implementation did they change some things over the years. For instance, they changed the amount of sub circles from many small circles to five larger ones. They are currently evaluating that the role of coordinator of such a circle is really big and they are discussing how the

workload of this person could be reduced. They also reflect that the most difficult part of their meeting structure and of consent decision-making is putting aside your ego; not talking rubbish or pushing through your opinion. Also, sticking to the structure of the meetings is sometimes experienced as difficult; for instance to not yet start arguing in the question round. They experience it as a process for all members and as a group; to learn how to enact sociocracy and develop meeting skills.

“As I said, it [sociocracy] is just like a musical instrument, when you do not play it well it will sound very foul. Then you cannot say that the method is not good, no, you simply have to learn to play the instrument ... You need patience, to master the instrument and discover its possibilities.” (1., Interview 4)

They experience that the effect of sociocracy and consent decision-making are first of all that it ensures that everyone is involved in the decision-making process. Everyone can steer a decision if they come up with new information. Everyone brings their personal qualities which can enhance each other and result in better decisions than individual persons could make. Decisions are made for a fixed period of time after which their effectiveness is evaluated, this reduces pressure to come up with something perfect at once. There are less issues of power as everything is decided with everyone included. Sociocracy is also said to bring structure and order to both the organisation and the meetings. Consent is experienced to create peace in the meetings; since everyone knows they have to find a solution that everyone can give their consent to, people do not (have to) play political games.

“When you have a successful meeting then everybody is happy together and we create something together which we could not have done individually, everyone has a contribution and... it is a very positive process.” (2., Interview 4)

1.1.2 COMMUNICATION AND CONNECTION

At ecovillage Bergen they employ several practices to enhance communication, self-development and group connection. They have a weekly heart circle where they share personal struggles and which are meant to help with self-development and group bonding. They have had training in nonviolent communication, which they often employ but this is found to be difficult in really emotional situations (explanation of heart circle and nonviolent communication can be found in Appendix A). They hold a monthly connection-day with the whole group where they do something fun together. At the start of every meeting they have a check-in round, asking how everyone is feeling and what is going on in their lives at the moment. They believe it is important to be in connection with each other; to have a friendship at the base of their collaboration.

They have a social circle that organizes the workshops for communication, self-development and group bonding, as well as the weekly heart circle and monthly connection day. Anyone can bring in suggestions for activities or workshops. In the past they have tried several other methods such as the way of council and the forum, these were found not to fit as well with the group as the heart circle method. The community members interact with each other on a daily basis. They meet with the entire community once every two weeks and the separate circles of the sociocratic organisational structure meet depending on their schedule. They meet during work on the land and on the cooperation days (every Thursday and one weekend every month) and they have many spontaneous social activities as well as a monthly planned group activity.

They notice that there has definitely been positive development in members of the community because of the methods they employ. Working with their irritations to become more conscious or help the other become more conscious has helped them

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in their self-development. They feel that the connections keep getting stronger and stronger, precisely through dealing with interpersonal conflicts that arise.

“Other than what you can do in regular society, just going home, it is here a bit more difficult. So you have to really work here and we see that as a bit of personal development. Either decreasing your own irritation or helping the other be more conscious. This is also really a goal of our community, next to our ecological goals, that bit of self-development and dealing with each other.” (3., Interview 3)

1.2 SOCIAL INNOVATION - FRAMING

1.2.1 NARRATIVE

They would like to see several aspects to society differently at ecovillage Bergen. They see a lack of purpose among people in society, except maybe purpose for earning money. People are almost completely denied in the current system that they compare to a wheel which cannot be escaped; to pay a mortgage, feed your children, drive your car, etc. A few mega-powers control all others, which is experienced as scary and problematic. The current society is seen as very industrial, with individual responsibility and an emphasis on the commercial, the money. Money is seen as the measure to which it is decided if things will happen or not. Just as regulations and laws determine how you should do things, this is also seen as something which can be done differently. They see social networks becoming ever bigger, which has diminished a person's influence on their direct social context.

At ecodorp Bergen, they see their project as a way to deal innovatively with some of the negative things they identified in society. In their ecovillage, they wish to experience again what it is like to live in a group. They believe by re-experiencing that and by being a self-sufficient community they will gain important experience to set the next steps for ultimately becoming a world citizen. When they make decisions they want everyone in the group to be acknowledged, with no concept of power, so that all decisions are supported by everybody. They feel that rules and regulations have to be loosened and the world powers have to be undermined in order to create change. They think that people need to find purpose again if we wish to reach a more desirable future. For this, people need to be in harmony with each other and nature, horizontally, but also vertically; they need to be aligned with their spiritual self. They believe this spiritual element is crucial to finding purpose again and being able to live as a community. Living in harmony with each other and with the cosmos according to them naturally results in choices for ecological building materials, organic food production and ecological waste treatment. They notice the possibility of fulfilling desires in a community like theirs that cannot be fulfilled in regular society; desires for creativity, for encounters, for freedom, for contact with nature, for solidarity, for experiment, for change, for love and also for trying things on the edge. They want to be separate from the big social networks and product supply chains, believing that this will be better in satisfying those many different needs or desires.

“That [connection] comes before building sustainably, it is first and foremost about connection with each other in a group... and also connection with that vertical component and from this it automatically follows that you treat each other and the earth in a sustainable manner.” (4., Interview 4)

Activities that are needed to reach this desired future are experiments with other ways of living, which they do at ecodorp Bergen by trying out things on their plot. Examples of this are: living as a group, self-building ecological houses and producing food and energy locally. For a successful community they recognize a need for two aspects as

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defined by Christian (2013a); socially and financially everything has to be in order. Experiments in breaking free from the rules of the game will drive change, laws and regulations are recognized as hindering these experiments as well as the prominent role of money in society.

The narrative can be said to have played a very dominant role in how they formulated their vision and the narrative of the initiator also determined who got attracted to the initiative. Once a group was formed, they formulated their vision by exploring everyone's narrative. They used techniques to discover how they as a group felt about many issues in society and how things should be changed and then slowly zoomed in on where they wanted to put their energy into. In the early stages they used the technique dragon dreaming to align everyone's narrative and create a shared narrative in the group to base their vision on.

1.2.2 VISION

As a vision they see *'a community where people can live together harmoniously and respectfully, in loving connection with each other, the earth and the cosmos whilst creating space for everyone's personal development'*. They also share certain values as a group. These values are deliberately not written down to allow continuous re-interpretation and evolution of the values. Connectivity is central to their vision and narrative of a future; connectivity to the community and to the cosmos. This comes even before sustainable building, which simply arose from their ambition to live in connection and harmony with everything and therefore also with nature. This vision was developed four years ago on a weekend supervised by an expert, before the initiative even knew which plot they would get. Currently, they feel a need to revise the vision as they feel that not everyone is aligned with the vision or people interpret it differently, which they notice when they have to make decisions. The fact that a lot has happened in the past years which has changed the plot and the community members is also a reason why a reformulation or re-understanding of the vision is deemed necessary.

The vision and values function in the decision-making as a sort of test, an unconscious test whether a decision is in line or not. The vision and values play two distinct roles in their daily decision-making: the vision provides the direction whilst the values show the way. They sometimes notice when new issues arise, such as a few inhabitants wanting to open a commercial sauna, that they have not fully grasped the values of the vision as a group yet. In such situations a discussion is started on the topic, to align the group's interpretation of the vision. In this way they keep developing the road of the values, where values are seen as unconscious steering agreements. They compare the ideal functioning of their group collaboration to birds flying in patterns without the presence of a clear leader of clear decision-making, yet still flying in perfect patterns. They believe their values do not have to be written in stone; once a group has a shared goal they will act as a swarm of birds working naturally together to catch food. They see the enactment of their vision and values as a continuous growth of the group, describing the process along ideas of Scott Peck:

"When you start something as a group, you start with a sort of 'pseudo-we'. Everyone thinks everybody is fantastic, there are only great ideas and they feel like nothing can break them. Then differences and irritations arise and a crisis happens. Then the next step, which often fails in groups, is to go to a true 'we'. Where you can accept and love each other including differences. This probably happens several times on higher levels, which is the growth you go through as a group." (5., Interview 4)

1.2.3 INTERPRETATIVE FLEXIBILITY AND ADAPTIVE CAPACITY

As the vision is said to function as a kind of test for decisions, it gives clear direction in all their decisions and actions. However, they evaluate that they interpret the vision in different ways and that the vision still leaves some gaps in which it does not give direction. The vision and values have inspired and motivated them to go through with and develop their plans. For example, they focus a lot on group connection and vertical connection since their vision motivates and inspires them to be in harmony and connection with everyone and everything.

Interpretative flexibility is ensured by making the vision only one sentence that describes in a quite general way a desired future. By working with flexible, unwritten values to determine their actions towards achieving the state as described in the vision, they can interpret the vision in different ways and change their values. Since the vision is so general, they can realign their values and still work towards the same vision. Adaptive capacity of the vision is also ensured by not writing down the values so that they can evolve in response to new members or developments. Also, they now feel a need to re-evaluate the group's vision and values, after which they might change the vision to better fit with the group energy.

"For me the vision gives direction, while the values show the road. That road is what we are still working on. We did not really write down: these are our core values. Also because we want to gain more feeling by what exactly is meant with a value." (6., Interview 4)

1.3 SOCIAL INNOVATION - KNOWING

At ecodorp Bergen they gained most of their views and their knowledge by being inspired and learning from other ecovillages and at the Global Ecovillage Network conferences (see chapter 2). They took training in sociocracy and they took workshops in several self-development and communication tools. They now produce knowledge by sharing their worldview, knowledge and experience through their website, interviews and on open days. They also have a newsletter in which they share their progress and experiences. Some separate members give workshops in elements of their knowledge. For instance, the initiator, gives workshops in sociocracy. They also bring some of their meeting practices to meetings with external parties such as the local government, for example by introducing a check-in round and an evaluation at the end of those meetings. They individually carry out their worldview and their experiences at the ecovillages in their personal networks. In the future they will allow tourists on their camping site so that these can experience life in an ecovillage. They evaluate on their knowledge and views by evaluating if the group energy and shared values are still aligned. They also evaluate if their sociocratic organisation is functioning properly, mainly by checking if they are enacting it properly.

"It is not only happening here, that we let everyone come to us, no, we bring things to our work places. That is how it spreads.... So through everyone's network..." (7., Interview 3)

1.4 SOCIAL INNOVATION - DOING

Many aspects described in the previous sections demonstrate the innovative ways of doing at ecodorp Bergen. In short, it can be stated that by being a private initiative of citizens who bought a plot of land to be developed as a sustainable community along their ideology of living in connection and harmony, they are innovative. They try to drive change through their ways of doing by inspiring individuals and showing alternatives.

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To achieve this they organise open days, collaboration days and more.

“Let’s put it this way, the system world, you can see it as a sort of system world, that money, our financial system, the bureaucratic system of the government; it forces people to live in a certain way. We could have lived in another way if we had started with different rules of the game. So it is actually these rules of the game that we want to... that we will let go a little.” (8., Interview 3)

2. TRANSFORMATIVE IMPACT

2.1 AMBITION

At ecovillage Bergen they do not have a clear transformative ambition stated in their vision, however, from conversations and their actions it becomes apparent that they do wish to actively inspire society to do things differently. They would for example like to demonstrate the sense and nonsense of regulations, to make everyone think about regulations in a different way. At ecodorp Bergen they strive to demonstrate that you can live a circular, ecological, economic and social principle and that that is actually fun and sociable. They wish to demonstrate that by closing local cycles, the earth can recover and world problems can be solved. They also have the ambition to give people purpose and inspiration and ideas: to show them an alternative and some hope. They want to make people realize that their unconscious way of living is a dead-end, that their way of life is not fun and that things have to be done differently. By realizing their dream of establishing a community of harmony and connection, they hope to inspire others that it is possible to do things differently.

2.2 POTENTIAL

They think that making local cycles has the potential to solve world problems and recover the earth. They view their way of living as a group as having the potential to make people feel one with each other again and to find purpose. They believe their way of living and developing a community to have the potential to meet many desires again (desires for creativity, freedom, close to nature, etc.). They view their ecovillage as having the potential to show people and also children that things can be done differently, to give them inspiration and hope to also change their lives. In meetings with external parties such as the local government they implement some of their meetings practices like a check-in and an evaluation round, this they think has the potential to make them understand their values better and perhaps even adopt them.

“I think it gives a sort of hope, an alternative. Because all the rest is just more of the same. We do not even have to do everything perfect, but we do give an image of hope and fire and change.” (9., Interview 3)

“And you show a bit of purpose. People that come to watch here, that come to help with the work, not because they gain something from it but simply because it gives them a good feeling: to contribute to meaningful things.” (10., Interview 4)

2.3 IMPACT

Ecovillage Bergen has been an inspiring example to the Dutch ecovillage network; getting this network off the ground and making them apply sociocracy. Their initiator, Fredjan, was one of the initiators of this network. They also inform other ecovillages of their experiences and knowledge, which might have helped these ecovillages. Also, it can be said that through developing the plot in their particular way, they have prevented it from being developed by a regular project developer who would not have done things as sustainable as them, which is itself a transformative impact. No physical projects have been started in their surroundings yet as a result of their project.

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DE HOBBITSTEE

The name Hobbitstee originates from the creature Hobbit in Tolkien's novels, which represents an intermediary between humans and nature. De Hobbitstee does not call itself an ecovillage, but an alternative community. De Hobbitstee has existed for over 45 years. In the 1960s a student from Leiden founded the commune in an old farm building in the province of Drenthe, on a terrain of 3.5 ha. He established a community based on anti-consumption principles, striving for free love, democratization and an ecological and anti-authoritarian society. Through the years the group composition has changed many times and so have their actions and principles. However, their core values to live in harmony with nature and each other have always remained (Hobbitstee, 2016). There are currently 9 adults and 6 children living in the community.

For this case-study interview five and six were conducted, this was a combined interview. Interview five refers to the answers of a member who has been involved with de Hobbitstee for roughly 34 years, interview six to the answers of a member who is involved for roughly four years now. Original Dutch quotes can be found in appendix E.

1.1 SOCIAL INNOVATION - ORGANISING

1.1.1 ORGANISATIONAL STRUCTURE AND DECISION-MAKING

At the Hobbitstee they call their decision-making method sociocratic. They are organised with a monthly general assembly where they make all important decisions with consensus. They have several workgroups that are responsible for different domains of action, for example a building group for the new building they are currently developing. These workgroups have some autonomy over decisions within their domain. The property is owned by a foundation called 'the new earth' which is run by members of the Hobbitstee and also some external people, ensuring shared leadership. As an association the Hobbitstee rents houses from that foundation. Some people in the Hobbitstee have their own businesses, such as a mushroom farm and a bakery, these are owned by the individuals involved and not collectively.

Back when Huzur (one of the interviewees and currently the oldest member) joined the community with his wife in the early 1980s, a lot of people had left the community and there was not really a structure left, so they went looking for organisation and decision-making options. They decided on consensus, also because another new member had experience with this in activist groups. They chose for consensus as it allows everyone to have a say in things and not let a few egocentric people decide for others. They also noticed that it demands an active attitude of all participants, which helps those in their self-development and stimulates the group connection. Over the years following several things have changed in their structure. When Huzur joined, they initially tried to have a completely shared communal cash system where everyone should give to their ability and take to their need, which arose from their egalitarian ideology. However this soon turned out not to work as some people were just taking what they wished. They therefor changed it to the obligation of giving 20% of your income to the community on top of the rent. They also changed the ownership structure a bit, going from complete shared ownership even over inhabitants' businesses on site, to letting inhabitants have a private business on site apart from the association. They mainly changed this due to negative experiences, as two members who worked a lot on the agricultural business took all lot with them when they left the community, despite collective investment. In their meetings and organisational structure they have changed little. Only some workgroups came or disappeared depending on the events happening at the Hobbitstee, like the new construction they are planning for which they founded a workgroup.

"That sociocratic decision-making and non-violent communication with each other... that is an active attitude; as a human you have to allow yourself to want to learn of circumstances or situations and stories you hear, to be able to learn how to get to grips with this." (1., Interview 5)

They view consensus decision-making and their organisational structure as effective in ensuring an active attitude, respectful interaction, in preventing or resolving conflicts, creating involvement and support of decisions. It has enabled shared leadership, shared ownership and shared responsibility. They do not talk of any negative effects experienced, this might be due to the fact that they are a relative small group which increases the chance of reaching agreement. At the beginning they did not have a procedure for allowing new members, which resulted in difficult meetings where they could not easily reach consensus. Since they installed a procedure for accepting new inhabitants, this has decreased. Lastly, when a member does not agree with a proposal, they have to explain this in depth (they need a good reason) and they have to actively contribute to formulating a new proposal.

"Treating each other respectfully, so that you get respect for who you are. Meaning that you are respectful to your own ideas or ideology and also to other people's ideas. That is actually what consensus does." (2., Interview 5)

1.1.2 COMMUNICATION AND CONNECTION

At the Hobbitstee they do not employ a fixed method to work on self-development but they do have a fixed monthly evening on Tuesday where they do something to stimulate self-development and group connection. This ranges from trying a method or taking a workshop, to simply making a round to ask how everyone is doing. They do use non-violent communication and have had several workshops in this, feeling that this is a very effective method for an active attitude, self-reflection and less conflicts. They meet each other every Tuesday evening, which is a 'Hobbitstee evening'. On these evenings they have once a month a general assembly, once a month a social evening where they invest in self-development or group connection and on the other Tuesday evenings they do various things. Apart from this they meet in their workgroups or during cooperation days. During the summer they have dinner table and enjoy many activities together. They have a WhatsApp group with all members to enable spontaneous activities, meetings or dinners.

They did not change much over time in the type of method or activities they have for communication and self-development. They have not tried methods like the forum or the way of council, because they felt no direct need for this. Any time new members join or old members leave, they acknowledge that the group dynamic changes and that they then have to evaluate on the new group dynamic. They notice that new members pick up the group vibe well, partly thanks to their selection procedure for new members. In the past they did not have a selection procedure for new members and simply allowed anyone who wished to live there, such a diverse group led to conflicts and differences within the group. They noticed recently that their WhatsApp group, which includes all members except three children without a phone, really stimulates and helps enable meetings and group activities.

"What I really notice is that in this way we communicate with each other from a positive attitude, and that always comes first, and also... that you do not criticise but give feedback when there are differences." (3., Interview 6)

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1.2 SOCIAL INNOVATION - FRAMING

1.2.1 NARRATIVE

At the Hobbitstee the individual members have varying narratives of their surrounding context. A lack of living in harmony with nature and each other is a recurring narrative. An example of a problem that is identified by some is that there have been individuals or certain parties in society who were acting very dominantly from their ego's and simply did as they pleased, this is seen as a problem because everyone should feel responsibility for their surroundings. Also a lack of transparent and collective decision-making is seen as a problem and little possibility to live in harmony with nature.

Their desired future involves individuals doing what is in their power to do. They feel that everyone should decide for themselves how they live or act; they do not want to enforce anything on anyone. They think that the implementation of shared leadership and shared ownership could lead to a bigger feeling of responsibility and new forms of decision-making. The implementation of sociocracy and nonviolent communication will in their opinion lead to a more active attitude of individuals, which in turn can lead to a more desirable society. They like the circular ideology of reusing waste, thinking it is an effective way of dealing with some issues in society. They believe that their four core values will lead to a harmonious community and society (sustainable development, personal development, social engagement and spirituality). All types of actors in society are seen as possible drivers of change to create a more desired future for everyone. For example, companies should feel more responsibility for the welfare and wellbeing of their surroundings, citizens should be more active, feel responsible and be able to participate in leadership and decision-making and political actors should not act from their ego's but be more transparent and act from shared leadership and shared responsibility.

"Well, I would like to see shared ownership [in society]... what you then also get is a feeling of responsibility for your surroundings. So when big companies have a place in those surroundings, that they also feel responsible for the wellbeing and welfare of the surroundings and that they don't... destroy the nature." (4., Interview 5)

The four core values to which one makes a commitment when they step into the group have arisen from their (unconsciously) shared narrative and ensure a good selection of new members and continuously motivate activities along these values. The narrative cannot be said to play a very active role in the community. New members are selected on a shared worldview, but at the Hobbitstee they do not actively engage in developing this shared worldview or propagating it to the outside world.

1.2.2 VISION

They currently do not have a vision, but instead they have four core values upon which their community is build. These are: *sustainable development, personal development, social engagement and spirituality*. They have a slogan which is '*ideals in execution*' ('*idealen in uitvoering*'). The core values play a very passive role in the decision-making. They do use the values as an agreement to which new inhabitants commit when they move in, which helps to reach agreement on decisions. All members experience that the group is well-aligned and every individual is flexible. This makes that all decisions go smoothly and they very rarely have to reflect back on the vision during the discussion on a decision. They have left the core values quite general and open to individual interpretation, they believe that when the values are too much from the collective, individuals are quickly not able to identify themselves in them anymore.

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“When you decide to start a project, which is with these four core values, that is a voluntary choice you make that does bind you to certain commitments. Also, when you see another step in a wrong direction you can say with each other; hey what are we doing, that should not be done.” (5., Interview 5)

The vision or core values have been dependent on the group living at the Hobbitstee at a certain moment. In essence their values have always remained the same, but the formulation and execution of the values have changed over time. In the past there vision was formulated as *‘in harmony and beauty with each other and nature’*. This vision is according to them still embodied in the current values, only formulated differently. In the early years of the community they for example had a different view on shared ownership and shared financing. Deciding that everything should be owned and managed by the community. After some negative experiences with this, they adjusted their values regarding these topics. They developed the current vision and values in an evening dedicated to this, where they discussed the subject and shared opinions. They then let it rest for a month, after which they discussed it again. Just recently it was also decided that for this group the principle of spirituality actually falls under self-development. This group could identify better with the concept of personal development than with spirituality. The principles are said to be very personal, everyone lives mainly from their own values and they allow each other this space. This is experienced as a very positive approach where they live together from everyone’s individuality, which gives energy to everyone.

“Also [for example] the extend of spirituality, you can do that very actively for yourself, but you can also not... so we have those values but you can live up to them to your own level.” (6., Interview 5)

1.2.3 INTERPRETATIVE FLEXIBILITY AND ADAPTIVE CAPACITY

In times of a difficult decision, their core values give direction. For example they had a discussion on their values when an inhabitant wanted to clad his tiny house with discarded LPs; to some inhabitants this did not agree with the natural appearance of their community, however, it did involve the use of a waste material making it sustainable in a way. Next to giving direction, the values also motivate in that each individual makes a commitment to them when they step into the group, which motivates activities along these principles. They do not ascribe an inspiring function to the vision.

The four values allow for very much interpretative flexibility as they allow everyone the space to enact them from their own individuality. Only when someone finds some action to clash with one of the core values, they reflect on it. The principles are also very general and can therefore be interpreted by every individual in their own manner. They have good adaptive capacity, as when the group changes they also re-evaluate their values to ensure that everyone supports them, that the values represent the group dynamic and that the group is aligned. In the past, the vision and values have changed multiple times in response to the groups composition. Also, when someone comes up with a new idea, which might not comply with the values, they are willing to reinterpret those principles.

“That is also what I think is very pleasant about this place: there are ideas and those are shared ideas but in the end you decide everything yourself. So, we really live together from everyone’s individuality. That is a very positive approach which gives a lot of energy, that you give each other that space.” (7., Interview 6)

1.3 SOCIAL INNOVATION - KNOWING

They have in the past gained knowledge or skills by taking workshops, for example in

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nonviolent communication, and by looking at other communities to gain knowledge about different methods of organising and living. Over the years they have produced their own knowledge and views in that they view that they should be able to be self-sufficient on their plot, for example by having some small businesses and filtering their own water. They interpret living in a place and on the earth in a different way, feeling this should be in harmony and that everyone should have individual leadership, feel responsible, and be involved. They do not actively produce knowledge on social media or through specific workshops. They do have open cooperation days and hope to inspire people simply by showing their community and being who they are in every contact with other parties or people. They do not have a system in place to evaluate their knowledge, however, they do reflect as a group on whether they are still communicating in a positive way and when they feel this could be improved they do a workshop or something like that. By having monthly social evenings they ensure that they stay aligned as a group.

“You start by being your own leader. So that is your personal leadership and from this comes dignity of you as a person.” (8., Interview 5)

1.4 SOCIAL INNOVATION - DOING

At the Hobbitstee they do many things differently from mainstream society. The inhabitants of the Hobbitstee have shared ownership and shared leadership over their community, which is an alternative way for people to live in and own a neighbourhood. They also manage and maintain the land and the buildings collectively. They decide issues with consensus and interact using non-violent communication, because they believe in values of equality and community feeling. They share many things, like tools, products, utilities and food. They have built or renovated the buildings using ecological materials and in harmony with nature, meaning for example that they use natural paints, waste materials, they use rainwater, filter their own waste water and partly produce energy sustainably.

Many different activities take place and have taken place at the Hobbitstee. For many years candles were hand crafted at the Hobbitstee and sold in charity shops. Recently, this candle craft house has been refurbished into a bakery. The bakery uses locally grown spelt to produce biological bread. There used to be a small biologic-dynamic agriculture business run by two inhabitants which provided a share of the community's income. When those people left, this was replaced by a new agricultural garden. Also, an oyster mushroom 'factory' has been started recently, producing the mushrooms on coffee residue of local restaurants. Some individual inhabitants also make earnings through for example yoga lessons, various workshops, sweat lodge rituals, and more.

2. TRANSFORMATIVE IMPACT

2.1 AMBITION

At the Hobbitstee they do not have the ambition to change or influence other actors or individuals. They do not live there to show others how things should be done, because they feel that everyone has to think and decide for themselves how they act. Of course they do have ideas about how society could function more to their ideal and they like to show people how they do things differently and inspire them, but they do not actively propagate their ways.

“I do not strongly feel like ‘I am going to change you’. But I would find that challenging... For example, we now collect coffee residue at local companies who are not at all conscious [of sustainability] and well perhaps this is a way to make them think about this or act differently. But that is not a goal in itself for me.” (9., Interview 6)

2.2 POTENTIAL

They view their ways of living communal, shared leadership, sharing goods, consensus decision-making, non-violent communication, ecological buildings and facilities as well as their circular economy businesses as having potential to inspire others. They like showing an alternative to how this are regularly done. There is a small campground on their plot where visitors or tourists with an interest in the community can stay and experience the community, this is viewed as having potential to inspire those people. Sharing responsibility with a group and letting decision-making methods arise from this, is seen as having potential to inspire others and as a step towards more happy living. Sociocratic decision-making and non-violent communication are seen as having the potential to create an active attitude in people, to make them want to learn from situations and develop. They believe that this kind of decision-making is really part of this time, because it allows people to truly connect and collaborate which is something many people and businesses are currently searching for. By bringing their own values and showing their practices in interactions with their social network they demonstrate what they stand for, they see this as having potential to have an effect on the others.

“When you are in meetings or in a workgroups ... and you remain yourself, that those people see; oh those are people from the Hobbitstee, and through that you show something of what you stand for and what happens here.” (10., Interview 5)

“It [consensus] is based on things that emerge. Because you know and see from each other what ideas you have, there arises a connection which you do not design up front. And I feel that in more places, that this is becoming the way of enterprising and of collaborating.” (11., Interview 6)

2.3 IMPACT

They have at the Hobbitstee not yet experienced anything physical happening in their surroundings because of them or their ideals. They do recognize to be part of a movement of citizens wanting to collaborate and connect again, to each other and nature. They might have inspired many people over the years to also think and do things differently, simply by letting them visit their community. They once led an action group to preserve a nature area in the neighbourhood, where they mobilized many neighbours and managed to succeed in maintaining the nature area by collaborating efficiently and peacefully.

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ECODORP BOEKEL

The first ideas for this ecovillage started roughly six years ago when Ad Vlems celebrated his son's first birthday and he desired to give him a more sustainable future. His wife Monique contributed to this that she wanted to do this while living in connection with others. Ad started a website where he shared their dream to start an ecovillage in Brabant. They soon got reactions from many families that also had this dream. A year later, the initiative now called Ecodorp Brabant, got the opportunity to build a natural building on a plot of land offered to them by the director of the centre for sustainable living. Having successfully build a communal, natural building on this site through many subsidies, donations and volunteer help, they gained confidence in the possibility of starting their own ecovillage (ecodorpboekel, 2016b). At a conference they mentioned not having a plot of land to start their ecovillage and the Mayor of Boekel was in the audience and offered them a piece of land. The project matched the municipality's vision, which is based on trust in its inhabitants. In 2014 the first plans for the ecovillage were handed in to the municipality and the group started calling themselves Ecodorp Boekel. The community is envisioned to consist of 30 sustainable rental houses, a community building, a workspace and offices. There will be space for on-site food provision, energy provision, drink water filtration, ecological waste water treatment and sustainable businesses and tourism (ecodorpboekel, 2016a). In 2015 roughly 15 future inhabitants started living in temporary constructions on the site. In 2015 the construction of an artist-in-residence building was started as well as the development of the food forest. In June 2016 they started building the garden, using biologic-dynamic and permaculture principles. They plan to start construction of their homes in 2017 (ecodorpboekel, 2016c). Currently there are 14 adults and 5 children living on site.

For this case-study interview seven and eight were conducted. Interview seven was with a member who has been involved for roughly three years, interview eight was with one of the initiators. Original Dutch quotes can be found in appendix E.

1.1 SOCIAL INNOVATION - ORGANISING

1.1.1 ORGANISATIONAL STRUCTURE AND DECISION-MAKING

At ecodorp Boekel they use holarchy as method for their organisation and their meetings; as a collaboration model and a decision-making method (an explanation of holarchy can be found in Appendix A). In holarchy there are circles with specific domains of action, in each circle there are specific roles that consist of a collection of tasks and responsibilities that are embodied by a person. Every circle is double-linked to the general assembly by a 'lead' link of the circle, who is the link from the general assembly to the circle, and by a 'rep' link, who is the link from the circle to the general assembly, also called a communicator. The individual representing a certain role has relative autonomy to decide how they will fulfil their role, within the boundaries of the vision and the core principles. When this individual encounters difficulties in fulfilling their role they discuss this at the general assembly and all members help them solve their difficulties. In holarchy this difficulty is called a tension: a role experiences a tension when there is a gap between the current situation and the desired future. Meetings are structured around tensions that are experienced by roles in circles. In every meeting there is a facilitator, a chairman and a secretary.

"Holarchy is a new form of designing and governing organisations where the emphasize is on self-organisation and the development of collective knowledge and creativity." (1., Ecodorpboekel, 2016d)

Ecodorp Boekel is legally organized as a corporation and as such finances the land and all construction activities. Once the buildings are constructed they will remain collectively owned by the corporation, individuals will rent the houses from this corporation. They currently do not own the land but have it on a lease contract from the municipality after which they hope to buy the land.

Holarchy is the only structure they have used in their organisation. Once they had gotten their spot in Boekel, they started looking for organisational structures. They liked the clarity and goal-oriented nature of holacracy and the decision-making method of consent, compared to other methods that ensure equality in an organisation. They learned the method from the book on holacracy and asked for help to implement it in their organisation. An educated holacracy-expert helped them in structuring their organisation and together with him they adapted the rules a bit to better fit to their preferences and experience. After this they decided to name it holarchy, since they changed the method and to omit having to pay royalties to holacracy. Compared to holacracy, they made the structure of the meetings in clear question rounds and argument rounds a bit looser and they also do not yet have a village circle where the lead-link and rep-link of each circle come together as they currently only have a general assembly where everyone meets. They chose to do this because their group is still relatively small and they did not yet feel like leaving people out of those important meetings. However, now that they are starting to grow and people are complaining about the long and frequent meetings, they plan to implement a village circle soon. This village circle will also function as the official board of the corporation, since laws require a corporation to have a board.

When they had just implemented holarchy they experienced some trouble with people talking before their turn and the facilitator not being able to guide the meeting soundly yet. Through experience they quickly developed their meeting skills. Decisions are made with consent and if someone has an objection, this objection is tested to a strict objection-guideline. They specifically made it difficult to have a valid objection, to prevent critical people from stopping progress in the project. The check-list for objections consists of a number of criteria to which an objection has to comply for it to be valid. An example of such a criteria is that the objection to a proposal is valid when the proposal will the performance of a role more difficult. This criterion was met when someone made an objection to selling medicinal hemp as they said it would make the role of PR more difficult since outsiders might have negative associations or prejudices with medicinal hemp. When an objection to a proposal is not valid the members agree that some decisions have to be made to keep going even if not everyone fully supports them and when a better solution arises they can return to the issue. They believe that when every member has to fully agree on absolutely everything you can never get anywhere.

“So in small aspects we differ [from holacracy] when it suits us better. And that is also holarchy; you simply try things and experience whether they work. You can also not object if someone wants to try something, because that is holarchy: you try something and when it doesn’t work you try something else.” (2., Interview 7)

Implementing holarchy helped them to be goal-oriented and effective, while still keeping equality among all members. Holarchy helped to structure their organisation and create clarity in tasks and responsibilities. They experienced that it is crucial to define the goal of a circle and of the roles very carefully when these are developed, as this determines the effectiveness of the structure. The structure with roles and domains also makes it very clear for them to know who is going to do what. They even have an online intranet page on which all members can read the definitions of all the roles, including which tasks and responsibilities belong to which role. Creating

something with a group was experienced as very tricky and holarchy has contributed greatly to making it easier. It helped them coordinate the work, enabled them to think as a group about how to realize their goals and to feel connected. It has created equality and fairness and it has laid the responsibilities at the bottom. It also made their group meetings more efficient and reduced conflict. Holarchy also created flexibility in two ways; because all roles are clearly defined, it is easy to find a new person to fulfill this role when someone leaves the community or changes roles. They support active people by enabling them to reach goals, while they prevent critical people from slowing down the process by having a clear checklist for objections to proposals.

"We are actually pro all people that are active, those people have to be stimulated, those people have to be able to reach their goals. And people that simply do less or are more critical, they are allowed to be critical, but they should not hold back things." (3., Interview 8)

1.1.2 COMMUNICATION AND CONNECTION

At the start of every general assembly they have a 'sharing', which is a round along all members where they can talk about themselves and what is happening in their lives. They notice that this allows people to understand each other's position better and it brings them together, which makes conflicts less likely to happen. They also have a social circle in their organisation that is responsible for creating and maintaining a tight, closely connected group. This circle organizes a monthly social meeting and a yearly social weekend. On these occasions they do fun things to create more group connection or they take workshops. The social circle also helps resolve interpersonal conflicts and helps people in their self-development, for which they use the method of Daniel Ofman and non-violent communication (explanation in Appendix A). This is completely on a voluntary basis and does not happen in regular group meetings.

"At the start of every general assembly we have a sharing... and in that way, you come closer to people and are less likely to get into conflicts. So that is a very important practice." (4., Interview 7)

They currently all meet at the general assembly which is once every two weeks, they want to change this when the village-circle is installed to once a month. Apart from this, they meet at the social meeting or when they have a workshop. Not much has changed over the years in the types of methods or meetings they have had. In the early stages of their community they have used dragon dreaming as a method to develop their plans (explanation in Appendix A). The social circle decides which workshops they will attend as a group, but everybody can bring in ideas for social activities. When they deem it necessary, the social group will talk with particular individuals to resolve conflicts or help them self-reflect and develop. The methods are viewed as effective in creating more connection in the group, for self-development and for better and more effective communication during the meetings. They help people self-reflect, which they view as a crucial skill needed to live in a community. The personal conversations with the social circle also really helped people feel good about themselves.

"It is absolutely effective. Those workshops enable you to look at yourself and deal with problems from there. That is really something you have to do when you start living in a community, you have to be able to look at yourself." (5., Interview 7)

"I also notice that those conversations one on one really have a lot of added value, for some people more as for others, but some people really feel better because of these conversations. And well, not everybody like them or needs them, but I think it's a success story." (6., Interview 8)

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1.2 SOCIAL INNOVATION - FRAMING

1.2.1 NARRATIVE

At ecodorp Boekel they see several aspects to society as troubling, even though they admit that overall we are very well off in the Netherlands. For the most part they regret that people are not very conscious, of environmental problems or of each other. They believe that most people are not acting 'bad' on purpose, but the fact that more sustainable alternatives are not the most easy and accessible really halts change in behaviour, since people prefer to do things that are easy. The lack of connection with people surrounding you, where people do not even know who their neighbours are, is also seen as troubling. The environmental problems we are facing as a global society and the lack of effective governmental or societal action against them are seen as very pressing and was one of the main drivers to start an ecovillage. They do not like that individuals are dependent on large systems on which they do not have any influence; one cannot easily say no to something when you do not agree with it. The fact that children are not free to play around in neighbourhoods because of all the cars is another aspect to society which they do not like. At ecodorp Boekel they believe national sustainability is necessary to give a future to their children.

"I think there are a lot of good things in this society, because we have achieved many things. The only sad thing is that there is so little consciousness... And I think that a lot of people still drive a gasoline car because it is easy. And I understand that; there just has to be an easy alternative if you want to reach a large group of people." (7., Interview 8)

In answer to these negative aspects identified in society, ecodorp Boekel wishes to be able to live sustainably in connection to each other. To achieve this, they feel that people have to collaborate with other innovative actors in creating an ecovillage; the initiative can then function as a stepping stone for other sustainable initiatives and drive change forward. For example, their homes will be built in collaboration with kalkhennep Nederland and the Dutch institute for ecology is doing experiments on drink water filtration. Also, they cooperate with as many partners as possible to make their impact of change as big as possible. For example, they cooperate with local schools and documentary makers. Cooperative ownership of the community land and buildings is believed to ensure that all inhabitants are involved in the decision-making and management. They believe that this model could also work for example in businesses, so that all employees have insight in the company and can steer where it goes. Also, cooperative ownership and a cooperative financing model will relieve individuals of a mortgage and through that they are no longer bound to a place. They view financing in a different way, believing that people can collectively take a mortgage as a cooperative and in that way develop their own neighbourhood. By creating small systems for provision of energy, water and food and treatment of their waste flows, they think they will be less dependent on large systems. Collaborating as a group in an innovative and unique process like theirs is experienced as difficult, hindering change, but implementing holarchy as governance method has made this more manageable and therefor drives change. Also, collaborating with so many different actors is experienced as a lot of hard work, however, it enables them to achieve a lot in a short amount of time.

"I do not mind that there is a government or large multinationals, but people should not become dependent on these because then those people hold all the robes and one cannot control their surroundings any more. I hope there will be more initiatives like this in which people are less dependent on large systems and more on small systems. The advantages of this are... that you can say no to things you do not support." (8., Interview 7)

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The role of the narrative was very decisive in the early stages of the ecovillage. Ad Vlems, the initiative holder, had shared his narrative and vision on a webpage. Without searching for members, many likeminded people responded and this provided momentum for the initiative to be born. The narrative can now still be said to serve as glue among the inhabitants and attraction for new members.

1.2.2 VISION

Ecodorp Boekel holds the vision of ‘*creating a unique and inspiring example in Brabant of sustainable living in connection*’. To this vision they employ three principles: self-reflection, participation and trust. Self-reflection was chosen because they expect inhabitants to learn from their own feelings. For example that when they get into a conflict or are irritated by someone, they look at themselves to see what this feeling says about themselves. Participation means that all members have to actively contribute to the initiative. Trust, in decisions that have been made by others but also in the fact that their initiative is impactful and meaningful, even in times of difficulty or opposition from the surrounding society.

“When you see an ecovillage as a raft that drifts on a streaming river. Some people stand on the side and think it is nice so they set one foot on the raft. That starts to hurt, because actually they are trying to stop the raft to be able to also put their other leg on. And there is actually only one way, which is to jump on the raft and participate.”(9., Interview 8)

Ad Vlems, the initiative holder, developed this vision together with his wife, before the final group for ecovillage Boekel was put together. They had learned that to have a successful ecovillage it is important to first define the vision and only then start looking for more members. According to them, this vision should not be open for discussion or re-interpretation as in discussions on the vision everyone can be right since there is no basis from which you are arguing. They select new members on the basis of the vision and values, to ensure that all members are in full support of this vision. They do acknowledge that some members attach more value to different aspects of the vision, but this is not seen as a problem, as long as those individuals do not start objecting to actions for other parts of the vision. For example, not all people like that the ecovillage is really meant to be an example and inspiration, as it has led to many interviewers, photographers and camera crews walking around on the site. However, these people cannot object to it since they have agreed to the vision when they became a member. They also set the vision before looking for people and made it non-discussable because they are afraid that if you do not do this, there will be dogmatic people who make every action very difficult as they believe everything has to be completely right. At ecovillage Boekel they prefer pragmatic people who simply do things, so that at least something happens and experience is built, and not everything has to be 100% perfect.

“You can talk about lots of things, but the vision, you really should not discuss that. Because once you start doing that,... then you might as well stop. Because how can you then determine who is right, since everyone’s vision is equally valuable.” (10., Interview 8)

1.2.3 INTERPRETATIVE FLEXIBILITY AND ADAPTIVE CAPACITY

The vision inspires and motivates them to be an inspiring example of living sustainably; they try their best to share their knowledge, experience and message and to collaborate with a lot of other sustainable partners and other actors to further promote sustainable living. At the early stages of the initiative, the vision gave direction for the group in terms of what they wanted to gain with the ecovillage and what they wanted to hold on to in negotiations with the municipality and other actors. The vision also provides direction as it serves as the ultimate goal of the holarchic organisation, which means

that all roles and circles are defined in such a way that they lead to that goal. The vision thus also serves as inspiration and motivation for the actions of the roles. Objections to proposals in the general assembly are tested to the functioning of the roles and thereby indirectly to the vision, through which the vision again provides direction.

There is not a lot of interpretative flexibility or adaptive capacity since the vision was set before the group was formed and is not open for discussion. However, one can argue that the vision is quite generally formulated and can therefore be interpreted quite broadly. Adaptive capacity is ensured for a bit through their principle of trust. If things are not going very well or are difficult they actively support each other and have faith in their vision. Adaptive capacity is also ensured through their to principle of flexibility. When they discover that something turns out to not work, they simply try something else.

“We also experience sometimes that we lose trust. Trust in that it will succeed and that it has meaning and that things are actually changing in society and that we are on the right track. Then we actively choose with each other to have trust.” (11., Interview 8)

1.3 SOCIAL INNOVATION - KNOWING

At ecodorp Boekel they produced their knowledge by looking for general inspiration at other ecovillages, sustainable houses and sustainable initiatives. They produced their knowledge on holacracy by reading about it in the book on holacracy and by being guided during the implementation of holarchy by an holacracy expert. They also took workshops in other tools such as non-violent communication, personal development and dragon dreaming. They now try to actively contribute to the generation of knowledge on their viewpoints. For example through their website where they share information, by collaborating with documentary makers and by participating in the democracy challenge of the government. They also started a platform for ecovillage workshops, on which they promote workshops related to ecovillages. They share their whole experience and their knowledge through social media and are portrayed in many news items and articles. They do not actively evaluate their views, however they do evaluate their knowledge and evaluate how effective their method of holarchy is. They have for example in the past adapted it by changing their method for voting on people anonymously and then discussing it and voting again, to simply all pointing at their desired candidate because this was faster.

1.4 SOCIAL INNOVATION - DOING

At ecodorp Boekel they have many practices that differ from mainstream society. One of these is their application of holacracy in a community, they are as far as they know the first community to do this. Their cooperative financial model is another innovative way at ecodorp Boekel. Next to this, their plans for building sustainably with innovative building materials such as kalkhennep (chalk-hemp) and making their own drinking water from rainwater are examples of their innovative ways. Many other things have been named in the previous sections. They aspire to achieve change in society by their ways of doing through setting an example that can inspire and educate others. By creating their community they hope to enhance change, or as they put it, they hope the Netherlands will tip over and become a sustainable society. They hope to catalyze this change by supporting other sustainable initiatives, by participating in governmental programs and by sharing their knowledge and expertise through their webpage, workshops and in interviews.

2. TRANSFORMATIVE IMPACT

2.1 AMBITION

Ecodorp Boekel has set a very clear and explicit ambition to be an inspiring example of sustainable living, including this in their vision. They also state that the ecovillage will only be truly successful when the Netherlands becomes sustainable, with the ambition to contribute to this process as a catalyser. They wish to give people energy and inspiration to also start contributing positively to a sustainable society in order to stop greenhouse gas emissions and environmental pollution. They wish to help other sustainability initiatives by functioning as a stepping stone for some of them. Also, they wish to be an example of specific elements in their ecovillage, for example their building materials and techniques, their drink water production or their financial model. They envision to achieve their ambition by creating the example of a sustainable community, by inviting documentary makers and other journalists, by participating in governmental programs and by sharing everything on social media and through tours and workshops. Next to this they invite a lot of volunteers whom they can offer a learning experience.

“The fact that a lot of people come here, that we collaborate with schools, that we collaborate with all kinds of organisations, is all to make that oil spill impact, of being an example and inspiring, as big as possible.” (12., Interview 8)

“Our village is only successful when the Netherlands tips, so when the Netherlands becomes sustainable... our contribution is that we can speed this up, we hope we can speed this up.” (13., Interview 7)

2.2 POTENTIAL

With their project they feel like they are planting seeds in people, which may take years to germinate, but that can grow into all kinds of beautiful sustainable projects or ideas. In that way their project inspires and motivates people to also be sustainable. They notice they most strongly inspire individuals, simply because those people see that things are happening and changing here. They view their building materials and methods, their systems for energy, drink water and waste water, their food production, their organisation model and their financial model as having potential to influence others in society in a positive way towards more sustainability. They are the first to bring holarchy to practice in an ecovillage, creating important experience in this area, which they view as having the potential to be replicated. They notice that they are part of a movement which is happening nationally and to which their story connects: what all the people in the movement are doing enhances their project and they in their turn enhance others. The director of the ministry of infrastructure and environment has called them the frontrunners of the new reality, acknowledging the ecovillage's potential for creating experience to achieve a new society (Ecodorpboekel, 2016e).

“For all people that come here or that hear about us: something about the ecovillage touches them and creates a kind of seed, and it can take ten or twenty years until such a seed germinates, but we do hand out all those seeds.” (14., Interview 7)

“That this is really a source from which people take things home to change their lives, that would be really very nice.” (15., Interview 8)

2.3 IMPACT

As an ecovillage they had some small impacts in their surroundings. Many individuals that were involved in the ecovillage initiative but did not end up becoming a member did change things in their lifestyle and living situation. A local housing association has

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started building self-sufficient houses in response to the presence of the ecovillage. They spread holarchy to an entrepreneurs group of which one inhabitant is a member, after the inhabitant explained the method and its benefits. A last impact, one could argue, is that they are part of a bigger, national movement toward sustainability and in that way contribute to the creation of even more sustainability projects and support.

“I think we are just part of a kind of movement that is happening anyway, so everyone is doing something... and what other people are doing strengthens us and what we are doing here is in its turn strengthening other people.” (16., Interview 7)

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VERENIGING AARDEHUIS

Vereniging Aardehuis is a community of roughly 20 buildings built using earthship principles. The initial ideas to build a neighbourhood consisting of earthships started around 2006, as initiator Paul Hendriksen got inspired by the earthship concept and introduced the idea to his friends. Earthships use waste and local and natural building materials for construction of a home and are designed in orientation to the sun. In the building design there are highly insulated northern walls made out of car tires filled with stamped earth and completely glazed south facades. There is natural ventilation and the little heating that is needed is provided by a clay oven or wood burner. The initiative holders searched for a municipality that would support their ambition to realize a project with earthships and found one in Olst. They started construction in 2011. They worked with over 1000 volunteers, doing almost all construction work themselves. In 2015 the construction was finalized (vereniging aardehuis, 2016). They now live with 43 adults and roughly 30 children in the neighbourhood.

For this case-study interview nine and ten were conducted. Interview nine was with one of the initiators, interview ten with a member who has been involved for roughly four years. Original Dutch quotes can be found in appendix E.

1.1 SOCIAL INNOVATION - ORGANISING

1.1.1 ORGANISATIONAL STRUCTURE AND DECISION-MAKING

Vereniging Aardehuis uses sociocracy as governance method. They have a board, an ALV and several workgroups with specific domains. They make decisions using consent, meaning that only if no one has a overruling objection to a proposal it will go through. The workgroups have relative autonomy over decisions within their domain and they are responsible for execution of actions within their domain, for which they can delegate work to other inhabitants or external parties. At all meetings they use a clear structure which starts with a check-in, followed by a question round followed by two rounds for arguments and guided by a facilitator, a chairman and a note taker.

The land was bought by the association and currently about half of this land is still owned collectively and managed by the association. The other half was sold as individual housing plots to members of the association. They founded a homeowners association ('VVE') to manage the houses, this association takes care of the maintenance and infrastructure of the houses.

At the beginning they only used consent decision-making and did not have a sociocratic organisational structure. Back then, they had some conflicts and experienced inefficiency and delays in the project. After implementing sociocracy, the meetings went more efficient and the organisation functioned more smoothly. They had decided to use sociocracy since the initiator, Paul Hendriksen had come to know this method and had invited someone from another ecovillage to train them in sociocracy. Currently, they notice that people who joined the group later sometimes have less discipline in the sociocratic structure from which conflicts and a discussion on the effectiveness of sociocracy have arisen. This is attributed mainly to a lack of true understanding of the principles of sociocracy because these newer members did not partake in the training and to a lack of discipline. A need for regular workshops about the practice of sociocracy is mentioned. They also acknowledge that the procedure does ask something of people; in discipline, confidence, trust and of preparation. When the vision is not shared by everyone or interpreted likewise, the sociocratic method does

not function properly, therefore they plan to have a separate meeting soon where they share their opinions on the vision to align as a group again.

"Before we had this model, I believe there were more conflicts. That it was more the ego's talking and that people were getting hurt... This model represents that everyone gets a change to say what they want to say and ask the questions they want to ask, and also being actively invited to do so." (1., Interview 10)

Sociocracy and consent decision-making are experienced to have brought many positive effects to the community. First of all, they have brought great peace in the meetings; where people do not shout through each other or force their argument on others. It is said to provide clarity and purposefulness and it generates trust if everything goes smoothly. It can also break trust, but they call that part of being human, it always remains people work. They notice that through their meeting structure new information arises since all people get to say something about everything. Also, everyone is heard, even when someone has a complaint but does agree to the proposal; this makes people feel like they were heard. Hearing everyone's opinion in the argument-round is said to give insight in how the group feels about a certain decision. Sociocracy has also made the decision-making process more efficient according to them; it gave more structure and space for everyone to give their opinion instead of just the people that scream the loudest. The meetings are sometimes experienced to take long due to the specific structure and they notice that this is why sometimes time becomes leading for a meeting, which is experienced as a negative effect. People will want to end the meeting instead of being focused on reaching a fully supported agreement. Also, they wonder to what extent everyone uses their veto right when they are single in denying a proposal, noticing that sometimes unconscious group pressure makes people agree to something. For some it can also be difficult to have to voice an opinion right on the spot.

"In normal meetings things always go like: I say something and then you say something different and had I posed a question or just made a remark and where will it fall; that is all very unclear. But with these circles and the rounds [in sociocratic meetings], it is a structure way of conversation which is very nice, and that you all have a shared goal." (2., Interview 9)

1.1.2 COMMUNICATION AND CONNECTION

Vereniging Aardehuis does not have any regular practices in place for self-development. To enhance the group-connection they have a check-in round at the start of every meeting for people to tell what is going on in their lives. They make use of non-violent communication, which they call 'unifying communication'. They have briefly tried dragon dreaming in an early phase, but did not like it. They also had a one-time workshop in sharing needs and desires, using a method called GROK, but not all people participated (explanation in Appendix A). When personal conflicts arise they try to work them out between the people involved and possibly with a facilitator. They gather for soup and coffee both once a month and they have cooperation dag and random parties. Other than this they meet at the general assembly or randomly and on the cooperation days on Saturday.

They have a communication circle whose domain is both communication to the outside world and communication in the group. This group organizes workshops and monitors the group's alignment. This group organized that GROK workshop, because they noticed that sometimes people are triggered by things in a meeting, which are caused by the fact that they feel that a need or desire of them is not being met or being ignored, and the circle thought it helpful to work on self-reflection. However, since only a small part of the community participated and they noticed that not all people feel a

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need for this type of workshops, they stopped organising this. They feel that they cannot make this type of group activity obligatory. Anyone of the group can however bring in a proposal for an activity. They have noticed that holding a check-in round at the start of meetings really makes people empathize and understand each other. However, some members are complaining that this makes the meeting last long.

“People are often triggered because they feel like a feeling or need of them is not seen or heard. To make this visible we offered such a learning track [GROK]... But what you then notice is that mostly a group of interested ladies show up and the men remain at home... but no you cannot make that obligatory.” (3., Interview 9)

1.2 SOCIAL INNOVATION - FRAMING

1.2.1 NARRATIVE

At vereniging Aardehuis they share a narrative in which several problems to current society are identified. They notice that economic growth has led to high CO2 emissions, intense use of land and high energy usage. Despite this being known even in 1972 when the Club of Rome first alerted society, ambitions to diminish the negative impacts of economy have never been reached. At vereniging Aardehuis they realize that we have only one earth and that it is not inexhaustible. They also find it strange that everyone owns the same stuff when we could share this and neighbours could help and support each other. They see that household sizes are diminishing, public support of elections is decreasing dramatically and the government is ineffective in dealing with recurrent problems in society, these are all things inspired their community.

They feel that to achieve a better future, governments should not halt citizen initiatives but instead facilitate them, acknowledging their organisational strength. They wish to show that it is possible to be creative with the present situation, to live differently than the norm and different from how we are ‘programmed’ by society to live. They view that when living in a neighborhood people should be more supportive of each other, helping each other mentally, in times of need and also simply by sharing tools, goods and facilities. People could manage and maintain their own neighborhood, increasing community feeling and a sense of responsibility, security and belonging. They wish to show the strength in doing things together. They believe that to achieve change and a better future you do not have to do things alone. They believe they can build their homes themselves using local, ecological materials and that neighborhoods could be completely self-sufficient in energy and water, waste (water) treatment and partly in food. They view decision-making and management differently, believing that everyone’s opinion and ideas have to be valued and included. To reach a more favourable future they identify the need for a mass to create an actual transition. They believe their project can be a contribution to this mass. They reflect that their project might only be like a drop in the ocean, but it is the intention and the bigger movement that will create changes.

“That is in my opinion also the strength of togetherness; that you do not have to do everything on your own. That we do not all have to own our own hand blender when we know that our neighbour has one too.” (4., Interview 10)

Actors to achieving their desired future are citizens who can do what is in their power to do and bundle their strengths, governments should facilitate these movements instead of halt them. Other organisations, companies and governments can get inspired by this example and also start doing things differently and more sustainably. Collaborations with the local government, the water supply company and housing association were difficult and were felt to hinder change, because the concept was so new to these actors. However, succeeding in developing a self-sufficient, ecological neighbourhood

as a citizen initiative, is thought to drive change. They emphasize the importance of involving their local surroundings and informing the public about their experience during the process to drive change. Their inexperience and organisation-troubles in the beginning slowed the process down and almost causing bankruptcy. Organising in a sociocratic manner stimulated the process. The role of the narrative was to bring together a group of like-minded people and it made the collaboration possible.

“People have a lot of knowledge in them and the organisation strength of those people; governments also have an interest in facilitating that instead of retaining it.” (5., Interview 9)

1.2.2 VISION

Their vision is to *‘built, work, dwell and live in harmony with nature, connection to each other and as inspiration to the world’*. At the very beginning, before they got the plot in Olst, their vision was simply: *‘to realise a project involving earthships in a radius of 10 kilometres around Deventer’*. Now, they notice it may be time to reflect on the vision again since the building aspect has been completed and they mainly have to focus on maintenance and the community feeling now. Their initial vision was formulated by the initiator and the small group attracted in the early phases. Once they had purchased the plot they revised their vision to formulate it more specifically in the way it is now.

Currently, they are particularly living the inspiration aspect in their vision. This is coordinated by their communication workgroup that tries to carry out their message of living in harmony. They do not have a procedure for checking decisions to the vision but they do unconsciously check if a decision is in line with their vision. The vision still plays a role in some difficult decisions that are currently playing. Like for example the construction of paths through the neighborhood and the possibility for a sewer connection on the toilet of a member going through some health issues. In these cases, when they cannot reach agreement, they reflect on the vision. The fact that the vision played a role in all the decisions is said to help newer members accept and understand decisions made in the past.

“It was off course a very long process, ten years, of which I was only around four years a member of the group. So I never witnessed a lot of the decisions, I agreed with those, I made a commitment to those, because I understood why they were made.” (6., Interview 10)

1.2.3 INTERPRETATIVE FLEXIBILITY AND ADAPTIVE CAPACITY

The vision can be said to have had a motivating, inspiring and directional effect on the process of the ecovillage. The vision has in the past motivated them to build houses with their own hands and in harmony with nature; they remained persistent in this during meetings with other actors and in their decisions for the building design, materials and installations. It now motivates them to keep inspiring others; they are for example developing a book with their individual stories and the overall story of the project and they keep giving tours and information evenings. They got inspired by the idea to write the book when they were reflecting with the group on the vision. The vision gives direction to people in their interactions with each other and with their surroundings; to remain in harmony and resolve any conflicts. It also gives direction for a future re-organisation of the organisation which can focus more on maintaining and managing the community and less on building.

There is a lot of interpretative flexibility to the vision as ‘being in harmony’ can be interpreted in many different ways. This has enabled them to apply the vision to many different situations and decisions. However, it also sometimes caused problems when the group was too divided on how to interpret the vision. For example, when they could

choose between strong wood from New-Zealand which would not have to be painted or local wood which would have to be painted every so many years to use as window frames. They could not reach agreement on this and decided to offer the choice to each family for their own house.

“Sometimes the topics [of discussions] are really intense, because there are so many different opinions and ways in which we think of the vision, also that aspect of sustainability is for everyone different and this really gives a lot of differences.” (7., Interview 10)

Since the vision has several elements, adaptive capacity is built in; a different emphasis could be laid on the vision in different stages of the project. First this emphasis was mainly on building in harmony with nature, now it is more on dwelling and living there as well as on inspiring others. They do notice that in some everyday happenings or decisions they do not always live up to their vision in a consistent way, however, it does help them reflect on this and try to improve this.

1.3 SOCIAL INNOVATION - KNOWING

In vereniging Aardehuis they produced most of their views and from their narrative of society and by becoming inspired by other projects, like the earthships of Michael Reynolds. They gained knowledge on specific aspects to a community by looking at other projects. They also had some external process managers to advise them and they took workshops, for example in sociocracy. They now produce knowledge themselves by providing workshops, tours, online information and in the future even a book. During the construction they invited over a 1000 volunteers and held regular open days, information days and tours. They do not actively evaluate on their knowledge and competences. They do evaluate on how they can even better share their knowledge and experience. They also evaluate on the effectiveness of their meetings, the meeting structure and the group alignment of how everyone interprets the vision.

1.4 SOCIAL INNOVATION - DOING

At Vereniging Aardehuis they have done and are still doing several things which can be called innovative. Many of these things have been mentioned in previous sections. In summary it can be stated that initiating a project to build a neighborhood in harmony with nature as a collective private initiative and as inspiration to the world, is innovative.

2. TRANSFORMATIVE IMPACT

2.1 AMBITION

In their vision they very clearly write the ambition to inspire people in the world around them. Their individual ambitions to change their context differ slightly, but they agree in general terms: they wish that people will start to realize how much they are shaped by society and that they can act alternatively and be gentler with each other and the earth. They want to inspire people not only to build with ecological building materials or to be self-sufficient in energy and water, but also to inspire them in the fact that it is possible as citizens to start a project, even in collaboration with the municipality and housing associations. They also hold the ambition to inspire people to live together again in close contact with their neighbors and where things are shared. Their ideal contribution is mainly to set an example that things can be done differently, to demonstrate new ideas and possibilities and to make people think or get inspired.

“Well, that society could be a bit gentler to each other, that is important to me, also not just to each other but also to the earth. And the idea that we are sort of shaped by how things are arranged in society, that people will break free from that.” (8., Interview 10)

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2.2 POTENTIAL

Telling their individual stories to their social contexts is seen as one of the most powerful things to inspire other people. Also the word-of-mouth spread of their achievements is viewed as one of the most important. Next to this, they feel that their sociocratic meeting structure, or even just the role of a facilitator, can be a good example for regular meetings. They see their solutions for building in orientation to the sun and using natural or waste material as having great potential to make the building sector more sustainable. They believe that by demonstrating that a neighborhood can be largely self-sustaining in water and energy, other projects will follow their example. They also believe that by showing that it is possible to create something collectively as a citizen initiative, other people will get inspired that things can be done differently. They are not under the impression that their project will radically change the situations in society, however, they believe to be a small contribution to a bigger movement towards showing how things can be done differently.

“So yes, I think that we are simply a small contribution to showing that things can be done differently. And I have never been under the impression that this will change the world, because it is off course just a small drop in the ocean. However, it is more about the intention and the movement.” (9., Interview 9)

2.3 IMPACT

For Vereniging Aardehuis it is safe to say that they have had some direct impacts on other developments. For example, plans are currently in production for a second earthship neighborhood in Olst, called ‘Aardehuizen 2.0’. This neighborhood was originated by people inspired by Vereniging Aardehuis and with the desire to live likewise. Next to this, another project is being build close by that was inspired by the sustainability and community elements of Aardehuizen, incorporating these in their development. Next to these impacts, there are also two women in the ecovillage who recently started their own mediation and facilitation company using elements of sociocracy, which they learned at Vereniging Aardehuis. Also, due to their positive experience with Vereniging Aardehuis, the municipality of Olst is now more ready to accept innovative projects. Even the municipality of Deventer, the municipality where they first applied for a building plot, is now realizing that they missed an opportunity and has started to show interest in other types of sustainable projects like tiny houses.

“On the one hand I think it might have been quite extreme what we did here and it has definitely asked something of my health to commit for so many years to a project. But to notice that through this we can inspire so many people and make them experience something. That is to me the most important.” (10., Interview 9)

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5. CROSS-CASE COMPARISON

In this chapter the cross-case comparison is presented, providing answers to my fifth sub question: *“What are differences and similarities between the five case-studies in terms of envisioning and practicing sustainability transitions?”*

The chapter starts with an overview of the key aspects of all cases in four tables dealing with the four sets of questions as presented in the research design (chapter 3). On the basis of these tables, the main differences and similarities between the ecovillages as well as some points of interest are mentioned. The chapter is concluded with a discussion of these empirical findings.

	IEWAN	Ecodorp Bergen	De Hobbitstee	Ecodorp Boekel	Vereniging Aardehuis
Legal structure	Buildings owned by housing association; As foundation they rent the buildings; As foundation they govern the plot and buildings.	Land and buildings owned by support-foundation; As association they rent the land and buildings.	Land and buildings owned by foundation; As an association they rent houses; Individuals have small businesses on the plot.	Land and future buildings owned by cooperative; Individuals rent houses from the cooperative.	Building plot bought by association; Half the land owned by individuals as building plots, other half owned by association.
Governance method	-	Sociocracy.	-	Holarchy.	Sociocracy.
Organisational structure	General assembly.; +- 18 workgroups.	General assembly.; Village-circle; Five sub-circles.	General assembly; Workgroups.	General assembly; Village-circle; Sub-circles.	Board; General assembly; Workgroups.
Decision-making method	Consensus with unanimity.	Consent.	Consensus with unanimity.	Consent.	Consent.
Meeting practices	Facilitator, chairman and note taker; Proposal step-plan; Online forum for proposal questions; Monthly general assembly; Workgroups meet depending on their schedule.	Facilitator; Check-in round; Question round; 2 argument rounds; Evaluation round; Sitting in a circle; Holding hands at start; Bi-weekly village meeting; Sub-circles meet depending on their schedule.	Monthly general assembly; Chairman; Secretary; Silence at start; Circle with hands at end; Workgroups meet depending on their schedule.	Facilitator, chairman & secretary; Sharing at start; Meeting agenda consists of tensions; Bi-weekly general assembly, will be changed to monthly; Circles meet depending on their schedule.	Facilitator, chairman & secretary; Check-in round at start; Question round; 2 argument rounds; General assembly is irregularly; Workgroups meet depending on their schedule.
Positive effects experienced	Everyone is heard; Involvement; Support of decisions; Feeling of responsibility; Semi-autonomous workgroups guarantee efficiency & speed; Facilitator in meetings creates fairness, structure & equality; No political games are played; People listen more & interact positively; Creates community feeling, full involvement.	Everyone involved; New information brought in by everyone; Personal qualities of everyone result in better solution than individually possible; No pressure for perfect solution -> fixed time-period for solutions; Less issues of power; Brings structure to the organisation and meetings; Consent brings peace in meetings; Positive creation process	Consensus is effective in: ensuring an active attitude; Support of decisions; Involvement; Respectful interaction; In preventing or resolving conflicts; Consensus & the organisation structure have enabled shared leadership, shared ownership, shared responsibility & supported decisions.	Holarchy makes them effective, goal-oriented, enabled thinking as group & feeling connected; It has created equality & fairness in their meetings; Laid responsibilities at bottom of the organisation; meetings are more efficient, structured & with less conflict; The goals, roles, tasks & responsibilities are very clear.	More efficient meetings & smooth organisation; Peace & fairness in meetings because of structure and facilitator; Clarity & purposefulness in meetings; New information arises because everyone talks; Everyone is heard due to structure.
Negative effects experienced	People with knowledge/competence on topic hold 'power' in discussion; Difficult to stick to strict structure (e.g. only ask questions in question round); Difficult to keep equality & consensus under time-pressure on decisions; Difficult not to submit to peer pressure when alone in disagreeing.	Difficult to put aside ego in meetings & only think of groups interest; Difficult to stick to strict structure (e.g. only ask questions in question round); Difficult to determine if it is a valid objection or if someone is just being too individualistic; Coordinator role of sub-circle is a lot of work; When vision or values are not completely shared, hard to reach decisions.	With no procedure for allowing new members they had trouble reaching consensus as people had different ideas and values; When they had complete shared ownership and shared finances they had negative experiences with members that took too much money or that took tools or products when they left the community.	Long meetings; Not everyone likes the sharing at the start; Difficult to stick to strict structure; (e.g. only ask questions in the question round); Consent is not always reached, which results in not fully supported decisions.	Long meetings; time instead of supported decision becomes leading; Asks a lot in discipline, confidence, trust & preparation; Group pressure can still occur; Having to immediately voice an opinion can be difficult; Lack of shared vision makes sociocracy hard; Training is needed for true understanding of sociocracy.

Table 4.1 Overview of governance practices and effects. Dealing with the sets of questions B and C and question 1.1.1 in the case-study descriptions.

ORGANISATIONAL STRUCTURE AND DECISION-MAKING

From the overview of the organisational structures and decision-making methods (table 4.1) it can be noticed that the ecovillages all have different organisational structures and methods for decision-making, yet they ascribe quite similar effects to them. For example, they all mention that their decision-making method created overall involvement as well as structure in the meetings and that it has allowed for fairness and equality. Some cases lay the emphasis on the effects of efficiency and goal-oriented meetings and structure, whereas others talk more of effects in positive communication and active attitudes. It can be said that these are differences caused by the different decision-making methods and structures.

The meeting practices also differ among the cases. All but one of the cases have a facilitator in their meetings, to which they all ascribe positive effects. Some cases have irregular general assemblies while others have bi-weekly or monthly meetings. In all the cases the workgroups meet irregularly, when they need to. Only some cases have practices involving sitting in a circle, holding hand or being silent together. Also, only one of the cases practices an evaluation round at the end of every meeting.

The legal structures are slightly different in all the cases. A couple of cases have found an association or foundation that owns the land, one case has found a cooperative, whilst in another case the land and buildings are owned by a housing association. In only one case are the houses privately owned by individuals. In all the other cases, individuals rent their living space from the association, foundation, cooperative or housing association.

As negative effects, almost all cases mention that it is difficult to act conform the strict structure in the meetings, or that it asks a lot in terms of discipline. Some cases also mention that the extensive meeting structure or decision-making method can result in too long or too frequent meetings. Some also mention that issues of 'power' by individuals or peer pressure can still occur, despite equalitarian ideals.

Some points of interest are first that in the case which has existed the longest, de Hobbitstee, they experienced some negative effects based on which they changed their ownership structure and their procedure for letting in new members. The other cases are still relatively young and have not changed big things based on the negative effects they are experiencing. Another point of interest is that several cases indicate that their organisational- and meeting structure as well as their decision-making method have actually created more group connection, community feeling and positive creation. These are effects which are not the primary reason for choosing a particular method, or for which the methods are known. A last point of interest is that holarchy is said to be more goal-oriented than sociocracy and from my empirical findings it also becomes apparent that inhabitants of the case where they practice holarchy mention positive effects like clear responsibilities, tasks and roles and effectiveness.

	IEWAN	Ecodorp Bergen	De Hobbitstee	Ecodorp Boekel	Vereniging Aardehuis
Communication tools	Facilitator in meetings.	Facilitator in meetings; Non-violent communication.	Non-violent communication.	Facilitator in meetings; 1 workshop non-violent communication.	Facilitator in meetings; 'Unifying' communication.
Effects of communication tools	Creates fairness, peace & structure in a meeting.	Facilitator creates structure in meeting; Working with irritations made people more conscious & helped their self-development; Through dealing with conflicts their group connections keeps getting stronger; Less conflicts.	Creates active attitude in people & self-reflection; Has ensured less conflict; Communication from positive attitude; Provide feedback instead of criticism when there are differences.	Created more connection in the group; Allowed better & more effective communication during the meetings.	Facilitator creates structured and fair meetings. Unifying communication is only practiced by a selected group, those people experience positive effects from it.
Self-development tools	-	Weekly heart circle (experimented with way of council & forum).	Monthly group session to stimulate self-development, no fixed method for that.	One on one conversations; Every so-many months a workshop; Core quadrant of Ofman.	- (one time workshop in GROK, practiced by a small part of the group).
Effect of self-development tools	Self-development is left to individuals, many people think of it as uncomfortable & unnecessary.	Self-development achieved and this has created more consciousness of their interactions with each other; Less interpersonal conflicts.	Helps people self-reflect and develop; Mainly helps increase the group connection and community feeling.	People are enabled to look at themselves & deal with problems or conflicts from there; People self-reflect, this is deemed crucial when living in a community.	The people that did participate still gather to talk about it, it helps them; Others feel no need for it or find it uncomfortable.
Group connection activities	-	Check-in round at start of meetings; Monthly group connection day; Shared meals.	Every Tuesday evening is a community evening; Random group activities, Whats-App group supports this; Open diner table in the summer.	Sharing at start of every meeting; Monthly social gathering; Spontaneous shared meals; Dragon dreaming used in early stages.	Check-in round at start of meetings; Monthly shared soup.
Effect of group-connection activities	-	Created collaboration grounded in friendship; Good group vibe is one of the conditions for a successful community.	Increases group connection & community feeling.	More group connection. Support in developing shared goals and reaching supported decisions.	Check-in round makes people empathize & understand each other (to some this round is the cause of too long meetings).

Table 4.2 Cross-case analysis of methods for communication, self-development and group-connection. Dealing with the set of questions C and question 1.1.2 in the case-study descriptions.

COMMUNICATION, SELF-DEVELOPMENT & CONNECTION

The overview of different communication, self-development and group-connections practices (table 4.2) shows a wide variety in the extent to which the cases are dedicated to these topics. Especially in the area of self-development and group connection the range is large; from cases that do not have any practices as they feel these are unnecessary or make inhabitants uncomfortable, to cases that state these practices are the reason for less conflicts and better collaboration.

All cases employ some communication tools and mention positive effects experienced from communication tools such as a facilitator in meetings or non-violent communication.

A point of interest is that the cases have varying frequency in which they have group activities that are not meetings. One case has a fixed community evening, another case has fixed shared meals, whereas other cases have no regular group activities in place at all. Another point of interest is that all cases that have regular practices in place to support self-development or group connection speak very highly of the effects of these practices. They state that this has greatly contributed to the community feeling, communication and collaboration. This is interesting since some other cases do not deem those types of practices necessary at all.

	IEWAN	Ecodorp Bergen	De Hobbitstee	Ecodorp Boekel	Vereniging Aardehuis
Vision aspects	Create ecological & communal housing; Create this in social housing sector; Create this in Nijmegen.	Live in harmony & respectfully; Live in loving connection with each other, the earth & the cosmos; Personal development.	-	Be unique & inspiring example; Sustainable living; Living in connection.	'Building, working, living & dwelling' in harmony with nature; In connection with each other; As inspiration to the world.
Values to vision	Three core principles: Sustainable/ecological, social/communal & open/educational.	Unwritten values.	4 principles: sustainable development, personal development, communal living & *spirituality.	Three core principles: Participation, Self-reflection & trust.	-
Role of vision in decision-making	Every proposal is tested to the core principles; Core principles ensure that decision is in line with vision.	Unconscious test if decisions are in line; Vision gives direction & values provide way; Enacting vision leads to more connection.	Only with disagreement they reflect on their principles; New members commit to acting in accordance with principles.	No decision is allowed to inhibit the functioning of a role in a circle, the roles in are defined according to vision.	No official role; Unconscious test if decisions are in line with vision.
Effect of vision	Inspires & gives direction in setting future goals; Inspired outsiders to join the initiative; Motivates actions; Provides direction as test for proposals; Motivated to hold on to ideals during negotiations.	Gives direction in decision-making as decisions are tested to the vision; Inspires and motivates them in their actions to fully achieve their ambition.	The principles give direction in a discussion when they cannot reach agreement; The principles motivate individuals to act accordingly.	Motivates them to be an example; to share information & collaborate with partners; Gave direction & motivation during negotiations; Inspires them to realize the project.	Motivated them to remain persistent in negotiations; Now motivates them to live-up to unrealized aspects of the visions (also inspiration); Gives direction in their interactions with each other & nature.
Interpretative flexibility & adaptive capacity	Broad formulation of core principles & vision; Group discussions on possible future scenarios; Reflection & discussions on group dynamic & vision interpretation.	One-sentence vision with flexible values; Unwritten values allows constant adaptation & reinterpretation of vision; New phase of project means re-evaluation of vision.	General principles, one can interpret them from their individuality; They changed & evaluated the vision & principles often, with new group composition or based on experiences.	The vision is not open for new interpretation or reformulation; One of the principles is trust, if things are not going well they support each other & have faith.	The vision 'living in harmony' can be broadly interpreted; Sometimes interpretation is too broad & no agreement is reached; In different phases they could focus on different aspects of the vision.
Narrative-vision relation	Lack of communal & sustainable housing in social-housing sector; Lack of citizen initiatives; Polluting building sector; Inequality in decision-making methods: Realise this!	They explored everyone's narrative & combined these to create current vision: Lack of purpose & social connection; lack of influence on social context; control by mega-powers & money: desire to live in group again, in harmony & connection.	Little possibility of living in harmony with each other & nature; Lack of transparency and collective decision-making; lack of responsibility for surroundings: Live by principles on these topics.	Lack of people being aware & taking action for sustainability; Lack of connection among people; Big dependence on large systems on which individuals have no influence; Many environmental problems: Vision to live sustainably in connection.	Inefficiency of governments in dealing with environmental problems: Start an initiative themselves; Environmental problems: desire to build with waste and ecological materials.
Reflection on narrative	Social-housing sector & citizen initiatives can realise ecological & communal housing; self-maintenance & self-development in social housing sector is possible & beneficial for everyone involved.	Creating their community can fulfil desires that normal society did not; Project gives purpose to people; They gain important experience in living in connection, this can enable future, world-wide connection.	Shared ownership & shared leadership leads to active attitude & feelings of responsibility; Active attitude & group connection help personal development & v.v.; Living in harmony with nature and each other is possible.	When alternatives to act more sustainably are made more easy for people, they will take them; A lot of people share their narrative & vision but do not 'dare' to make the jump & realise this vision.	Citizen initiatives have organisation strength & in collaboration they can achieve many things; Living in a community is possible; Building your own house is possible; Earthships are not necessarily the only solution, straw bale houses are also suitable here.

Table 4.3 Overview of the visions and narratives. Dealing with the set of questions A and questions 1.2.1, 1.2.2 and 1.2.3 in the case-study descriptions.

*recently incorporated in the value of personal development.

VISION & NARRATIVE

In the overview of visions and narratives in ecovillages (table 4.3) the first thing that can be noticed is that the cases have different aspects in their vision and core values. Some visions are more focussed on building sustainably/ecologically, where other visions focus first on living in harmony with each other and the cosmos. Interesting is also that one case does not have a vision and merely acts from core values. Two other cases in turn do not have any official core values and merely act from their vision. Although in the case of ecovillage Bergen they do have core values from which they act but those have not been written down to enable continuous reformulation.

The role of the vision and core values in the decision-making methods of the cases varies. For some cases, the vision is actively used as a check for every proposal or decision. In other case-studies the vision plays a much more unconscious role, or is only addressed when the group cannot reach agreement.

The method of formulation of the vision (not included in table 4.3) also differs; in some of the cases the vision was formulated by the initiator(s) before they looked for rest of their group, whereas in other cases the group was first formed after which they formulated the vision. What can be noticed is that in this second case, the vision changes over time, to adapt to experiences or new group compositions.

All cases speak of effects like motivation, direction and inspiration which the vision has on their actions. Some cases emphasize more on the inspiring role of the vision, where others describe a more motivating and directing role to the vision.

All visions and values are quite broadly defined, which leads to much interpretative flexibility. This is not in all cases experienced as positive. Adaptive capacity is in some cases present as they reinterpret the vision actively and allow it to be changed over time. In other cases, where the vision was fixed at the start of the project there is less adaptive capacity. This is in one case solved by having a very broad vision.

The narrative-vision relation is for all cases quite direct and all have a positive reflection on their narrative through their experiences.

With the use of this table it is possible to reflect on my analytical framework as presented in the research design (chapter 3). First, the relation between the narrative and the vision seems quite direct, as the inhabitants mention the same issues in their narratives as they have included in their vision. Second, the influence of the narrative on the actions is mainly through the vision and not so much directly. This can be attributed to the fact that ecovillages try to create collective actions, for which a collective motivation is needed to reach agreement about the course of the actions. For this, the vision is used, since this is something all participants have agreed upon despite possible differences in their narratives. The reflection back on the narrative through the actions happens in all cases, but only in a couple does this actually influence the existing vision. Therefore, it can be said that the cases have differing levels of interpretative flexibility and adaptive capacity.

	IEWAN	Ecodorp Bergen	De Hobbitstee	Ecodorp Boekel	Vereniging Aardehuis
Transformative ambition?	Not in the vision; In one core value.	Not in the vision; In their statements and actions.	No.	Yes, in their vision.	Yes, in their vision.
Ambition	Inspire citizen initiatives to collaborate with social-housing sector; Inspire this sector to build communal & sustainable houses; Inspire building sector to build more sustainably; Demonstrate that self-management of building leads to involvement, social safety & neatness.	Show sense & nonsense of regulations & laws; Demonstrate that closing local cycles can help solve problems; Show that living a circular, ecological, economic & social principle is possible & fun; Give people purpose, hope & inspiration. Show alternatives; Make people realise things have to be done differently.	They do not actively want to change people, everyone should decide for themselves how they want to live.	Be inspiring example of living sustainably & in connection; Be catalyser to Dutch sustainability transition; Inspire & give energy to people to contribute to sustainability; Be stepping-stone for other small, sustainable initiatives; Be exemplary with aspects of their ecovillage, e.g. their drink water filtration.	Be inspiration of harmonious living; Inspire people that they can act differently than how society 'programs' them & be gentler with the earth & each other; Inspire people to build ecologically & self-sufficiently; Inspire people to live together again in connection & support; Show that citizens can start & realize a project.
Trans. potential?	Yes.	Yes.	Yes.	Yes.	Yes.
Potential	Success of realising their project & having successful collaboration with social housing sector & local governments; Their sustainable building solutions; Showing self-governance as communal house is possible; The combination of all these aspects in one project holds most potential to create impact, in their opinion.	Demonstrate that: closing cycles locally help earth recover; living as group can make people feel connected & give purpose; living as community can make desires be met; Being an example that things can be done differently & inspire people to also change; Bringing meeting practices & values to external meetings, helps people understand their values or even adopt them.	Potential of passive inspiration to individuals or other actors by living as a group in connection & harmony while using sustainable practices.	Plant seeds in people that inspire & motivate them to be sustainable; Many aspects of the community are viewed as having potential e.g. holarchy, building methods, financial model; By being part of the larger sustainability movement they can enhance other projects & be enhanced by these in turn; Collaborating with many partners helps achieve more.	Individual stories & word of mouth spread is viewed as having biggest potential to inspire others; They view their sociocratic meeting structure, building design & -materials & energy- & water solutions as having potential to inspire others; Showing it is possible to create something as citizens. By contributing to a larger movement, a mass necessary for transition is created.
Trans. impact?	Yes.	No physical project.	No.	Yes.	Yes.
Impact*	Sustainable area development in Nijmegen; Acceleration of local negotiations between a new citizen initiative and social housing sector; Start of a consultancy firm to advice similar projects.	Their ecovillage did serve as inspiration to initiate the Dutch ecovillage network & inspired them to use sociocracy; By sharing their knowledge & experience they have helped other ecovillage initiatives.	-	A local housing association has started building self-sufficient houses; Their holarchy method got adopted by an entrepreneur group of which one inhabitant is a member; Through being part of a bigger movement they believe to have an impact on making the Netherlands more sustainable.	An 'Aardehuizen 2.0' project is being developed; A local housing project inspired their design on vereniging Aardehuis; Two inhabitants started a mediation company using sociocratic elements; Municipalities Olst and Deventer are now more open to other alternative projects.

Table 4.4 Overview of the transformative impact levels. Dealing with the set of questions D and question 2 in the case-study descriptions.

*All ecovillages have probably had an impact through inspiring individuals who came to visit or volunteer and afterwards changed something in their lifestyle or started their own project, this is hard to track and is therefore not included.

TRANSFORMATIVE IMPACT

The levels of transformative impact which the different cases describe about themselves (table 4.5) differ.

Especially de Hobbitstee differs from the other cases in that it does not have a transformative ambition. The other cases all have this ambition, however, some included this explicitly in their visions and others did not.

All cases ascribe transformative potential to their community because they view that they practice such innovative ways that they can inspire and be exemplary to many actors. Also, one case views they have the potential to function as a type of kickstarter to other innovative companies. All cases speak of the potential to demonstrate another way of living which can bring purpose, inspiration and more sustainability than mainstream ways of living. The cases view that both elements to their ecovillage, like building methods, water filtration techniques or organisation structures, as well as the holistic combination of these elements have the potential to create transformative change. Lastly, two cases emphasize on the value in word-of-mouth spread of their individual stories to inspire other individuals to change their way of life.

Some cases view they have had impacts in the form of projects being initialised based on them, others merely have had an impact through aspects of their ecovillage like their decision-making or their organisational structure being copied. All mention that their project has probably inspired a lot of individuals which has led them to change things in their life, however, this form of transformative impact is hard to track.

Looking again at the analytical framework, it can be argued that the main transformative impact that I came across in my empirical findings lays in the levels of ambition and potential and less in the level of actual impact.

DISCUSSION OF CROSS-CASE

In this section the empirical findings and the cross-case comparison are discussed.

For this discussion I also used findings from the discussion session which I organised at the Dutch ecovillage network event. At this session roughly thirty people from various Dutch ecovillage initiatives were present and after a short presentation of my preliminary findings we discussed three different topics: 1) their organisational structures and decision-making methods, 2) the role of and views on their visions and 3) their methods for communication, self-development and group-connection. A short description and a summary of the main results from this session can be found in Appendix F. Overall, this discussion confirmed my empirical findings, only a few new topics were brought to light, these are presented in this discussion.

I also used the interview with one of the initiators of the Dutch ecovillage network for this discussion, this is referenced as interview 11 and the original Dutch quotes can be found in Appendix E.

ORGANISATIONAL STRUCTURE AND DECISION-MAKING

About the organisational structures and decision-making methods it can be argued based on my findings that the different methods employed lead to quite similar effects and are also chosen for quite similar reasons. All cases said that their organisational structure and decision-making method have led to more effectiveness and involvement of participants than 'regular' structures and methods with more hierarchy. All cases selected their structure and method from a desire to create equality, transparency and involvement. These similar desires and experienced effects do not provide an explanation why cases chose for a particular structure or method. Only Ecodorp Boekel provided as explanation for their specific choice that they deemed holarchy more goal-oriented and efficient. From the interviews it became apparent that most cases chose a method that they were already familiar with or had heard positive stories about from acquaintances. It can be argued that once having decided on the set of qualities they want their structure and method to comply to, an ecovillage can choose from several options employed in ecovillages, which will not lead to very different effects.

The ecovillages have different ownership structures yet despite this, they talk of similar levels of involvement and types of leadership. Whether the land is owned collectively by the ecovillage association, by a support foundation, individually by inhabitants or by a housing association, the experienced levels of involvement of the inhabitants in the decision-making as well as the construction and maintenance appear similar. Also, in all cases they still make collective decisions about the land. It can be argued that for the cases of IEWAN and Vereniging Aardehuis, where the land is not completely owned collectively, the current situation is still quite shortly after the construction period. Therefore, the levels of involvement and type of leadership might still change in time, when no more construction and little maintenance has to be done collectively. This cannot be said based on my research findings.

It can be stated that the top circle as described in sociocracy and holacracy is very similar to a regular board in an organisation. The top circle consists of representatives of all smaller circles, which is similar to the gathering of a group of managers of different departments in a board. The two main differences are that in sociocracy and holacracy there is a double-link between the top circle and the smaller circles and that the power is spread amongst all participants instead of resting in the hands of one manager. The double-link ensures that the 'leader' of a circle is a different person than the person

who represents the circle in the top circle. However, since this double-link is not always practiced, this distinction is not present and a top circle really resembles a regular board except for the power distribution.

In the discussion with ecovillage members all participants agreed that when the initiative is still small, existing of only 6 to 8 people, it is difficult to establish a full sociocratic organisational structure. The small amount of people means that all persons have to be in almost all the circles of the organisation, or that not all roles can be fulfilled. This is one of the difficulties of implementing sociocracy or holacracy right from the beginning, when the initiative is still small. Also, part of the participants agreed that having a double-link between the top circle and the smaller circles is too abundant when the organisation is still small and it mainly leads to very long meetings. Because of this some ecovillages do not actually practice this double-link, which can be said to counter-act the division of power which is so central in these structures.

No effects were measured quantitatively of the organisational structures and decision-making methods on the effectiveness and success of the organisation in my research. All cases argued that collective decision-making with equality and involvement leads to better decisions than an individual would have made and also leads to more support of decisions and involvement of all individuals, than with hierarchical structures, which in turn can lead to more productive work. Studying whether this is actually true was not part of my empirical research and no statements can therefore be made about this. Also, participant observation would have been necessary to make statements about the day-to-day power dynamics and organisational efficiency.

VISIONS

Looking at the visions of the ecovillages, the vision development and the role of the vision differ most significantly among the ecovillages and can be said to have led to different types of envisioning. In some ecovillages the vision is developed by the initiator(s) before they look for more members, in other ecovillages the vision is only developed when a full group has been formed. These different approaches did not lead to very different types of visions, however, it can be said that they have led to different types of commitment to the vision. In the case when the vision is formulated after the group was formed, the vision keeps changing over time and is open for discussion and reformulation. In the cases where a vision had been determined beforehand, there have been no changes in the vision and the vision is not open for discussion. What can be noted is that in this case the vision also plays a more dominant and decisive role in the decision-making process. For example in the cases IEWAN and Boekel, where the vision was defined beforehand, they have built-in checks to the vision in their decision-making method. In cases like Bergen and the Hobbitstee, who develop the vision based on the group formation, there is only a very unconscious, unofficial check to the vision in the decision-making process. Nothing can be said about the success of either of the approaches based on my empirical research.

This different role of the vision in the decision-making process was illustrated by an anecdote from interview 10, where the issue arose that in some Dutch ecovillages the vision is experienced to play a negative role. People can use the vision as a kind of power tool to steer the actions of the group, if the vision is actively included in the decision-making method. From my empirical research it did not become apparent that this is experienced in my case-studies. From other ecovillage research, it has however become apparent from multiple empirical researches that an ecovillage has more chance of success when the vision was formulated as one of the first things by a small group of people and is not open for discussion (Christian, 2003; Austerberry, 2009). In

transition literature, Berkhout (2006) argues the contrary about larger scale and more heterogeneous organisations, stating that a vision should be open for change and re-interpretation to enhance interpretative flexibility making a vision accessible to more people. Long term empirical research will be necessary to research which of the two approaches is most beneficial for Dutch ecovillages and cannot be said based on my empirical findings.

“So some, maybe initiative holders or other people, who feel the vision very strongly test what should happen to it and with that also steer decisions and actions. Whereby the vision actually plays a very active role in the everyday, but not in a way that is completely inclusive.” (1., Interview 11)

“I personally think that we are a learning, evolving consciousness and that we can therefor also stimulate each other, precisely because of the diversity and exchange, and that this is very important.” (2., Interview 11)

What I noticed during my empirical research was that in cases where the vision was open for change, the members of that ecovillage placed greater trust in group connection and shared ideals to ensure a good course for the ecovillage. Ecovillages where the vision had been set before looking for members were more sceptical about the wide variety of people that are attracted to ecovillages for very different reasons; believing the vision was needed to bond and guide everyone. These ecovillages also did not attach as much importance to group connection or self-development practices. Based on this, it can be argued that when a vision is determined first and not open for discussion, the basis for group connection is this shared vision, whereas in cases with a fluctuating vision, group connection practices are necessary to ensure good collaboration. In the discussion session it became apparent that opinions about the changeability of a vision vary greatly. A member of an Anastasia village (a particular type of ecovillage) remarked that their vision is primarily that there is a multitude of visions and that these should all be respected. Whereas other ecovillages really do not think that a vision should be changed over time or be in any way flexible. They base this opinion mostly on the research of Christian (2003) and Austerberry (2009), fearing that the group will fall apart as soon as a discussion on the vision starts.

ECOVILLAGE RULES-OF-THUMB

Austerberry (2009) and Christian (2003) both made rules-of-thumb for starting a successful ecovillage which got published in the ecovillage newsletter. The recommendations for a successful ecovillage are based on extensive empirical research including interviews in many ecovillages in the US and Australia. Christian and Austerberry came to similar recommendations, from different case-studies. Some examples of recommendations are: agree on a decision-making method early on, prioritize process skills and the community-building process, determine the mission first, design physically and structurally for community, make it hard to get in and easy to get out of the community.

The role of the vision in the decision-making process and thereby indirectly its role in helping realising actions differs a little in each of my cases. For all cases the vision functions as a motivation to live up to the initial dreams. In all cases the vision also provides direction for actions, but in different ways; either as guide for actions, as a check of new proposals or as a check if an objection to a new proposal is valid. Some cases state that the vision plays a very active role in their decisions, where every decision is tested to the vision, others reflect that the vision is more an unconscious check which only plays an active role when discussions arise, again other cases based

a mission and several goals on their vision and these play a role in the decision-making method instead of the vision itself. These different roles of the vision can be said to have resulted from different opinions on what a vision should do and has resulted from or in different decision-making methods.

With respect to the narrative-vision relation in my case-studies, based on my findings it can be stated that this relation is quite close. Some ecovillages emphasize on a lack of connection in their narrative of people with each other and nature, and they then formulated a vision based on this. Other ecovillages hold a narrative in which they notice the great environmental burden of human activities and especially the housing sector, which is why they formulated a vision primarily based on wanting to build sustainably. All cases reflect with their experiences so far that with their vision and practices they can remedy or get around some of the problems they identify in society and therefor see themselves as sustainable examples for individuals and society.

A difficulty of developing a vision that arose in several of the ecovillages that participated in the discussion session is the conflict between wanting to accept all people as they are, yet creating boundaries in a vision. They all agreed that by developing a vision, one actually creates boundaries to the behaviour, choices and activities of individuals that agree to the vision. However, all ecovillages strive for equality and acceptance of individuals. As this obviously contrasts with creating boundaries, many ecovillages struggle with the extend of the boundaries they create in their vision.

About the formulation of the vision, the issue arose in the discussion session that when the vision is formulated too much in terms of an ideal world, the surroundings of an initiative will not be able to understand the vision. If the vision is too dreamy, the surroundings are not able to identify what the initiative actually wants or plans to do, which can greatly hinder their process of settling in a place. However, one ecovillage had experienced that when they changed the vision to a more down-to-earth version that was fully understandable to their surroundings, the ecovillage members themselves could not find themselves in the vision any more. The vision was now experienced as too down-to-earth to inspire and create support among the ecovillage members. In the discussion session, the participants therefor agreed that the vision has to be formulated both from the ecovillage members' dreams and with understanding for ones surroundings.

SELF-DEVELOPMENT AND COMMUNICATION METHODS

Regarding the tools and methods to improve communication and collaboration employed in the cases, it can be noted that opinions differ greatly on this topic, this seems to be related to their visions and to the level of interaction between inhabitants. In some cases working on communication and personal development is regarded as vital to the success of a community, where other cases believe this should be left up to individuals. In the cases where attention is given to personal development, communication and also group-connection, the regular and communal activities are more frequent than in the cases where they do not give attention to these matters.

From interview 10 it became apparent that this difference in level of dedication to these topics might be a result of the different cultures and ideals from which the ecovillages emerge. Cases that give no attention to personal development or communication instead attach greater value to building sustainably and living in harmony with nature. The cases that do have practices in place for these matters started from the desire to live in harmony with other people or even specifically to enable personal development. Building sustainably came in the second place for them. Since the

cases start from these different desires, they also do not experience a loss when they do not have practices in place for personal development. However, the cases that do have practices in place say to experience very positive effects both for personal development and group connection/collaboration. It can be argued that for the success of an ecovillage, these practices are vital, since much empirical research has shown that ecovillages with these practices in place are more successful because it helps create good collaboration (Christian, 2003; Austerberry, 2009). This cannot, however, be said based on my own findings, partly because I only studied 'success stories' and did not look at failures.

My empirical findings indicated at the issue of whether personal development should be left up to individuals, as it is deemed unnecessary or could make the group uncomfortable. This contradicted starkly with cases that view attention to personal development as crucial to successful collaboration. In the discussion session, a related issue was brought to light. Which is the question of how far one should take the communication and personal development workshops. Ecovillages experience that there is a danger of acting almost like a therapist or psychologist when you start to work on people's personal development. This of course does not have to be a bad thing, but one should consider the depth to which you wish to work on qualities and skills of individuals when engaging in practices for better communication and personal development.

All ecovillages that participated in the discussion session agreed to the great importance of celebrations, parties and rituals. Creating fun experiences with the group is deemed vital for group connection and cohesion. Also, they agree that being able to share your personal feelings and situation is important for group connection. A talking stick or sharing at the start of a meeting can ensure that every person gets a change to share their feelings and for others to empathise with this person. A talking stick is passed around the group as a symbol for the right to speak singularly in a group, this method is also used by many indigenous tribes. Using a talking stick is also experienced to ensure that people who talk a lot do not dominate the group. The importance of celebrations and rituals did not become apparent from my empirical findings. This can be attributed to the fact that I did not specifically ask about them or because I had not initially viewed celebrations as tools for collaboration. Due to the great emphasis the participants of the discussion-session laid on this matter, it can be argued that celebrations are definitely also a tool for collaboration.



6. CONCLUSION & DISCUSSION

In this chapter the conclusion and discussion are presented, followed by a list of the references used in this thesis.

The discussion starts with a discussion of the implications and opportunities of the empirical findings for sustainability transitions. After discussing the implications of my findings beyond my research question, I will in the next sections discuss the conceptual and analytical framework and the methodology I applied, the implications of my findings to existing literature and I reflect on my role as researcher. The discussion is concluded with recommendations for future research.

CONCLUSION

This section provides a conclusion that is based on the empirical findings as presented in the previous chapter and ultimately attempts to answer the main research question of this thesis. The research presented in this report was guided by the research question: *“How do Dutch ecovillages envision and practice sustainability transitions, and what tools are used for collaboration, communication and decision-making to realise their community ambitions?”*

As answer to my first sub question I developed an analytical framework to help me study the envisioning and practicing of sustainability transitions in ecovillages, based on a literature review (figure 5.1). This framework combines the TSI framework with elements from other vision and transition literature and enabled me to study also the relation between the vision and actions as well as the transformative impact.

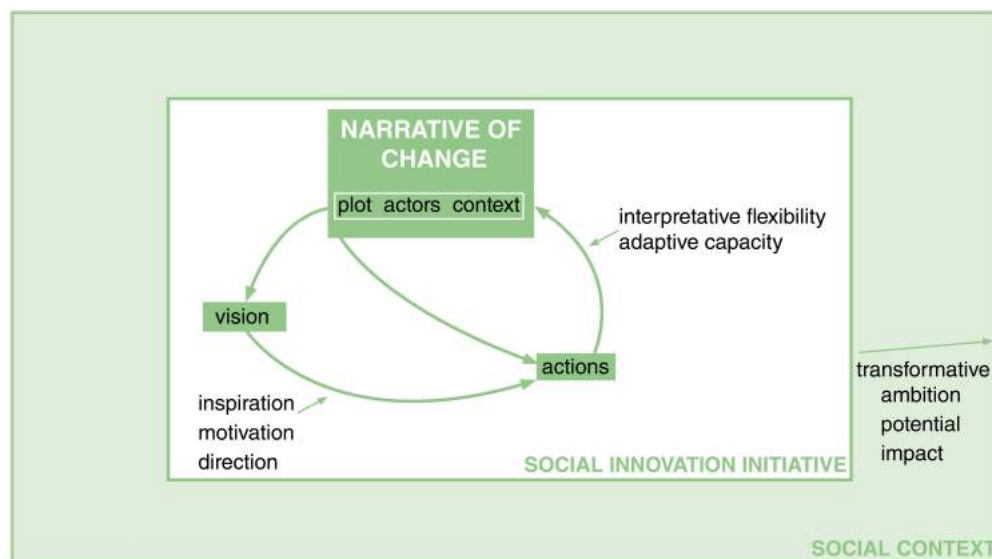


Figure 5.1 Analytical framework developed for my research (own image).

Through the analysis and comparison of five case-studies of Dutch ecovillages guided by the specially developed analytical framework, an answer to the second, third and fifth sub question can be given. First, the cases have varying methods for decision-making and different organisational structures, e.g. sociocracy or holarchy. They ascribe similar positive effects like fairness, equality and high involvement to these methods but they lay a different emphasis on aspects like either efficiency and goal-oriented structures or active, positive attitudes and full support of decisions. All cases run into some issues when implementing their decision-making method. For instance, truly following the strict meeting structures, remaining issues of power and peer pressure and long and frequent meetings.

Second, it can be said that Dutch ecovillages employ different manners of envisioning; utilising their vision in the decision-making process in different ways and having different processes of developing their vision. Some cases use their vision very directly by checking all proposals to the vision, others only reflect unconsciously on the vision. Regarding the development of the vision, there seem to be two different ways practiced. In some cases the vision was developed by the initiators before they looked for the rest of their group and in these cases the vision is not much open for change or reformulation. Other cases change and develop their vision over time based on experiences or with new group compositions. In all cases their narratives about society relate closely to the visions they formulated and with the experience of their projects these narratives were positively reinforced.

Third, it can be stated that the cases have different tools for collaboration and communication and they have varying opinions about these tools. All ascribe positive effects to meeting tools like a facilitator, specific meeting structures and methods like non-violent communication. Not all value personal development or group connection practices. Some cases do not have practices in place for this, believing they are matters that should be left up to individuals. Other cases value them highly and ascribe their low levels of conflict and high levels of connection and collaboration to practices for personal development and group connection.

For all cases it can be said that their tools for collaboration, communication and decision-making support their ideals of participatory and equal decision-making and full inclusion of all members. Issues the cases run into during their envisioning and practicing are amongst others that of living up to their organisational and meeting structures, what the role of the vision should be and how it should be development, personal conflicts or lack of skills, laws and regulations and unfamiliarity with ecovillages by governments which delays or objects their projects.

In answer to the fourth sub question, the empirical findings indicate that the cases view their impact on sustainability transitions differently. First, one of the cases did not have the ambition to actively work on their transformative impact on society. Of the other cases, some had this ambition, but did not include it in their vision and again others had this ambition and included it explicitly in their vision. Second, all cases ascribe transformative potential to their practices. For example, all said that their experiments with new decision-making methods and organisational structures, as well as with tools for communication and collaboration, offer important experiences that can be useful to governments and companies. On top of this, the cases all view that their projects have the potential to inspire many individuals to change their way of life towards sustainability. Third, some of the cases view they have already had transformative impacts, in the form of elements of their ecovillage being adopted by companies, building methods being replicated in the mainstream building sector as well as more acknowledgement by institutions, more media attention and local governments being more open to collaboration with citizen-initiated initiatives for sustainable living.

DISCUSSION

This section starts with a discussion of the implications of my empirical findings to larger scale sustainability transitions. For the discussion of the implications of my conclusion for sustainability transitions, I also made use of the interview with one of the initiators of the Dutch ecovillage network, this is referenced as interview 11 and the original Dutch quotes can be found in Appendix E.

After discussing these implications, this section is continued with a discussion of my conceptual and analytical framework and my methodology. After this, I discuss my role as a researcher in this project. The section is concluded with recommendations for future research.

IMPLICATIONS FOR MACRO-SCALE SUS. TRANSITIONS

Rothschild (2016), developer of the collectivist-democratic organisation model, argues for the logic of a cooperative economy and participatory democracy which values individual choice and human cooperation instead of procedural and legalistic structures, similar to ideals found in ecovillages. She argues that people who co-own and co-manage their co-operative workplace or even their society, learn to identify with the groups need and interest, which can in turn lead to a more sustainable society. She states that a more authentically egalitarian and democratic alternative to the current hierarchical democracy already exists and is being practiced in participatory-democratic organisations. She deems experience in these organisations of relevance when wishing to transition to a society-wide participatory democracy model (Rothschild, 2016). Ecovillages are examples of participatory-democratic organisations and thereby contribute to this experience which implicates their relevance to sustainability transitions.

Since ecovillage inhabitants have a much lower environmental impact compared to regular citizens (e.g. Boyer, 2016) and experience other positive effects like purpose and connection are mentioned by ecovillage members, upscaling ecovillages will in itself contribute to sustainability transitions. When Dutch ecovillages are more successful and widespread, more people can live in them and the chance of elements in ecovillages being adopted by companies and governments is enlarged.

Ecovillage Boekel is part of the governmental initiated project called the 'democratic challenge'. This program was initiated from the governments' aim to renew local democracies and it gathers experiences from innovations in local initiatives that work with different types of democracy (democraticchallenge, 2017). It is programs like these that demonstrate the governments' interest in experiments with different types of democracy, making ecovillages a relevant place for experiences. The European Commission also acknowledges the incubation of community-based activities as important for cooperation for innovation and exchange of good practices. GEN-EU started a two year research project called CLIPS which is funded by the European Commission. The aim of this research project is to design a support framework for community-led projects, as these face many challenges but can offer examples of sustainable practices (clips, 2017).

Looking at my empirical findings, ecovillages have shown to be able to have a transformative impact on society in many different areas, ranging from building techniques to ownership structures and participatory decision-making models. The

cases in my empirical research all had transformative potential and (almost all) ambition and a few had already had an actual transformative impact. This shows the relevance of ecovillages to sustainability transitions. On top of this, it can be argued that through uniting in (inter)national networks like the GEN and the Dutch GEN their chances of impact are enhanced. Being connected to networks allows exchange of information and experience as well as provides the possibility to lobby with governments for regulation and law changes which enable ecovillages to take root and scale-up, enhancing their potential influence on sustainability transitions (Interview 10).

“In Italy they are working on a law proposal which creates a separate status for ecovillages, because in the current zoning law, and also in the Dutch law, something is either for agricultural use or nature of living; everything is very segregated, while an ecovillage is neither a farm, a nature area, a church or a living neighbourhood, but everything is integrated.” (3., Interview 11)

Regarding the relevance of the social innovations in ecovillages to sustainability transitions, the importance of their tools for communication, collaboration and decision-making also comes to light. From my empirical findings it became apparent that many ecovillages acknowledged the importance of social practices such as sharings, meeting structures or personal development as these enabled their levels of collaboration. Several ecovillages also stated that companies have adopted some of their organisational structures or decision-making methods after noticing their increased levels of efficiency and involvement. This indicates at the possibility that practices at ecovillages could be adopted in other sectors of society to increase group connection and thereby collaboration. The government and companies as well have acknowledged a desire for more participatory processes to increase productivity and involvement, things that can be stimulated by using tools for communication and collaboration as experimented with in ecovillages. In his paper on ecovillages as islands of the future, Lupke (2012) also points at this opportunity.

“So to the idea that you also have to take care of the social dimension is less awareness, in my experience. That is something I also learned through GEN-Europe and GEN international, how important this dimension is. This is also what the clips project is based on, because this is where it often goes wrong.” (4., Interview 11)

The implications of ecovillages to society range widely and one other influence I wish to emphasize is their potential to serve as a kick-starter to other innovative companies. Ecodorp Boekel mentioned this during my interviews there. Since ecovillages attempt to achieve high levels of self-sufficiency and buildings with natural and local materials, they look for partners who can help them in this mission. Possible partners are small companies applying innovative techniques that are not yet accepted by or fully ready for mainstream application. An example of this is the company ‘Kalkhennep Nederland’, who build houses using an innovative technique which allows one to construct walls solely with chalk and hemp. By offering this company a place to build houses, this company can demonstrate and test its techniques. This can help the company to gain new customers. Other examples of how ecovillages can serve as kick-starters to innovative techniques are their experiments with drink water filtration, waste water filtration and new techniques for heating. By collaborating with research institutes, universities and small companies, ecovillages benefit from the sustainable techniques whilst the organisations gain competence and proficiency. This role as kick-starter is an example of how ecovillages can influence sustainability transitions in society.

An often used critique on the relevance of social innovations at ecovillages is that it would not be possible to scale their innovations up to a society-wide level. For instance, methods of consensus decision-making can result in very undesirable power

situations of individuals when for example the group cohesion and shared goal is not strong enough, this is more likely to occur in larger groups (Christian, 2012). Sociocracy and holacracy are both said to be fit to govern an entire society, however, no such examples exist and so far only ecovillages and small companies have adopted the methods. However, political participation and bottom-up governance have been proven to be possible on a large society-level scale as is for instance demonstrated by the Zapatista movement in Mexico. Here, people have challenged the concentration of power in their government and have deepened the democracy, transforming politics through networked learning. Zapatista's do notice that this requires deep participation of all members of society, leadership development and education to understand issues. By making participation in politics obligatory everybody knows how the system works and cannot be fooled by it, creating complete involvement in the democracy (Swords, 2011; Starr et al., 2011). Examples like this demonstrate the possibility of larger scale participatory decision-making models and imply the importance of developing skills and doing experiments as is being done by ecovillages.

"For example, we collaborate with 'Kalkhennep Nederland', through which we will built sustainable houses of chalk-hemp, to show that this allows you to build sustainably whilst having a beautiful home. We also collaborate with the Dutch institute of ecology, they will realise a new type of whole purification system using alga... So in this way we are to them a test-project, a kick-starter that can make their projects big so that they can be applied in other places." (5., Interview 7)

Regarding the larger scale adoption of the egalitarian decision-making methods used in ecovillages two things can be argued against this possibility. First, ecovillages themselves expressed their doubts about the possibility of applying their methods to companies or even entire countries. Mainly basing their doubts on the skills and motivation that individuals would need. Second, a very clear and shared vision is needed for these decision-making methods and organisational structures to function properly. It can be argued that this is in companies currently not the case and hard to achieve and in larger organisations or countries it is even more difficult to formulate a vision and or to have full support for it. This diminishes the relevance of experiments in Dutch ecovillages to sustainability transitions.

Ecovillages themselves discussed during the discussion session that they would really like more scientific research on their communities to enhance their recognition by broader society and thereby indirectly their influence on sustainability transitions. Being able to bring research and articles that cover the benefits and innovation potential of ecovillages to meetings with partners such as local governments or a contractor is believed to ease the negotiation processes. The ecovillage network also has this high on their agenda as they recognize that governments and businesses strangeness to the concept of an ecovillage really hinders the scaling up of the ecovillage movement in the Netherlands (Interview 10). Through dissemination of my research results I have the opportunity to contribute to this, I will discuss this potential in a later section.

"In the Netherlands the municipality always remains responsible and those municipalities are therefore very cautious to unknown materials and building techniques, which makes sense since they are liable for them... So I think for municipalities it is also very important to hear that they are not alone, because a municipality also thinks like; help, what is this?!" (5., Interview 11)

DISCUSSION OF FRAMEWORK AND METHODOLOGY

CONCEPTUAL AND ANALYTICAL FRAMEWORK

The conceptual framework I developed for my empirical research was in general very helpful in finding answers to my research question. The aspects 'organising' and 'framing' of the social innovation framework were very helpful in studying the visioning and practicing of social innovation in ecovillages. The aspects of 'knowing' and 'doing' were in retrospect less relevant to my particular research question as the practices I studied were those involving tools for communication, collaboration and decision-making, for which I had made a separate analytical framework. The three levels to study the transformative impact on the social context of an initiative (ambition, potential and impact) were very useful in mapping the impact of the ecovillages. The inclusion of also the transformative ambition and potential in my opinion allowed a more complete analysis than just focussing on the actual impact the ecovillages have had so far. Analysing these different levels also brought to light more clearly the relevance of social innovations in ecovillages to sustainability transitions.

Looking at the addition I made to the analytical framework to study narratives of change as developed within the TRANSIT project, I reflect that this was very useful to holistically study the envisioning in ecovillages. By looking at the aspects that determine the functioning of a vision (direction, inspiration, motivation, interpretative flexibility and adaptive capacity) I was able to discuss the role of the vision in the decision-making process of the ecovillages which can be relevant to sustainability transitions. Also, studying the content and process of formulation of the vision allowed me to discover small differences between ecovillages and the reasons behind these differences. This information can both be relevant to the ecovillages themselves as to any type of future initiative.

Several implications of my theoretical developments to current literature can be distinguished. First, in studies on the vision of innovation initiatives, I recommend including the narratives perspective to broaden the understanding of the motivation of ecovillages and the reasons behind their vision. Also, including the indepth study of the vision using elements from van der Helm (2009) and Smith et al. (2005) enabled deep understanding of the role and functioning of the vision in an innovation initiative, I therefor recommend this to branches of literature that focus on the narrative, like for example the TSI framework. On top of this, I think my type of research into innovation initiatives where I focussed on making an overview of current practices could be of inspiration to frameworks like TM and SNM where the focus of the analysis lies more on the potential for up-scaling or even on enabling this up-scaling. I believe that by mapping current practices a much broader understanding of the innovation initiative was reached which brought to light their potential implications for sustainability transitions. Through this analysis I discovered that certain aspects of ecovillages can be of importance to sustainability transitions and that not necessarily the entire ecovillage idea has to be upscaled. This potential for uncovering exemplary elements to innovation initiatives can inspire TM and SNM. Lastly, my framework can be useful to understanding the relationship between vision and actions, this contributes to existing literature.

Looking again at my analytical framework, see figure 5.1, I can identify where in the framework the emphasis of my research was. With my research I mainly studied the narratives, visions and particular actions, whilst focussing on the interaction between the vision, narrative and actions. The emphasis was on tools for collaboration, communication and decision-making so of the actions, I only researched the practices around these themes. I did not study other actions of ecovillages. I also studied the transformative impact levels, yet I did this only qualitatively.

Regarding my analytical framework to study the tools for collaboration, communication and decision-making, I notice that the categorisation developed by Christian (2013a) was a helpful starting point. With the results from my five case-studies I can now propose a different categorisation of the types of tools applied in ecovillages. What I missed in the categorisation developed by Christian (2013a) was a clearer distinction between different types of process and communication skills, so this is what I want to make in my own categorisation. I also discovered that I had actually researched community glue practices without including this in my own analytical framework, and here I also missed a clearer distinction between different types of community glue practices. Based on these two observations, I propose a new framework which has a subdivision in the community glue practices and a clearer definition of the process and communication. This new framework is depicted in figure 5.2.



Figure 5.2 New framework to study aspects to governance in communities (own image).

METHODOLOGY

Regarding my methodology I reflect firstly that performing case-studies and specifically conducting multiple interviews per case-study, was a good approach for my type of research. By doing case-studies I managed to get answers to 'how' questions and could describe the current state of ecovillages in the Netherlands. Performing multiple interviews per case-studies enabled triangulation of data and it provided a more complete picture than a singular interview could have. The discussion session I organised was incredibly valuable to get confirmation of some of my findings and to gain new insights.

I reflect that participant observation would have been very valuable and insightful to my research. I could now not discuss whether the different decision-making methods and meeting practices resulted in different levels of efficiency and involvement in meetings from my own observation and had to trust on the accounts of the ecovillage inhabitants. Outsider insight through participant observation can also be useful to the ecovillages themselves to bring to light things they do not notice themselves out of habit. Also, with the use of participant observation by attending meetings, I would have been able to provide a more precise description of their meeting practices and the every-day practice of their decision-making methods and organisational structures. Lastly, participant observation can bring to light difficulties, power relations and inconsistencies in the practices.

As I final reflection it can be argued that looking at 'failures' would also have been very valuable to identify lessons from failed ecovillages which can serve as experience to other ecovillages and can influence sustainability transitions by providing relevant lessons regarding new practices for more sustainability.

ROLE AS A RESEARCHER

A researcher can have many roles in a research project and there is a lively discussion about to what extent the role of a researcher reaches or should reach (e.g. Wittmayer & Schapke, 2014). During my research I discovered that I was not merely acting as a researcher in the sense of observing and analysing what is happening in Dutch ecovillages and what this implicates for sustainability transitions. I realised that by performing so-called 'transformative research' I became influential to the transformative impact of the ecovillages under study. I reflect in hind sight that it can be said that I contributed to the transformative impact of the ecovillages in at least three ways.

First, by asking questions about the effects of their decision-making methods and organisational structures, I made them think about the potential of these methods and structures. Especially when I asked about whether they saw their decision-making method and organisational structure as something that had the potential to change society, I received several responses where the interviewees had not yet thought about this, but now that I had made them think, they would like to do something with this potential. The second contribution was through my interview with one of the initiative holders of the ecovillage network. By asking her the differences between the ecovillages as well as about the role of the ecovillage network in disseminating experience and knowledge gained in ecovillages, I indirectly gave the interviewee ideas for future actions of the network which will have impact on the transformative impact of Dutch ecovillages. Third, during the discussion session I already disseminated my research results to a part of the Dutch ecovillages and they positively responded that the information as well as the discussion session were very valuable for exchanging information and experiences. Lastly, by writing this thesis on ecovillages with a focus

on their tools for communication, collaboration and decision-making, I have brought attention the experiences in ecovillages with new types of participatory governance which will make this experience more widely available and could be beneficial to other organisations in society and ultimately lead to a more sustainable society.

These three possible impacts my research has on the role of ecovillages in sustainability transitions have made me want to reflect on the role of a researcher in the context of transformative research. I believe that transformative researchers have to be careful in their research and decide how they want to enact on their potential influence. For example by reflecting on how they disseminate their research results. I believe that when engaging in socially oriented, transformative research, the researcher cannot deny their influence on the transformative impact of the case under study and can positively utilise this to further promote and/or enable sustainability transitions.

RECOMMENDATIONS FOR FUTURE RESEARCH

Since Dutch ecovillages have so far not been studied academically and because in general little ecovillage research in relation to transition studies exists, many recommendations for future research can be made. Some already became apparent in the discussion, for example: do the decision-making methods and organisational structures employed actually lead to more effectiveness, equality and involvement? To research questions of this type, quantitative research or research involving participant observation is necessary.

In view of my analytical framework, there are two aspects to this framework which can be explored more in future research, regarding Dutch ecovillages and other niche innovations. First, in-depth research into the relation between the vision and the practices and the feedback between the two would be valuable. In this case, looking also at failed initiatives will provide valuable evidence for which methods are most successful. Second, quantitative research into the transformative impact and potential of ecovillages would be valuable to better understand the role of ecovillages in sustainability transitions. Once this role is more clear, actions can be undertaken to further support the influence of ecovillages on creating more sustainability in society.

Other questions that arose during my research that would be recommendable for future research and also for discussion amongst ecovillages themselves are: Does involvement in the long term drop when the property is not owned collectively? What is the role of the vision in the initiative? Can autonomy of sub-circles over decisions lead to a collapse of cohesion? Does the type of dimensions included in the vision have influence on the success of the ecovillage? What is the difference between sociocracy and holacracy and what are the benefits and downsides experienced of both? Which aspects to their collaboration and communication methods are the cause of the experienced benefits and how can these be adopted by companies or governments?

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A.

REVIEW OF TRANSITION LITERATURE

MULTI-LEVEL PERSPECTIVE

The multi-level perspective is the leading perspective used to analyze sustainability transitions, as it can give an overall view of the multi-dimensional complexity of changes in socio-technical systems (Rip and Kemp, 1998; Geels, 2002; Geels, 2004; Geels and Schot, 2007). In the multi-level perspective as developed by Geels & Schot (2007) three levels in society are distinguished. These are the niche innovations, the socio-technical regime and the socio-technical landscape. The socio-technical landscape can be defined as the context in which the socio-technical regime takes place. The landscape includes policies from the government, cultural characteristics and the national and international economy. It includes the macro-economic as well as culture and the macro-political developments. The socio-technical regime can be seen as the current routines in a specific system. Socio-technical regimes stabilize existing trajectories in many ways: they determine cognitive routines of engineers (blinding them to developments outside their field), laws and regulations, lifestyle adaptation to technical developments, sunk investments in machines, physical infrastructures and human competencies. The level of niche innovations is where radical novelties emerge. Niche innovations are initially local and small, they are fostered by small networks of actors and they are protected from mainstream market selection (Geels & Schot, 2007, pg. 400). This is the level where social innovations start.

Transitions in society come through only when interactions between processes at all these three levels take place, for example when an innovation in the niche level becomes adapted in the socio-technical regime and is in the end integrated in the landscape. The multi-level analysis of a transition is pictured in a diagram which makes changes over time visible (see figure A.1).

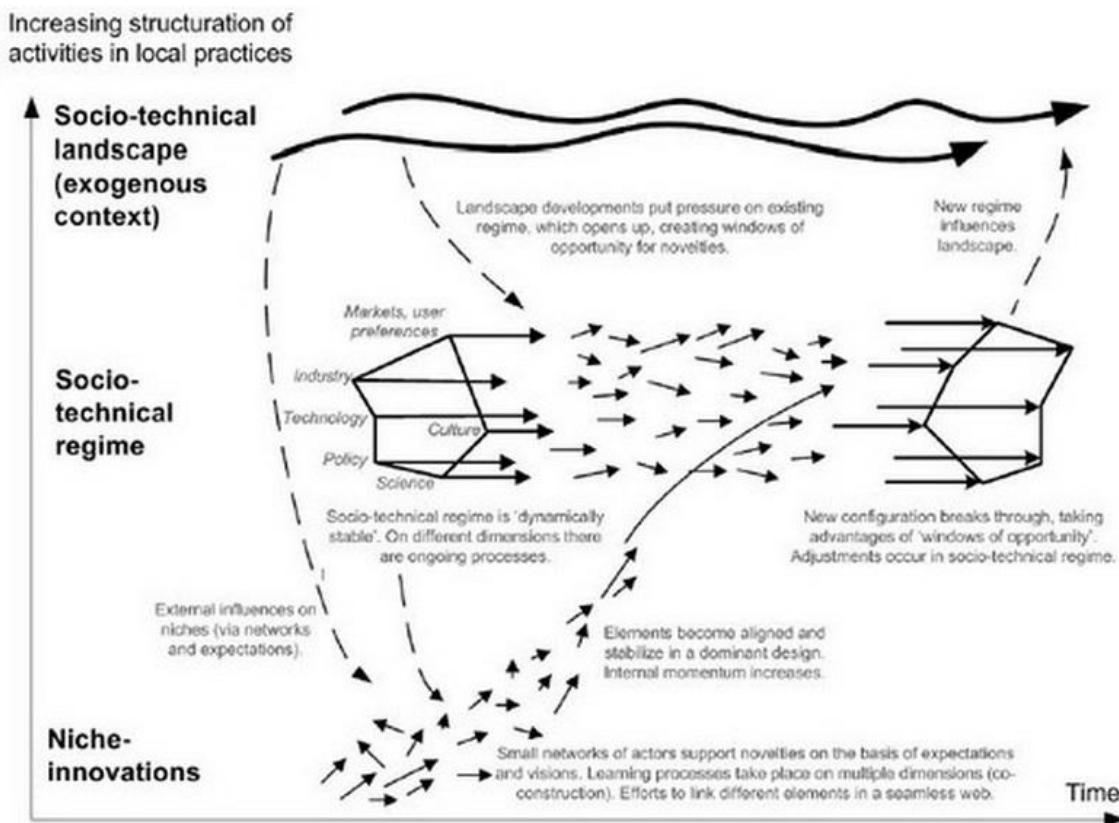


Figure A.1. Illustration of the multi-level perspective framework (Geels & Schot, 2007).

TRANSITION MANAGEMENT

Transition management is based on the multi-level perspective and is applied as a policy/governance approach applied or as a policy model, to analyze and support innovation processes. Three important aspects to transition management are niches, networks and visions.

Niches

A niche is one of the levels in the MLP framework. A niche is described as a place for innovations to occur, often characterized by a subsidy, a geographic location or a specific sector. The niche provides a protective space wherein actors can develop new practices and understandings, leading to so called niche-innovations. Developments and experiences of niches can be integrated into broader society. The concept of a niche within transition management is the unit of analysis for studying how radical change can occur in society, when it is shielded from the mainstream market in the start-up phase. (Grin et al, 2010; Rotmans et al., 2001). Niche innovations are a type of experiments that can result in the recrafting and constitution of new institutions in the broader societal context. *'Applying a niche's perspective thus offers a closer look at how these actors interpret their reality and anticipate, give meaning, search, learn, and can deliberately deviate from existing routines and rule-regimes'* (Grin et al., 2010, p. 30). In short, niches within transition research are a format to assess change processes and to understand how niche innovations can be supported to achieve sustainability transitions (Quist, 2007).

Networks

Networks are the actors and their relationships, which together are a social structure. Networks function as a framework which influences behaviour of actors, whilst simultaneously actors shape the network and relationships, with their behaviors and actions. Depending on which network is analyzed and the level of analysis, certain powerful individual actors can be identified as key actors (Quist, 2007, pg. 59-61). Granovetter (1985) developed a concept of embeddedness, from which follows that relationships in a network depend highly on trust and informality. The existence of trust relationships amongst actors with decision-making power in a group means that the actions of the network alter from the behaviour that would occur with only rational economic mechanisms. This is very interesting, especially in the case of ecovillages where the inhabitants are very closely embedded, meaning that their networks most-likely consist of trust-based relationships. Analyzing the network of an ecovillage could therefore potentially be of interest.

Visions

Sustainable future visions are very important for sustainable technology development, system innovations towards sustainability and in transition management (Quist, 2007, pg. 39). When a system or regime experiences recurring problems, opportunities for alternative visions emerge. These visions are then based on alternative worldviews or different expectations about possibilities (Quist, 2007, pg. 40). Within the field of transition management, visions are referred to as *"a framework for formulating short-term objectives and evaluating existing policy... these visions must be appealing and imaginative and be supported by a broad range of actors"* (Rotmans et al., 2001, pg. 23). Smith et al. (2005) propose five functions a vision can have for system innovations and transitions, which can be seen in Figure A.2, taken from Quist (2007, pg. 40). Smith et al. (2005) argue that there are three factors of influence to the consistency and robustness of a vision: 1) the degree of interpretative flexibility, 2) the adaptive capacity of the vision to new developments and 3) the coalition of stakeholders supporting the vision.

(1) <i>Mapping a 'possibility space'</i>	Visions identify a realm of plausible alternatives for socio-technical systems providing societal functions
(2) <i>Providing a heuristic</i>	Visions act as problem-defining tools by pointing to the technical, institutional and behavioural problems that need to be resolved
(3) <i>Providing a stable frame for target-setting and monitoring progress</i>	Visions stabilise technical and other innovative activity by serving as a common reference point for actors collaborating on its realisations
(4) <i>Providing a metaphor for building actor-networks</i>	Visions specify relevant actors (including and excluding) acting as symbols that bind together communities of interest and of practices
(5) <i>Providing a narrative for focusing capital and other resources</i>	Visions become an emblem that is employed in the marshalling of resources from outside an incipient regime's core membership

Figure A.2. Functions of visions for future system innovations (Quist, 2007, pg. 40; taken from Smith et al., 2005, pg. 1506).

Some visions focus on describing promises, expectations and socio-technical scenarios, where others focus more on their guidance and the functions they can provide. The latter are found in transition management and is sometimes called a Leitbilder (Quist, 2007, pg. 42). Visions serve as guidance when they are applied as means to achieve a specific desired end-state, supported by an effective coalition of supporters that are working on changes which lead toward the overall goal. Berkhout (2006), however, rejects visions as guidance; he defines visions more as proposals/bids, *'which require interpretative flexibility so that actors can align the vision with their own interests, worldview and value systems'*. This also entails that the vision can be modified by participation of new actors. A vision can gain ground when it appeals to a wide range of actors, or when powerful actors or groups support the vision and enforce support of the vision on others (Berkhout, 2006). This means that insight into the vision of a group of actors within a niche can show the potential of growth of the niche.

STRATEGIC NICHE MANAGEMENT

Strategic niche management (SNM) is also developed as policy tool or research model, it differs from TM in that it is used to address market-based technological innovations. SNM as a research model studies the capability of niches to grow towards the major sociotechnical landscape. It is used to learn about the way a technological novelty protected from market pressure can reach a broad integration in the regular market. As an intervention tool, SNM can be used to assess whether the upscaling of the nice technology is possible and if the technology can survive in the regular market and socio-technological landscape without protection (Raven, 2005). SNM is concerned with two aspects in a niche: 1) the quality of learning, and 2) the quality of institutional embedding. There are two types of learning: first-order and second-order learning. First-order learning is about learning about the surface features of a practice, second-order learning involves reflection to question the values and assumptions that underlie the practice. If evidence of second-order learning can be found, a niche has more change or success for regime inclusion (Hoogma et al., 2002). The second aspect studied in SNM is institutional embedding, this means the amount of technical, market, social and institutional support, which determines partly the niche development. Infrastructures and technologies from the regime should be embedded and a widely shared vision of future niche development has to be in place. Also, a niche will need a broad network of supportive actors, which must include actors from all sectors (e.g. producers, users, policy-makers, etc.) (Smith, 2007).

Regime transformation can occur from niche growth, following diffusion pathways. Niche innovations will have to align with the sociotechnical regime. For this to happen, the niche has to be stimulated within itself by means of three key processes; learning processes and its feedback loops, network formation and voicing & shaping and coupling of expectations (Raven, 2005). Analysis of niche engagement with current regime is marginal and SNM most often concludes that niches alone are unlikely to transform regimes, unless the niches are robust and compatible with the regime (Smith, 2007). A successful niche, with potential of growing into a new regime, is robust and has potential to grow. Meaning that second-order learning is involved and a broad network of actors are embedded. The ultimate goal of a niche in SNM is to replace the existing regime (Seyfang, 2016). SNM is not very applicable to radical innovations, as it was developed to study market-based technological innovations. A radical innovation has more distinctive characteristics and a different development process (Seyfang, 2016).

SOCIAL LEARNING

Learning is another perspective with which to look at transitions and one form of analyzing transition from this perspective is with the concept of Social Learning Systems. Wenger (2000) developed a theory on Social Learning Systems (SLS) which is another way to look at innovation initiatives and their potential to transform society. The success of an organization or initiative can depend on their ability to organize as an SLS and to participate in broader SLSs. Within a SLS, knowing is created by participating in a social learning system. He defines social learning as the interaction between social competence and personal experience. Participation within an SLS is determined by three modes of belonging: 1) engagement, which is the act of doing things together and engaging with one another; 2) imagination, which allows us to reflect, orient and explore and gives us a sense of identity; 3) alignment, which makes sure that our local activities match other processes beyond individual engagement to achieve a bigger effect (Wenger, 2000, pg. 227-228).

A social learning system has three structuring elements, namely communities of practice, boundary processes and identities. Communities of practice (CoP) are communities which share cultural practices that reflect their collective learning. This can range from “*a tribe around a café fire or a medieval guild, to a group of nurses in a ward, a street gang or a community of engineers interested in brake design*” (Wenger, 2000, pg. 229). According to Wenger (2000) “*CoPs are the basic building blocks of a social learning system because they are the social ‘containers’ of the competences that make up such a system*”. CoPs define what constitutes competence in a given context, by combining three elements of competence. 1) *Joint enterprise*, which means that members collectively understand what their community is about and they hold each other accountable for this. 2) *Mutual engagement*, which means that trust is built in relationships and norms are established. 3) *Shared repertoire*, the community has a shared repertoire of communal resources (language, routines, artefacts, stories, etc.). To positively develop a CoP the level of learning energy to the joint enterprise, the depth of social capital and the degree of self-awareness about the shared repertoire have to be sufficient (Wenger, 2000, pg. 229-230).

A community of practice naturally creates boundaries as people are (unintendedly) excluded from a CoP because they lack the competence. How a CoP deals with these boundaries can strengthen or weaken it, as the boundaries can connect communities and offer learning experiences. At the boundaries the competence and experience of an individual can diverge, which offers learning opportunities to an individual. Individuals can work as brokers between CoPs, this does require legitimacy of the individual if the wish to include the newly learned competence with their own CoP. Objects can also

serve as bridge between CoPs, for example, a shared language or routine between different CoP can make it easier for them to interact and exchange. Lastly, interactions between CoPs can work as bridges between CoPs. This requires boundary practices which facilitate outsiders to understand the CoP (Wenger, 2000, pg. 232-237).

In general, the ability of an individual to learn from an interaction with other CoPs depends on their ability to suspend and engage their own identity. An identity is defined by what is known vs. foreign to an individual. Subsequently, connectivity, expansiveness and effectiveness are aspects of identity which can help or block evolution of a CoP. Good identities are shaped by 1) the existence of a good home-base, 2) a good sense of trajectory, 3) multi-membership of several CoPs and 4) belonging to several fractals (layers of CoPs) in society (Wenger, 2000, pg. 238-243).

The implications of this SLS theory are that organizations can benefit from knowledge of the functioning of CoPs as they can stimulate social learning. This can be done by giving room to informal learning processes, facilitating identity building and organizing in a complex manner which links different CoPs (Wenger, 2000, pg. 243). Managers or leaders should identify CoPs, they should provide infrastructures to enable CoPs and they need to use non-traditional methods to assess the value of a CoP. In this way, communities of practice can be used as knowledge development for challenges (Wenger & Snyder, 2000).

GRASSROOTS INNOVATIONS

Grassroots innovation theory as developed by Seyfang and Smith (2007) links innovation and community action for sustainable development. Where SNM addresses market-based technological innovations, Grassroots Innovation (GI) theory refers to community based innovations for sustainability (Seyfang, 2016; Seyfang and Smith, 2007). GIs are characterized by a response to an ideological and community need and they draw from a fragile resource base, which makes them vulnerable to forces outside their control and makes them focus on self-maintenance and intrinsic benefits (Boyer, 2016). GIs differ from conventional market-based innovations because they are 1) driven by ideologies instead of profit seeking, 2) create spaces for expression of more sustainable values and culture, 3) often involve communal ownership structures, 4) they operate in the social economy instead of the market economy, relying on voluntary labor, grants or mutual exchange, 5) have different organizational forms and 6) have a different resource base (Seyfang 2016; Seyfang 2009). In this way, grassroots initiatives are said to offer a more radical alternative to regimes and structures than market-based innovations. However, they can be relatively vulnerable to forces outside their own control as they draw from a fragile resource base (Boyer, 2015, pg. 321). Examples of grassroots initiatives include local organic food schemes, community currencies, community energy projects, low-impact eco-housing, skill-share networks, cohousing groups etc. Seyfang and Smith (2007) argue that this type of community action can be a promising, but currently neglected, site of transformational innovation for sustainability.

The value of GIs lies in their potential to deliver system-changing innovations for sustainability, however to support them, SNM does not suffice (Seyfang, 2016). GIs are viewed as radical innovative niches that emerge from civil society, their diffusion patterns and niche development process are more complex and non-linear than standard niche literature would predict. This is why, GI research has turned to theories of politics and social movements, as well as social practice theories, to better understand how GIs interact with wider systems and how the social innovations take root and spread (Haxeltine et al., 2015, pg. 96). The community context of GIs is inseparable from their innovative capacity, which makes community-building in GIs crucial. Practical efforts to

support GIs in their development should therefore focus on social embedding (Seyfang, 2016).

Grassroots innovations can diffuse across the regime along three so-called diffusion-pathways. The first is replication, where a practice diffuses within a committed activist network. The second pathway is scaling up, where application of the practice happens by a broader audience beyond the activist network. The third diffusion pathway is niche-to-regime, where the grassroots practice is adopted at higher institutional levels and structural changes in the adopting institutions occur (Boyer, 2015, pg. 322 citing from: Seyfang, 2010; Seyfang & Haxeltine, 2012). Where in SNM the ultimate goal of the innovation is to replace the current regime, for GIs this is not always the case. A GI can aim to be merely complementary to a regime. For GIs to grow they often need for the mainstream regime to support the GI, this ask for intermediation between the GI and the regime (Seyfang, 2016). To enable this intermediation to take place and allow mainstreaming, the most ideal GI should be an 'intermediate' community-based project, which means that it is neither too radical nor too embedded in the regime (Boyer, 2015).

SOCIAL PRACTICES

Another way of looking at societal change within the field of Industrial Ecology is with the dynamics of social practices. A social practice can be defined as *"a routinized type of behaviour"* (Reckwitz, 2002, pg. 249). A practice can be distinguished from a habit in that a practice exists as *"a block or pattern which can be filled out by a multitude of single and often unique actions"* (Reckwitz, 2002, pg. 250). The practice pattern consists of interdependencies between bodily activities, mental activities, "things" and their use, understanding, know-how, states of emotion and motivational knowledge (Reckwitz, 2002, pg. 249). Giddens (1984, pg. 2) wrote: *"The basic domain of study of the social sciences, according to the theory of structuration, is neither the experience of the individual actor, nor the existence of any form of social totality, but social practices ordered across space and time"*. Giddens stated that the day to day actions of individuals use and reproduce the broader social systems (Giddens, 1984, pg. 24). Social practices are enabled and constrained by social structures, they are creating them and simultaneously shaped by them. This creates a 'duality of structure' as proposed by Giddens, which means that social structures are created by agency and are simultaneously the medium of its creation. As a result of this agent and institutions each shape and create the other, because of this every agent is both constrained and enabled by social structures to (re)create social structures (Giddens, 1979).

Studying transformation and stability in social practices has the potential to gain insight into social change. Reproduction and transformation of social practices has implications for consumption patterns and on associated institutions and infrastructures (Shove et al., 2012, pg. 2). Practice theory presents an interesting way of analyzing individual agency and the possibility of changing it. A practice can be said to be composed out of three elements: materials, competences and meaning. Around these three elements Shove et al. (2008) developed a framework of analysis for practices. In this framework a practice consists stuff, skills and image. With stuff, actual materials, objects, bodies and technologies are meant. Skills are the know-how, competence and knowledge necessary within a certain practice. Image is the identity, meaning and emotions connected to a practice. These three elements can also be defined as 'material artefacts, conventions and competences', see figure A.3. When a practice is deconstructed along the lines of these three elements, the current situation can be described and the 'problem' can be identified. The connections between the three elements are dynamic and are continually maintained or challenged through perfor-

mance. Also, once the links between these three elements are firm, the practice is well established and can only evolve very slowly over time. However, after deconstructing and analyzing a practice, a design for transition can be developed and a new synthesis between the three elements can be established (Shove et al., 2008).

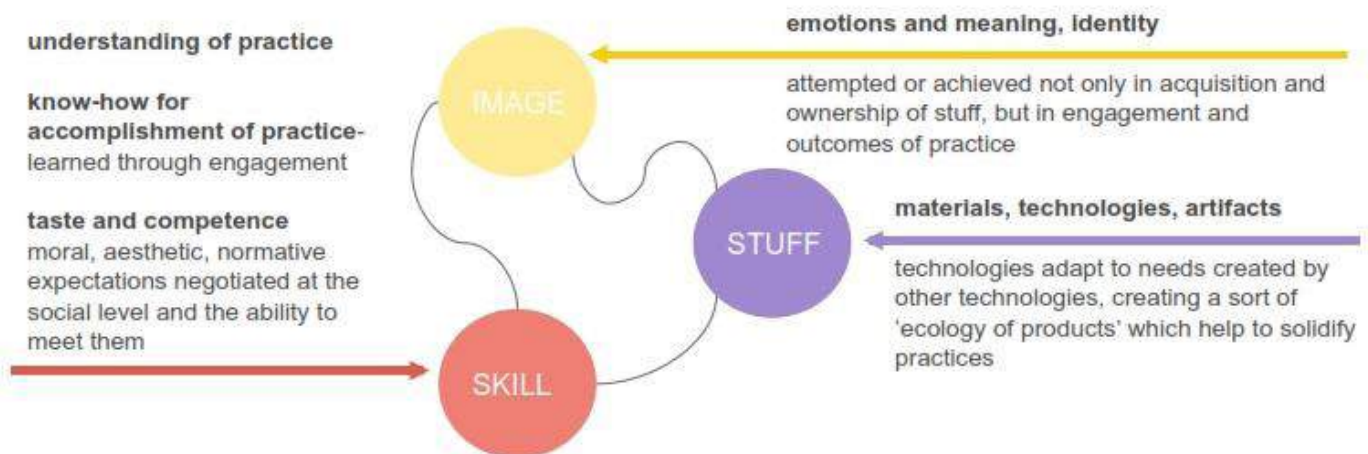


Figure A.3. *Stuff-Image-Skill model with elaboration (Shove et al., 2008).*

The establishment of a new institution has the potential to create transformative societal change as it often happens simultaneously with the disruption of existing institutions and social structures. An institution can ensure the long-term stability of a social practice, which makes institutionalization of sustainable practices valuable. Institutions can be defined as '*rule systems that reproduce social practices independent from individual persons, time and space*' (Giddens, 1984). Institutions are reproduced by conform behaviour in the form of unquestioned routines and can be challenged by non-conform behaviour. A new practice can arise through social innovation. A new practice does not become an institution overnight, there is a process of institutionalization and an institution is never in end-state, they rely on reproduction. Newly institutionalized social practices can challenge and replace existing institutionalized practices and thereby contribute to social change (Howaldt et al., 2014, pg. 10). Though practice theory explains the interaction between social practices and societal structures, thereby unveiling their potential for change, it leaves in the dark how exactly social practices can emerge, evolve and disappear.

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TSI FRAMEWORK FOR NARRATIVES OF CHANGE

Source: Wittmayer, J.M., Backhaus, J., Avelino, F., Pel, B., Strasser, T. & Kunze, I. (2015b). *Narratives of change: How Social Innovation Initiatives engage with their transformative ambitions*. TRANSIT working paper #4, October 2015.

(1) Content of narratives	
Context <i>Why?</i> <i>(When?)</i> <i>(Where?)</i>	How is the context constructed in the NoC under study? <ul style="list-style-type: none"> - What past and current problems and societal challenges are framed in the NoC? - What desired future or goal is described, lending purpose to proposed actions?
Actors <i>Who?</i>	How are actors constructed in the NoC under study? <ul style="list-style-type: none"> - Who are the individual, organisational and sector-level actors driving and/or hindering change?
Plot <i>How?</i>	How is the social change process said to unfold in the NoC under study? <ul style="list-style-type: none"> - What events, experiences or activities lead to the desired future and in what sequence? - Which activities by the initiative and other actors are driving and/or hindering change?
(2) Role of narratives	
How is the role of narratives in general and specifically in social change processes perceived? <ul style="list-style-type: none"> - What role do social innovation actors ascribe to the narrative they share and narratives of others? 	
(3) Production of narratives	
How were/are the NoC's under study produced? <ul style="list-style-type: none"> - What kind of ideas, concepts, metaphors or discourses are included or alluded to in the narrative? (Is the concept of "social innovation" used explicitly?) - What visual aids are used to support ideas, concepts or metaphors used? - What kind of narrative practices does the initiative engage in? - How central are narrative practices to the activities of the SI-initiative? 	

SOCIAL INNOVATION ACTIVITY

Source: Haxeltine, A., Kemp, R., Dumitru, A., Avelino, F., Pel, B. & Wittmayer, J. (2015). *TRANSIT WP3 deliverable D3.2 – A first prototype of TSI theory*. Version 1.1, April 2015.

Box 1: Social innovation activity in terms of: knowing, doing, organising and framing.

Knowing

- Production of knowledge both as a product and to support the strategy and activities of a SI, including: research (both academic and applied); websites, blogs, and other social media; operating and training manuals; and, expositions of generative paradigms (e.g. in the form of an article, book or TED talk by an inspiring leader in the social innovation initiative...).
- Learning processes and the development and maintaining of competence.
- Monitoring, appraisal and evaluation.

Doing

- Practices: SIs are constantly created and maintained through the practices and doings of the actors involved - the SI as 'entity' is continually (re-)created through the performance of SI.
- The performance of SI effects socio-material configurations. The ways in which SIs deploy resources can be understood as a distinct form of *material commitment* to a particular configuration of the system in question. The production of new elements then may be expected to be associated with a shift in commitments on the part of the SI initiative.
- 'Doing' as understood in a relational framing involves the use of technologies and material commitments. It is recognised that all SIs will involve technology and that many will also involve aspects of technological innovation as well as 'social' innovation.
- Strategy development and implementation of strategies to 'grow' or 'scale' the SI and to both adapt to and seek to influence change (transformation) processes.
- 'Power' of the respective actors and the collective: "power to" and "power over".

Organizing

- Ongoing work is necessary to 'hold it together'. SIs are not only subject to organisation in relation to their own internal coherence but also in relation to other collectives
- Organization: system of responsibilities, legal form of companies, task distribution, internal and external relationships.
- Scale of operation and nature of activities.
- Standards for conduct.
- Governance of social innovation and 'logics' of governance.

Framing

- Basic values and beliefs: the system of values and beliefs and associated criteria.
- Identities (related to values, beliefs and practices) reflected in stories and metaphors of what the social initiative is about.
- Meanings, issues, visions, imaginaries, and discursive commitments.
- Frames and framing processes; framings of the 'power' relations of the respective actors

SOCIOCRACY

Sociocracy is a whole-system self-governance system with a built in decision-making process. Sociocracy means governance by peers and aims to create harmonious organization based on equivalence, transparency and effectiveness (Christian, 2013b). Sociocracy as governance method was developed by Dutch engineer and businessman Gerard Endenburg in the 1970s and is based on quaker-style consensus, feedback loops of engineering/cybernetics and on nature (self-organising structures). For companies and organisations, sociocracy can create more equivalence between members and staff, as well as create more effectiveness, fairness, inclusiveness and transparency. Intentional communities often already have this feeling of equivalence, transparency and inclusiveness, sociocracy can help them in being more effective and efficient in how the community is managed and the vision is realized (ibid).

Sociocracy is a pattern of double-linked decision-making circles existing of small groups of people. Each circle has a particular aim, area of authority and budget. Each circle consists of people with expertise and/or strong stakes about the task of that circle. This structure overcomes the problem of regular decision-making, where people with no expertise at all have an equal say in the matter as people with a lot of expertise (Rios, 2011). A circle cannot expand, instead new circles originate when an existing circle identifies a new aim and elects a representative from the circle to start a new circle that focusses on this defined aspect of the organization. Circles are like committees/teams/departments in regular organizational structures. There are higher and lower circles, which does not indicate their level of authority, but their level of abstraction. Often, there is one general circle, which deals with big, long-term issues, then around this circles there are lower circles which focus on concrete, specific and short-term issues. The circles are double-linked to each other by the means of an operational leader and a representative. The operational leader is the person starting the new circle and providing this circle with information from the higher circle. The representative provided information from the lower circle back to the higher circle, to inform the people of this circle about the activities of the smaller circle. This double-linked structure helps everybody in the community see everything, by connecting all circles, it is necessary to ensure transparency and the two roles cannot be performed by one person (Christian, 2013b).

The permaculture principle of applying self-regulation and accepting feedback is included in sociocracy through the three steps for those wanting to implement a proposal: 1) planning, 2) implementation and 3) evaluation. It uses plan-implement-evaluate loops to remove the pressure on the group to make the proposal right at once at provide the ability to relax, have confidence and feel free to experiment (Christian, 2013a). This frees up creativity, learning by doing and innovation, as it creates a mood of 'good enough for now' and 'Ok... let's find out.' Before implementation of a proposal, a clear plan for evaluating the results does have to be made. A circle has next to the representative and operational leader, also a facilitator and a meeting manager. All meetings in a circle can have five processes: 1) proposal-forming, 2) discussing & consenting to a proposal, 3) evaluating an implemented proposal and possibly modifying it, 4) selecting people for roles in the circle, 5) providing role-improvement feedback to people (Christian, 2013b).

HOLARCHY

Holarchy is a governance method based on holacracy, which is in turn very similar to sociocracy. Holarchy and holacracy are more goal-oriented than sociocracy. Holacracy is in its nature oriented to businesses, who compete with each other. Holarchy is an adaption of this which is not oriented at competing but working together. Management with 'holarchy' means management with the natural structure of an organisation. The flexibility and adaptability that can be achieved with holarchy are compared with a flock of birds who collectively search for insects (ecodorpboekel.nl, 2016).

A holarchic organisation consists of circles and roles. Examples of roles are: finances, promotion, construction, vegetables, etc. When a role is simple, it is performed by a single person. If a role is more complex, such as for example the construction of new houses in an ecovillage, it is performed by a circle of people. Within this circle every person takes on a small part of the large role, which creates clearly defined smaller roles. Every person with a role has autonomy to make decisions within the domain of their role, however, other people are allowed to make suggestions and ask questions. Every person is expected to look at the whole community from the perspective of his role. In other words, this person/role functions as a sensor to the community for issues in the domain of his role. Every domain or goal of a single role of circle of roles adds up to the ultimate goal of the community (ecodorpboekel.nl, 2016).

Meetings with holarchy are very different from meetings in sociocracy. The meetings are centred around tensions of individual roles. Every role can put a tension on the agenda and the whole group will then help this role to solve their tension. This way, the meeting consists of tensions that are being solved by the whole group, one after the other. A tension is the difference between the present situation and the desired goal. When a role cannot decide on a plan how to reach the goal, or runs into troubles realizing their plan, they have a tension and they can ask the group to help them in a meeting. Anything that is said or done in a meeting which does not contribute to solving a tension, is stopped. An added benefit is that all individuals will look at tensions from the perspective of their roles, this ensures that solutions are beneficial for the community as a whole. This also ensures that when individuals object to a solution, they do this with arguments from their role and they cannot be attack on it personally (ecodorpboekel.nl, 2016).

DRAGON DREAMING

"Dragon dreaming is a method for the realisation of creative, collaborative and sustainable projects or organisations"(dragondreaming.org, 2016a). Dragon dreaming is based on a body of experience in the Australian Gaia foundation, understandings of indigenous Australian Aboriginals and ecological wisdom. Dragon dreaming is built on three principles; 1) personal growth, where individuals have to commit to their own healing and empowerment, 2) community building, there is a focus on strengthening the community, and 3) service to the earth, it should enhance the well-being and growth of all life. With dragon dreaming, all activities are aiming to create a triple win situation for the principles. The dragon represents what is outside people's comfort zone. It is believed that learning to face your dragons will liberate personal powers. You cannot slay your dragons, but you can harness its energy for your greater goals (dragondreaming.org, 2016b).

With dragon dreaming, members of a community or organisation have a simple method to navigate around their nightmares and realize their vision. The method consists of four phases: the dreaming, the planning, the doing and the celebrating. Celebrating connects the doing of a project back to the original dreaming and should be fully

integrated throughout the other phases. The four different phases also reflect four different personality types and four different ways of speaking. All four types are needed in a team to make a dream come true. Realizing a project with dragon dreaming consists of things like making a visionary dream circle, establishing goals and objectives and playing a board game. The board game uses conflicts between individuals in a transformative way as a resource for the project (dragondreaming.org, 2016b).

NON-VIOLENT COMMUNICATION

Non-violent communication is based on principles of nonviolence; which is defined as the natural state of compassion when no violence is present in the heart. Non-violent communication skills focus on personal responsibility for our actions, the choices we make when we respond to others, and how we contribute to relationships. It is a method that helps remind individuals that we know instinctively that it is good to authentically connect to another human being. It helps to hear your own deeper needs as well as those of others. Through the practice of non-violent communication one can learn to clarify what they are observing, which emotions they are feeling, what values they want to live by and what they ask of themselves and others. There is no language of blame, judgement or domination. An emphasis is on experiencing pleasure from contributing to each other's well-being. (nvc.com, 2016a)

Skills that are part of non-violent communication are:

Differentiating observation from evaluation, differentiating feeling from thinking (no judgement, criticism or blame for feelings), connecting with universal human needs and values (trust, understanding, sustenance, ..) and requesting what we would like in a way that clearly and specifically states what we do want (it is not focussed on what you do not want, and it should truly be a request and not a demand, given by the other out of willingness and compassionate giving). (nvc.com, 2016b)

HEART CIRCLE / HEART IQ

"Heart iq is the practice of meaningful, heartfelt and authentic connection with yourself and others." (Heartiq, 2016). Heart IQ is created by Christian Pankhurst and helps individuals connect back to who they are and communities to consist of authentic and real people. It does so by integrating two skill-sets, one for expanding your emotional-energetic range, and the other for creating authentic connection with others. Heart IQ is a simple method as, instead of performing complex psycho-analyses, it is built upon four questions: what are you feeling? What do you want? What do you need from others? What's holding you back? (Heartiq, 2016).

Expanding your emotional-energetic range focusses on the individual and helps them feel more joy in life by allowing all emotions to be. It also focusses on vertical connection, both connection upwards to 'the source' and downwards to your body. This is all focussed on the individual, but it is achieved in a group setting. Heart IQ requires others to 'activate' ranges in an individual that they themselves cannot access or see (Heartiq, 2016). Creating authentic connection with others is called the horizontal range and develops an individual's ability to connect intimately, authentically and vulnerably in relationships to others. This focusses on two ranges; horizontal IN and horizontal OUT. Where the horizontal IN helps you acknowledge your own inner needs, take the step of asking for those needs to be met by others and then receiving the help you've asked for. For most people this last step is the most difficult; to let people help you as they find it easier to give than to receive. The horizontal OUT range helps you learn to speak your truth and express yourself authentically to others. This involves talking about things you find hard to share or that are hard for others to hear (Heartiq, 2016).

GROK

GROK is a card game developed by Christine King and Jean Morrison, which allows people to attach words to feelings and needs and stimulates communication. It is based on non-violent communication. GROK helps to develop cooperation, self-appreciation, social and emotional skills, sharing, communicating, empathize, and much more. The card game has feeling-cards and needs-cards with which many different games can be played on different levels of complexity (Earthgames, 2016).

CORE QUADRANT OFMAN

The core-quadrant of Ofman is a model to describe qualities that belong to a person and how you as a person function. The model describes an individual's core qualities, their pitfalls, their challenges and their allergies. By mapping these four aspects to an individual, this person can get an overview of their stronger and weaker points and through that can develop themselves. This can also be used to analyse conflicts which a person has with another person, learn from that and prevent future pitfalls..

Core qualities are the strong points of someone's character, the aspects other people admire in them or what a person demands in other persons. They can be for example being creative, being decisive, being helpful or being flexible. *The pitfalls* are qualities that arise when your core quality becomes too strong. People will start to be annoyed by you, for example if you are decisive, a pitfall is to become insistent or pushy. *Allergies* are qualities in other persons which irritate you. This allergy is often the opposite of what an individual is themselves. For example, when a person is humble, they will be quickly irritated by people that are boasting or very proud. Lastly, *the challenges*, are the qualities in other people that irritate you: these often show you that you lack this quality and could learn from it. For example, when you are annoyed by someone's passivity, this could be their pitfall from being patience and contemplative. If you yourself are decisive or even insistent, you could learn from being more patient and contemplative (arteveldehogeschool, 2016).

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B.

INTERVIEW GUIDELINE 1

The main questions are numbered, the sub questions were posed depending on the course of the conversation.

Original Dutch version:

Introduction

Bedankt dat je de tijd hebt genomen voor dit interview.
Ik zal een korte introductie geven van mijn onderzoek; ik ben bezig met een onderzoek naar Nederlandse ecodorpen voor mijn Master thesis aan de TU delft. Dit onderzoek richt zich op wat voor visie de ecodorpen hebben en wat voor rol die speelt in de praktijk en daarnaast richt het zich specifiek op de manieren waarop beslissingen genomen worden, en de technieken en praktijken die gebruikt worden om dit proces te ontwikkelen. Hierbij heb ik het over technieken als geweldloze communicatie en praktijken als hart cirkels, dragon dreaming, etc.
Met dit interview wil ik graag een overzicht krijgen van het ecodorpnetwerk Nederland, hoe het netwerk ecodorpen ondersteund en wat jullie kennis is van de ecodorpen.

General information

Wat is je naam en wat is je functie binnen het ecodorpen netwerk?
Hoe is het ecodorpen netwerk ontstaan, hoe ben jij erbij gekomen?

Questions

1. Op wat voor manier denk je dat jullie evenementen en contacten effect hebben gehad op de ecodorpen die deelnamen?
-Wat voor evenementen, trainingen en lobby activiteiten houden jullie allemaal?
-Wat is jullie ideale rol, wat zouden jullie nog willen gaan doen om ecodorpen meer te ondersteunen?
-Hoe regelmatig is het contact met de ecodorpen?
-Hebben de ecodorpen invloed op wat jullie doen, is er een nauwe wisselwerking?
2. Merk je verschillen in de effecten die de verschillende beslissingsmethodes in de ecodorpen hebben op hun functioneren, activiteiten en groei?
-Merk je dat de beslissingsmethodes afhangen van de specifieke visies die de ecodorpen hebben? Of wat is de reden om te kiezen voor een bepaalde methode?
-Welke verschillende technieken/workshops gebruiken ze om communicatie of zelfontwikkeling te verbeteren? Bijv. geweldloze communicatie of heart IQ
-Merk je daar ontwikkelingen in?
-Merk je dat er sprake is van uitwisseling van ervaring onder de ecodorpen?
3. Merk je dat de visie van de ecodorpen een verschillende rol speelt voor de ecodorpen?
-Wat zijn de grootste verschillen tussen visies/doelen van ecodorpen?
-Wat is het opvallendste verschil in naleving van de visie tussen de ecodorpen?
-Hoe komen deze fysiek tot uiting of merkbaar in hoe het ecodorp groeit?
4. Heb je tips voor specifieke elementen aan de ecodorpen die ik wil onderzoeken, qua visie, organisatie en technieken om communicatie te ondersteunen?
-Ecodorp Bergen, Aardehuizen Olst, Ecodorp Boekel, de Hobbitstee & Iewan

Final comments

Ik zit eraan te denken om naar aanleiding van de informatie van de verschillende ecodorpen een interactieve sessie te organiseren waarin de ecodorpen kunnen discussiëren over de verschillende methodes en organisatie vormen die ze toepassen, zouden jullie vanuit het ecodorpen netwerk daaraan mee willen werken?

Komende weken zal ik de informatie verwerken in mijn thesis, ik wil je graag de mogelijkheid geven om data die ik uiteindelijk in mijn thesis plaats in te zien, voordat ik hem inlever. Ik zal je niet vragen om het hele interview transcript goed te keuren want dat ik heel veel leeswerk voor jou, maar ik zal in mijn uiteindelijke werk de delen markeren die ik uit dit interview in mijn thesis heb geplaatst en daar goedkeuring om vragen. Dit kan wel enkele weken duren, ik hoop dat je daar begrip voor hebt. Heb je hier nog opmerkingen over?

Heb je nog andere vragen of opmerkingen?

Dan, om het interview af te sluiten, wil ik je graag heel erg bedanken voor je tijd en ik hou je op de hoogte.

English version:

Introduction

Thank you for taking the time for this interview

First of all, I would like to ask you if it is alright with you if I record this interview?

I will give a short interview to my research; I am doing research for my master thesis at the TU Delft on Dutch ecovillages. This research focusses on how the narrative and vision of ecovillages and the role these play in their actions. The research specifically focuses on the ways in which decisions are made and the techniques and practices used to develop this decision-making process. Examples of these are techniques like non-violent communication or dragon dreaming.

With this interview I hope to get an overview of the Dutch ecovillage network, how the ecovillage network supports ecovillages in the Netherlands and what your knowledge is on Dutch ecovillages.

General information

What is your name and what is your function within the ecovillage network?
How was the network initiated and how did you get involved with it?

Questions

1. In what way do you think that your activities and contacts have had an effect on the participating ecovillages?
-What type of events, workshops and lobby activities do you organize?
-What is your ideal role? What are future plans to support ecovillages even more?
-How regular do you have contact with the ecovillage and do you organize events?
-Do the ecovillages have influence on what you are doing; is there a close collaboration and interaction?
2. Do you notice a difference in the effects that the different decision-making methods of the ecovillages have on their functioning, actions and growth?
-Do you see that different decision-making methods depend on which specific visions the ecovillages have? What is the reason to choose a specific method?
-Which are different techniques and practices they use to enhance their communication?
-Do you notice development in these techniques over time?

	-Do you notice exchange of experiences between the ecovillages?
3.	<p>Do you notice that their vision plays a different role, in the different ecovillages?</p> <p>-What are the biggest differences between the visions/goals of ecovillages?</p> <p>-What are outstanding differences in how the ecovillage realize/live their vision?</p> <p>-How is this physically visible or noticeable in the process of the ecovillage?</p>
4.	<p>Do you have any tips concerning the specific elements of the ecovillages that I am researching, about their vision, organisation and techniques to support communication?</p> <p>-Ecodorp Bergen, Vereniging Aardehuis, Ecodorp Bergen, de Hobbitstee & Iewan</p>
Final comments	
	<p>I am thinking of organising an interactive session after collecting the information at the different ecovillages, in which the ecovillages can discuss their different visions, methods and organisation structures and exchange experiences, pros and cons. Would you, from the ecovillage network, like to collaborate with me on this?</p> <p>In the coming weeks I will process this information in my thesis, I want to give you the opportunity to review the data which I will place in my thesis, before I hand it in. Would it be okay if I send you a version of the thesis with highlighted sections that I took from this interview, for you to review and approve of?</p> <p>Do you have any final remarks or questions?</p> <p>Then, to conclude this interview, I would like to thank you for your time and I will keep you updated.</p>

INTERVIEW GUIDELINE 2

The main questions are numbered, the sub questions were posed depending on the course of the conversation.

Original Dutch version:

Introduction

Bedankt dat je de tijd hebt genomen voor dit interview.
Ten eerste wil ik vragen of het goed is als ik dit interview opneem, zodat ik het later terug kan luisteren?
Ik zal een korte introductie geven van mijn onderzoek; ik ben bezig met een onderzoek naar Nederlandse ecodorpen voor mijn Master thesis aan de TU delft. Dit onderzoek richt zich op hoe ecodorpen de wereld anders willen zien, hoe ze daar aan bijdragen en het richt zich specifiek op de manieren waarop beslissingen genomen worden, en de technieken en praktijken die gebruikt worden om dit proces te ontwikkelen. Hierbij heb ik het over technieken als geweldloze communicatie en praktijken als hart cirkels, dragon dreaming, etc. Met dit interview wil ik graag een overzicht krijgen van jullie visie op de samenleving en de visie van het ecodorp en daarnaast in jullie organisatie en beslissingsmodel en de speciale technieken die gebruikt worden om dit mogelijk te maken, en als laatste een inzicht in hoe jullie bijdragen aan de bredere transitie naar een duurzame samenleving.

General information

Hoelang woon je al in het ecodorp?
Was je betrokken bij de oprichting, op wat voor manier?
Hoe ben je op dit moment betrokken bij de organisatie/besluitvorming?

Questions

1. Ik heb begrepen van jullie documenten dat jullie visie en kernwaarden ... zijn. Hoe komen deze volgens jou naar voren in het ecodorp?
 - Wat zijn de kerneigenschappen/activiteiten/fysieke elementen die deze visie helpen realiseren?
 - Hoe helpt deze visie jullie in de dagelijkse activiteiten en de beslissingen, naar jou ervaring?
 - Zijn er kleine onderlinge verschillen te merken in hoe mensen het ecodorp zien en de visie interpreteren, ondanks de gedeelde visie?
 - Wat zijn de kern eigenschappen aan de huidige samenleving waar dit een alternatief op is/waar jullie tegen zijn?
 - Hoe is deze 'visie' ontworpen, hoe werd hij gezamenlijk opgesteld?
 - Wordt de visie wel eens verandert, is hij open voor discussie?
2. Ik heb gelezen dat jullie ... gebruiken om beslissingen te nemen. Hoe helpt jullie methode van beslissingen maken met het bereiken van jullie doel en wat was de ontwikkeling om deze methode goed in praktijk te krijgen?
 - Wat zijn voor jou de belangrijkste eigenschappen van deze methode?
 - Hoe denk je dat deze methode het leven in nauw groepsverband en veel samenwerking ondersteund?
 - Wat is naar jou ervaring het belangrijkste voordeel van deze methode tegenover de 'standaard' hiërarchische methode van beslissingen nemen?
 - Hoe is deze methode tot stand gekomen?
 - Heeft hij zich ontwikkeld over tijd? Was het tijdens de initiatief, bouw en huidige fase verschillend?

	<ul style="list-style-type: none"> - Werkt deze methode altijd om tot beslissingen te komen, wat in het geval dat het niet werkt? - Wat zijn de meningsverschillen over deze methode en zijn effectiviteit? - Hoe verloopt het als nieuwe bewoners deel gaan nemen in de organisatie? - Hoe werken de verantwoordelijkheden? - Wat zijn jullie rechtsvormen? Wie is de eigenaar van het land/van de huizen? - Hoe worden taken verdeeld en hoe werkt de dagelijkse organisatie? - Zijn er werkgroepen met autonomie over beslissingen? - Is er iets aan deze methode wat niet optimaal werkt; wat je persoonlijk zou veranderen?
3.	<p>Welke activiteiten of technieken gebruiken jullie om communicatie en zelfontwikkeling te bevorderen en de beslissingsmethode te ondersteunen? - Omschrijf de groepsbijeenkomsten waarin wordt gewerkt aan sociale skills.</p> <ul style="list-style-type: none"> - Hoe wordt er gewerkt aan betere communicatie? - Hoe wordt er omgegaan met persoonlijke 'ruzies' of ergernissen? - Hoe wordt er geholpen met individuele ontwikkeling? - Hoe wordt er gewerkt aan onderlinge verbinding om een diepere groepsband te creëren? - Heb je persoonlijk het gevoel dat deze technieken de samenwerking in het ecodorp en de realisering van de visie ondersteunen? - Hoe wordt er besloten welke technieken er gebruikt worden en wanneer? Is er gekeken naar voorbeelden in andere ecodorpen? - Is er een ontwikkeling in geweest? Was het tijdens de initiatief, bouw en huidige fase verschillend? - Zijn er ook eenmalige/tijdelijke workshops gevolgd? - Moet iedere bewoner verplicht meedoen aan deze ontwikkelingsmethodes? - Dragen de technieken bij aan effectievere besluitvorming? - Worden externe relaties op een zelfde manier benaderd? - Wat is voor jou zelf de belangrijkste ontwikkeling geweest in communicatie?
4.	<p>Ik zag op jullie website dat jullie op verschillende manieren proberen de samenleving om jullie heen te betrekken en beïnvloeden door jullie levenswijze en ervaring. Op wat voor manieren denk je dat jullie het meest invloed hebben op andere mensen?</p> <ul style="list-style-type: none"> - Wat is denk je jullie belangrijkste bron van interactie met de bredere samenleving; workshops, rondleidingen, interviews, evenementen en waarom? - Wat is, naar jou idee, de belangrijkste 'innovatie' die jullie kunnen bijbrengen aan de rest van de samenleving voor een transitie naar duurzaamheid? - Denken jullie ook aan jullie innovatieve besluitvormingstechnieken etc. als een van de innovaties in het ecodorp waarmee jullie de samenleving kunnen beïnvloeden? - In vergaderingen en andere interacties met externe partijen proberen jullie dan jullie eigen besluit- en communicatie technieken mee te nemen? - Hebben jullie al een tastbare navolging/effect gehad in de omgeving of bij individuen/bedrijven? - Hoe zien jullie ideaal gezien jullie bijdrage aan verandering in de samenleving (op wat voor vlakken en op welke manieren)?
Final comments	
	<p>Komende weken zal ik de informatie verwerken in mijn thesis, ik wil je graag de mogelijkheid geven om data uit dit interview die ik uiteindelijk in mijn thesis plaats in te zien voordat ik hem inlever. Ik zal je niet vragen om het hele interview transcript goed te keuren want dat ik heel veel leeswerk voor jou, maar ik</p>

zal in mijn uiteindelijke werk de quotes markeren die ik uit dit interview in mijn thesis heb geplaatst en daar goedkeuring om vragen. Dit kan wel enkele weken duren, ik hoop dat je daar begrip voor hebt. Heb je hier nog opmerkingen over? Heb je nog andere vragen of opmerkingen? Dan, om het interview af te sluiten, wil ik je graag heel erg bedanken voor je tijd en ik hou je op de hoogte.

English version:

Introduction

Thank you for taking the time for this interview
First of all, I would like to ask you if it is alright with you if I record this interview?
I will give a short interview to my research; This research focusses on how the narrative and vision of ecovillages and the role these play in their actions. The research specifically focuses on the ways in which decisions are made and the techniques and practices used to develop this decision-making process. Examples of these are techniques like non-violent communication or dragon dreaming.
With this interview I hope to get an overview of your narrative of society and your vision for the ecovillage, besides this, I wish to get an overview of your organization structure and decision-making method and the special tools and or practices you employ to enhance communication and self-development.
Lastly, I wish to get an overview of how you view your contribution to the national transition towards a sustainable society.

General information

For how long have you lived in this ecovillage?
Were you involved in the founding of the initiative and in what way?
How are you currently involved in the ecovillage and in the organisation?

Questions

1. I understand from your documents that your vision and mission are How is this vision realized and lived in the ecovillage according to you?
-What are the core elements to this vision which help realize it; which help translate it to concrete decisions and actions?
-How does in, your experience, the vision guide you in your daily activities and decisions?
-Are there internal differences in how people in this ecovillage interpret the vision or view the ecovillage?
-What are the core elements to the current society to which your vision and the ecovillage is an alternative? The elements of society that you 'protest' against.
-How was the vision developed, was it created in collaboration with all inhabitants?
-Has this vision been developed over time, is it open for discussion?
2. I understand that you use ... to make decisions, how does this method of decision-making help to achieve your goal and what was the process of first applying this method?
-What are to you the most important qualities of this decision-making method and what are the effects of it on the community?
-How do you think that this method supports living as a group with high levels of cooperation?
-What is, in your experience, the most striking advantage that this method offers in comparison to a 'standard' hierarchical structure for decision-making?
-How was it decided to use this method?
-Did the method develop over time? Was it applied during all phases?

	<ul style="list-style-type: none"> -Does this method always work to come to a decision? What happens when it does not work? -Are there currently any disagreements about the method and its effectiveness? -Is there currently something about the method which according to you could function more optimally when changed? -How does it go when new inhabitants start taking part in the decision making? -What are your legal forms; who owns the land and buildings? -How are tasks divided and how does the daily organisation function? -Are there workgroups/circles with autonomy over their decisions?
3.	<p>Which activities or techniques are used to enhance communication and self-development in support of the decision-making method and communal living?</p> <ul style="list-style-type: none"> -Describe the groups gatherings and practices which help develop social skills? -How do you work on better communication? -How do you deal with personal conflicts or irritations? -How is personal development supported? -How is interpersonal- and group connection developed? -Do you personally feel these techniques and practices help support collaboration in the ecovillage? -How is it decided which techniques will be used and how? Did you look at examples in other ecovillages or other parts of society? -Has there been a development over time of these techniques? -Were there any one-time workshops taken? -Is every inhabitant obligated to participate in these workshops or gatherings? -Do you feel like these techniques have contributed to more effective decision making? -Do you approach external parties using skills developed in the community, for example non-violent communication? -What has in you experience been the most significant development in the communication between inhabitants and during decision-making?
4.	<p>From your website I gathered that you interact with and try to influence broader society with your experience and ways of living. In what way do you think you have the most influence on broader society?</p> <ul style="list-style-type: none"> -What is in your opinion your most important source of interaction with wider society? (workshops or site tours, interviews or cooperation days, etc.) -What is in your opinion the most important or significant innovation that you have realized here that you can share with broader society to enhance the transition toward a sustainable society? -Do you here also see your decision-making method as an innovation which could positively affect the sustainability transition? -Do you bring along your decision-making method to meetings with external parties? -Have you already seen any imitation in the neighbourhood or other types of influence you have had on other parties or individuals? -What would ideally be you influence on broader society according to you?
Final comments	
	<p>In the coming weeks I will process this information in my thesis, I want to give you the opportunity to review the data and quotes which I will place in my thesis, before I hand it in. Would it be okay if I send you a version of the thesis with highlighted quotes that I took from this interview, for you to review and approve of? Then, to conclude this interview, I would like to thank you for your time and I will keep you updated.</p>

INTERVIEW REFERENCES

Nr.	Ecovillage	Date (D-M-Y)	Person	Involved
1	IEWAN	09-11-2016	Ani Ohman	3 years
2	IEWAN	20-11-2016	Mare Nynke Zijlstra	Initiator
3	Ecodorp Bergen	19-11-2016	Jan Cuperus	6 years
4	Ecodorp Bergen	19-11-2016	Fredjan Twigt	Initiator
5	De Hobbistee	23-11-2016	Huzur Stapper	34 years
6	De Hobbitstee	23-11-2016	Eva Flendrie	4 years
7	Ecodorp Boekel	18-11-2016	Martijn van den Heuvel	3 years
8	Ecodorp Boekel	23-12-2016	Monique Vissers	Initiator
9	Vereniging Aardehuis	27-11-2016	Mirjam Burema	From start
10	Vereniging Aardehuis	27-11-2016	Helene van Nijs	4 years
11	Ecodorpen netwerk	30-11-2016	Monique Wijn	Initiator

D.1

COMPLETED SETS OF QUESTIONS IEWAN

Framework for narrative and vision:

(1) Content of the narrative

Context	<p>Past and current problems</p> <p>No availability of living as a community in the social-housing sector, with complete management and maintenance in the hands of the inhabitants. No availability of ecological housing in the social-housing sector. Little citizen initiatives working for their desired housing accommodation; with more social connection and community feeling. Unequal decision-making in their communal housing group.</p> <p>Desired future or goal</p> <p>Social housing for communal and ecological living, where the inhabitants have a lot to say in the construction and maintenance. More citizen initiatives which collaborate with province, municipality and housing association to realize their desired housing accommodation. An equal and fair decision-making method. Use of natural and local building materials as well as sustainable utilities, such as waste-water treatment, heating and electricity. They want to be free from fossil fuels.</p>
Actors	<p>The citizens themselves are the ones who need to start taking initiative to realize these new and more beneficial forms of living. This has to be done in collaboration with the province, municipality and housing associations. Housing associations/corporations have to start building ecological houses and communal houses in self-governance.</p>
Plot	<p>Events, experiences or activities leading to the desired future</p> <p>The formation of the initiative IEWAN was the first event. Negotiations with the province, municipality and housing associations were the next step. Having established cooperation, the first information day where interested individuals could become future inhabitants was the next big event. The many meetings with and amongst the actors (ALV, architect, contractor, municipality etc.) enabled the construction of an ecological and communal house. Maintaining the monthly ALV, deciding with consensus and the work group structure currently contributes to living as a community. The many open days, tours and workshops reflect their desire to educate and inspire society.</p> <p>Activities driving/hindering change</p> <p>Citizens starting the IEWAN initiative have enabled change. Preparedness of the municipality and housing association to build in this type of collaboration has enable change. Municipalities withholding attitude towards communal governance of public space is currently withholding change. Housing associations and municipalities' strangeness to the concepts of ecological and communal living are withholding change. The open days, tours and workshops, as well as the simple fact that they realized their vision are currently driving more change. Building regulations are hindering change.</p>
(2) Role of the narrative	
	<p>The shared narrative of the initiative holders made them develop their vision and undertake actions. On the first information day to enlist</p>

	future inhabitants, the narrative helped in bringing together people with a shared idea and worldview. By explaining the narrative of the initiative, future inhabitants could realize if they would fit in to the group and initiative or not. The shared narrative is also what bonds the current inhabitants and what drives their actions. They are all people who value ecological housing and communal living.
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(3) Production of narrative

	The narrative was not actively produced but it was something that was shared amongst the initiative holders. The narrative was merely specified a little in the early stages of the initiative, which resulted in some people leaving the group as their narrative did not correspond with the group narrative.
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(4) Vision arising from the narrative

What?	From the narrative of desiring a future with ecological and communal but still social housing, a vision arose to 'create ecological and social housing in Nijmegen'. Three core principles to their vision were formulated; Ecological/Sustainable, Communal/Social and Open/Educational.
How?	The vision and principles arose from the narrative very directly; These core principles are used to check whether a decision in a workgroup or a proposal to the ALV is in line with the vision or the narrative. Therefore it plays a role in every decision made at IEWAN. The principles also help formulate future goals.

(5) Aspects of the vision

Effect	The vision motivates through the core principles which have to be met in every decision or proposal. In the past it also motivated them to hold on to their principles in every meeting with other actors. The vision inspires in that it sets the agenda for future actions; aspects to the vision or core principles which have not yet been reached are clear to all and are addressed. The vision also inspired outsiders to join the initiative in its early stages. It provides direction by acting as a check for every action and decision in the general assembly as well as by setting the agenda for future actions.
Consistency & Robustness	Interpretative flexibility is ensured through constant discussion about how to interpret the core principles. Also, it is enabled by the fact that the core principles are broadly formulated. There were some cases when the core principles were too broad to decide a discussion and a more fundamental discussion on the interpretation of the principle was needed before they could decide. Adaptive capacity is supported by constant and open discussion on the principles and on possible scenarios, enabling them to be changed if that is deemed necessary.

Framework for social innovation activity

(1) Knowing

Views	That communal and ecological living should be and can be available in the social housing sector. That citizen initiatives can succeed. That inhabitants of social housing can self-govern their accommodation and be involved in the development. That ecological housing is possible, including waste water filtration and energy production on-site. That housing associations/corporations should start providing ecological houses and also communal houses and that can be beneficial to them; they will need to do less maintenance and administration. That
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	decision-making can be more fair and effective.
Production	They talked to a housing association with experience in communal housing. They looked at examples of ecological buildings and they involved an architect specialized in ecological building to ensure an ecological design.. They took training in consensus decision-making and read about it. They had experience with communal living in their previous accommodations. They share information on all aspects of their project, except the decision-making, on their website and they provide tours and workshops.
Evaluation	They had a consensus decision-making expert evaluate their general assembly, to help asses if they were doing it good. They monitor their energy production and consumption. They discuss issues in the workgroups and general assembly.
(2) Doing	
Practices	They initiated the project themselves. They pushed through their desire for ecological and communal housing in the social sector during negotiations with housing associations and governments. They use consensus decision-making to ensure involvement and support of everyone in all decisions. They govern and maintain the building themselves. They were involved in the development of the building. Their core principles and vision ensure all actions and decisions are in line, these are however open for discussion and are relatively broad which leaves room for interpretation.
Interaction	They meet on the monthly general assembly, randomly in their workgroups depending on the workload and on the monthly 'klusdag'. All other meetings of inhabitants are random and spontaneous and happen on the balconies, in the garden or in the communal rooms.
Change	By giving tours and information on their project they hope to influence and inspire other actors in society that it is possible to have ecological and communal housing in the social sector starting from a citizen initiative.
(3) Organizing	
Structure	They use consensus decision-making with unanimity to make decisions. They are organized with a general assembly and 18 workgroups for different tasks.
Daily organization	On the general assembly clear tasks and deadlines are described and given to specific persons or workgroups. Those persons or workgroups are then responsible for the execution. External contacts are managed by a specific workgroup.
Legal Forms	The land and building are owned by the housing association. As a foundation they rent they apartments and govern the building.
(4) Framing*	
	* This aspect is covered in the narrative and vision framework

Framework for methods of collaboration, communication and decision-making

(1) Governance

Over-arching structure	Consensus decision-making with unanimity is used. This means that every single member has to agree with a decision for it to pass. This also means that one person can block a decision using a veto. Decisions are made at a monthly general assembly. In a general assembly, fairness and equality are ensured by appointing a facilitator who manages who is talking. Action points are executed by individuals or work groups. There are roughly 18 workgroups, each responsible for a different aspect to the community. The workgroups have autonomy over small decisions.
Process	Using consensus decision-making was decided from the very beginning by the initiative holders, however they did not honestly implement it from the start. When they noticed that at a certain meeting conflicts arose, they decided it was time to invest in understanding and practicing consensus decision-making completely. Later, the total group of initiative holders and future inhabitants again agreed with consensus to use consensus as decision-making model. The initiative holders had negative experience with majority voting and positive experience from consensus decision-making from previous communities or action groups. Their structure did not change much over time, except that the proposal 'stappenplan' was introduced to clarify and speed up the process of decision-making. During the building period there was sometimes a time pressure to make decisions and in this period they sometimes 'accidentally' exerted group pressure to reach consensus in order to speed up the process. They now reflect on this and have the ambition to prevent that from happening in the future.
Contribution	Consensus decision making has ensured equality and fairness in the decision-making. It also created full involvement of all members and contributed to the community feeling since everyone can be who they want and yet still be included in the group. It also created a big improvement in how people discuss with and treat each other, compared to for example democracy with majority voting.

(2) Process and communication skills

Methods	No regular activities are in place to improve communication or support self-development. Occasionally they take a workshop in consensus. Personal self-reflection and an open attitude are stimulated through the core principles but are left up to the individual. A one-time meeting was held on what type of vibe and communication everyone desired. And another one-time meeting on everyone's biggest fears. They do have a procedure to deal with interpersonal conflicts, where those people first have to try to talk it out amongst themselves, else a third person will sit with them and if that does not work the conflict is taken to the general assembly.
Group gathering	The only obligatory group gatherings are the monthly general assembly and the meetings of the separate work groups meetings. Members can randomly meet for dinner, at the food cooperation or at the weekly Sunday café.
Process	New members pick up on the governance system fast. They do not get special workshops. When members notice that communication or decision-making is not going smoothly, they start a discussion about this and possible apply changes, this has so far not been done.

Framework for transition contribution

(1) Ambition

Ideally they see their contribution as giving an impulse to society to start building more sustainable, in order to reduce the overall CO2 emission of the building sector. Also, they wish to demonstrate that when inhabitants manage their own building they are more involved and the neighborhood is safer and cleaner. On top of this, they wish to inspire individual citizens to start initiatives to realize social housing which is communal, ecological and self-managed. They wish to inspire housing cooperation to develop communal and ecological housing for the social sector.

They do not have any of this formulated in their vision but it is part of one of their core principles; open and educational. Also, it is a view shared among all members; to want to serve as an example.

(2) Potential

Their methods of ecological building, communal living, social housing sector with these attributes, consensus decision-making, self-governance of inhabitants, citizen-initiative, participatory development are by them viewed as having the possibility to change and inspire others. They try to achieve this by for example holding open days during construction, workshops in clay plastering and straw bale building during construction, cooperation days during construction and currently through monthly site tours that are open to everyone. Private site tours, mainly for housing associations and municipalities are also given. There is an information afternoon four times per year, for people interested in living there. They have a food cooperation for biological food and ecological products, open to everyone, which enables people to eat and live more ecologically easily.

Inhabitants contribute to other initiatives, action groups and volunteer work, through this they talk to a wide audience who might not otherwise have known the project.

They do not see themselves as sufficient experts to inform or train others in consensus decision-making (even though they knew more than a guy they hired as a consensus expert).

(3) Impact

Once they bought the building plot, more initiatives dared to buy a plot on the site, so in that way they functioned as a driving force for the building site which the municipality had trouble with selling. Another project is currently in development which is also a citizen initiative to live ecological and communal in social housing, the housing association was a lot more open to collaboration with them since the success story of Iewan and their positive experiences with them. The direct neighbors to Iewan have inspired their architectural design and building method on them, also creating communal and/or ecological buildings, since Iewan strongly profiled themselves as sustainable when they bought the first plot of land. Many individuals as well as corporations and municipalities have been inspired by this success story, for example a waterboard came by to see their local waste water filtration system.

Two inhabitants started a consultancy bureau to give advice, training and workshops to housing associations, local governments and citizen initiatives who want to achieve something similar to Iewan.

D.2

COMPLETED SETS OF QUESTIONS ECODORP BERGEN

Framework for narrative and vision:

(1) Content of the narrative

Context	<p>Past and current problems</p> <p>They see a lack of purpose among people, society can be seen as a prison, a wheel that cannot be escaped to pay a mortgage, feed your children and drive your car. People are almost completely denied in the current system. A few mega-powers control all others, which is experience as scary and rubbish. The current society is seen as very industrial, with individual responsibility and an emphasize on the commercial, the money. Money is a measure to if things are possible or not, just as regulations and laws determine how you should do things. They see social networks becoming ever bigger, which makes a person's influence on their direct social context diminishes.</p> <p>Desired future or goal</p> <p>They see this as a way to deal innovatively with some things in society. They want to let go of the rules of the game in regular society to test if they can then meet their desires. They wish to experience again what it is like to live in a group, to experience that and then make the next step to become a world-citizen and be one with everyone, so in that way this is a practice for that future. Rules and regulations have to be loosened and the world powers have to be undermined. People need to find purpose again. People need to be in harmony with each other and nature, horizontally, but also vertically, they need to be aligned with their spiritual self.</p>
Actors	No clear mention of who should do what except that people have to find their own purpose again and break free from rules in society.
Plot	<p>Events, experiences or activities leading to the desired future</p> <p>Experiment with other ways of living, through trying out things on their plot. Such as living in a group again, building their own, natural houses and remedying the soil environmentally friendly. People need to connect with the spiritual again. For a successful community they recognize a need for two aspects as defined by Christian (2013), socially and financially everything has to be in order.</p> <p>Activities driving/hindering change</p> <p>Laws and regulations are currently hindering experiment. Money is hindering change. Experiment will drive change, trying new things out, 'breaking free'.</p>

(2) Role of the narrative

The narrative played a very dominant role in how they formulated their vision and ofcourse it also determined who got attracted to the initiative. They formulated their vision using many techniques to discover how they felt about many issues in society and how these should be changed and slowly zooming in on where they wanted to put their energy into.

(3) Production of the narrative

	In the early stages they used dragon dreaming to align everyone's narrative and create a shared narrative in the group to base their vision on.
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(4) Vision arising from the narrative

What?	As a vision they see 'a community where people can live together harmoniously and respectfully, in loving connection with each other, the earth and the cosmos whilst creating space for everyone's personal development'.
How?	Connectivity is central to their vision and narrative of a future. Connectivity to the community and to the cosmos. This comes even before sustainable building, that simply arose from their ambition to live in connection and harmony with everything and therefor also with nature. Their vision was developed four years ago, before they even knew which plot they would get, on a weekend supervised by an experienced person. Now recently they feel a need to revise it again as they feel that not everyone is aligned with the vision or people interpret it differently. They also notice when new issues arise, such as a few inhabitants wanting to open a commercial sauna, that they have not fully grasped the vision as a group yet. In such situations a discussion is started on the topic, to align the groups interpretation of the vision.

(5) Aspects of the vision

Effect	Based on their vision they developed a mission which clearly gives direction to how to realize the vision. However they now realize that they interpret the vision in different ways and that the vision still leaves some gaps in which it does not give direction. The vision does work as general inspiration and dream. The vision also is said to function as a kind of test for decisions, through which it gives clear direction. The vision determines the direction, however, it is their values that guide the way. However, they want this to be open, to let everything that wants to arise be able to arise.
Consistency & Robustness	Interpretative flexibility is ensured by making the vision only one sentence that describes a quite broad desired future. By working with flexible values to determine their actions towards achieving the state as described in the vision, they can interpret the vision in different ways. They deliberately did not write down their core values because they want to continuously develop their interpretation of the value. This has led to a current state where they feel that the group is not completely aligned in their interpretation of values and the vision. However, since the vision is so general they can realign their values and still work towards the same vision. The vision really serves a guidance, whereas the values determine the direction through which flexibility is ensured. Adaptive capacity of the vision is ensured by not writing down the values so that they can be flexibly interpreted, depending on the situation or developments. Also they now feel a need to reevaluate the groups vision and values, after which they might change the vision to better fit with the group energy.

Framework for social innovation activity

(1) Knowing

Views	They view living in society differently, they want to be separate from the big social networks and product supply chains, believing that everyone.
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	<p>this will be better in satisfying many different needs. They believe by re-experiencing what it is to live in a group and as a self-sufficient community they gain important experience to set the next steps for ultimately becoming a world citizen. They believe that living in harmony with each other and with the cosmos naturally results in choices for natural building materials, organic food production, etc. They believe the spiritual element is crucial to finding purpose again and being able to live as a community. They believe their values do not have to be written in stone; ones a group has a shared goal they will act as a swarm of birds working naturally together to catch food. When they make decisions they want everyone in the group to be acknowledged, with no concept of power, so that all decisions are fully supported.</p>
Production	<p>They got inspired by other ecovillages and the global ecovillage network conferences. They did not have guidance by an external process manager. They took training in sociocracy. They have tried several different communication/self-development tools, such as the forum and the way of council, but the heart iq method most fitted with their group which is why they chose that.</p> <p>They produce knowledge by sharing their worldview through their website, interviews and on open days. Some separate members also give workshops in elements of their knowledge, for example, Fredjan gives workshops in sociocracy, Jan in ecological building. They have a newsletter in which they share knowledge and experience.</p>
Evaluation	<p>They evaluate if the group energy and shared values are still aligned. They evaluate if their sociocratic organization is functioning properly, mainly if they are enacting it properly.</p>
(2) Doing	
Practices	<p>They use sociocracy to structure their organization and to structure their meetings. They are remedying the soil naturally, they will grow food organically, they compost human waste, they will built using natural and local materials, they will live as a close group, they will facilitate sustainable tourism, and more.</p>
Interaction	<p>They meet with the entire community once every two weeks. The separate circles meet depending on their schedule, between once every two weeks or once every three months.</p>
Change	<p>They organize participations days every Thursday and one weekend per month. They organize events such as a student festival, children camps and workshops.</p>
(3) Organizing	
Structure	<p>They have a sociocratic structure in their organization, meaning that they have a top village circle which has representatives and coordinators of all sub-circles.</p>
Daily organization	<p>In the village circle tasks are decided upon and divided among the circles, these are responsible for performing or delegating these tasks.</p>
Legal Forms	<p>They founded a support-foundation called 'Steunstichting ecodorp', this foundation owns the land. The ecovillage as an association rents the land from this foundation. They therefor collectively own and manage the land. When individual houses are built, these will remain collective property.</p>
(4) Framing*	
	<p>* This aspect is covered in the narrative and vision framework</p>

Framework for methods of collaboration, communication and decision-making

(1) Governance

Over-arching structure	They use sociocracy as governance method, both for their organization structure and their meeting structure. they have a top village circle which has representatives and coordinators of all sub-circles (organization, social, inhabitants, green & building/living). The meetings start with a check-in round, then the proposal is being clearly laid down, then a round for questions happens, then two rounds of opinion/arguments happen, then the proposal is adjusted and consent is asked. They always end a meeting with a 'assessment round' where they evaluate how everyone thought the meeting went and what could be improved.
Process	They chose for sociocracy from the very beginning. The process does not always go smoothly, but as Fredjan said, it is like playing an instrument, the instrument is not wrong, you just have to learn to play it. And if you come to a football match with a tennis racket you won't agree on the net; everyone needs to share the same goal. Putting aside your ego is the most difficult, trying not to talk from you ego or putting individual preferences above the groups interest.
Contribution	It ensures that everyone is involved in the decision-making process. ensures that everyone is involved in the decision-making process. Everyone can steer a decision if they come up with new information. Everyone brings their personal qualities which can result in better decisions then individual persons could make. Decisions are made for a fixed period of time this reduces pressure to come up with something perfect at once. There are less issues of power as everything is decided with everyone included. Sociocracy is also said to bring structure and order to both the organization and the meetings. Consent is experienced to create peace in the meetings.

(2) Process and communication skills

Methods	They use nonviolent communication and a heart circle. They believe it important to be in connection with each other; to have a friendship at the base of their collaboration. It has helped them in their self-development, working with irritations to become more conscious or help the other become more conscious. They feel that the connections keep getting stronger and stronger, precisely through dealing with interpersonal conflicts that arise.
Group gathering	Once a week they have a heart circle. At the start of every meeting they have a check-in. Once a month they have a 'connection day' with the whole group when they do something fun together.
Process	A few people took a course in nonviolent communication and they passed that on to the group. They tried the forum and the way of council before settling with the heart circle. They attribute the success of everything so far to sociocracy, which made it a creative and fun process. They have a social circle which decides what happens in the heart circles and on the connection days. Everyone can come up with ideas for this. Jan feels that once a week the heart circle might be too little, because when living so close together a lot of 'issues' keep arising. People find it difficult to use nonviolent communication in all situations, for example when emotions get really high.

Framework for transition contribution

(1) Ambition

Demonstrate the sense and nonsense of regulations, make everyone think about regulations in a different way. To demonstrate that you can live a circular, ecological, economic and social principle and that that is also fun and 'gezellig'. Demonstrate that by making small cycles, the earth can recover and world problems can be solved. To give people purpose and inspiration and ideas, to show them an alternative and some hope. To make people realize that their unconscious way of living is a dead-end, that their way of live is not fun and that things have to be done differently.

(2) Potential

They view their ideas of making local cycles as having the potential to solve world problems and recover the earth. They view their way of living as a group as having the potential to make people feel one with each other again and to find purpose. They view this way of living and developing as having the potential to meet many desires again (creativity, freedom, close to nature, etc.). They view their ecovillage as having the potential to show people and also children that things can be done differently, to give them inspiration and hope to also change their lives.

(3) Impact

They were an inspiring example to the ecovillage network; getting this network off the ground and making them apply sociocracy. They also inform other ecovillages of their experiences and knowledge, which might have helped these ecovillages. Also, it can be said that through developing the plot in their particular way, they have prevented it from being developing by a regular project developer who would not have done things as sustainable as them, which is itself a transformative impact. No physical projects have been started in their surroundings yet as a result of their project.

D.3

COMPLETED SETS OF QUESTIONS DE HOBBITSTEE

Framework for narrative and vision:

(1) Content of the narrative

Context	Past and current problems
	There have been individuals or certain parties in society who were acting very dominantly from their ego's and simply did as they pleased, this is seen as a problem because everyone should feel responsibility for their surroundings. Even companies. Decisions should be more transparent and open for discussion.
	Desired future or goal
	Do what you can do, why not? Like the circular ideology of reusing waste. They would like to see more shared leadership, that everyone carries the responsibility for what happens and that from this idea new decision-making methods arise. There should also be shared ownership, which again will make everyone feel more responsible and must lead to shared leadership. They wish to see more sociocratic decision-making and non-violent communication. People should gain a more active attitude to allow themselves to learn from situations and grow. However, they also feel like that everyone should decide for themselves how they live or act; they do not want to enforce anything on anyone.
Actors	They do not specify which actors should do what in their desired future very precisely. Only that companies should feel more responsibility for the welfare and wellbeing of their surroundings, that citizens should be more active, feel responsible and be able to participate in leadership and decision-making and political actors should not act from their ego's but be more transparent and act from shared leadership and shared responsibility.
Plot	Events, experiences or activities leading to the desired future
	The implementation of shared leadership and shared ownership could lead to more feeling of responsibility and new decision-making forms. The implementation of sociocracy and nonviolent communication will lead to a more active attitude of individuals. Four core values will lead to a harmonious community; sustainable development, personal development, social engagement and spirituality.
	Activities driving/hindering change
	People and companies not feeling responsible for their actions or themselves. Ego's in politics doing whatever they want.

(2) Role of the narrative

	The narrative does not play a very active role in the community. People are selected on a shared worldview, but they do not actively engage in developing this shared worldview or propagating it to the outside world. The four core values to which you make a commitment when you step into the group, ensure a good selection of new members and motivate activities along these values.
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(3) Production of the narrative

	They leave the production of a narrative almost completely up to the individual, believing then once you try to generate this communally people will quickly not recognize themselves in the narrative anymore. Everyone lives from their own worldview, but the decision to live at the Hobbitstee has already created a selection of people with a relatively similar worldview.
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(4) Vision arising from the narrative

What?	Their slogan is 'ideals in execution'. They have four core values, which are 'sustainable development, personal development, social engagement and spirituality'.
How?	More recently they have decided that this last value, spirituality, falls, in the opinion of the current group, more under personal development. This groups could identify better with the concept of personal development than with spirituality. The values are also very personal, everyone lives mainly from their own values and they allow each other this space, also to share this. This is experienced as a very positive approach where they live together from everyone's individuality, which gives energy to everyone and where they give each other space. In the past the vision was 'in harmony and beauty with each other and nature', which, according to Huzur is actually still embodied in the current vision and values, only formulated differently. They developed the vision and values in an evening dedicated to this, where they discussed the subject and shared opinions. They then let it rest for a month, when they discussed it again.

(5) Aspects of the vision

Effect	At times of difficult decisions on which they cannot agree the vision gives direction, for example with the tiny house covered in Ip's which do not give a very natural appearance, but it is the use of waste material. They do not really ascribe an inspiring role to the vision. Things sort of evolve very flexibly in the group where decisions can be made without having to go back to the values or vision. The four core values to which you make a commitment when you step into the group, to ensure a good selection of new members and motivate activities along these values.
Consistency & Robustness	Very much interpretative flexibility as they allow everyone the space to act from their own individuality. Only when someone finds it to clash with their core values or vision do they reflect on it. The values are also very general and can therefore be interpreted by every individual in their own manner. They have good adaptive capacity as when the group changes they also reevaluate their values to ensure that everyone supports them. Also when someone comes up with a new idea, which might not comply with the values, they are willing to reinterpret those values.

Framework for social innovation activity

(1) Knowing

Views	They view ownership and leadership differently in that they believe things should be owned collectively and leadership should be shared to ensure feeling of responsibility and an active attitude of citizens. They view sociocratic decision-making with consensus as a good tool to ensure an active attitude, prevent or resolve conflict and create involvement, support and respectful interaction. They view that they
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	<p>should be able to be self-sufficient on their plot, by having some small businesses and filtering their own water.</p> <p>They interpret living in a place and on the earth in a different way, feeling that everyone should have individual leadership, feel responsible, and be involved.</p>
Production	They took some trainings in nonviolent communication, they looked at examples in other communities to gain knowledge about different methods of organizing and living.
Evaluation	They do not evaluate their knowledge, they do reflect on if the group is still communicating in a positive way and if not they may decide to do a workshop.
(2) Doing	
Practices	They build using ecological building materials, they filter their own waste water, they grow food on-site, they produce mushrooms on coffee residues, they have a small organic bakery, they decide with consensus, they share tools, products and utilities, they manage the land collectively and they own everything collectively.
Interaction	Every Tuesday evening is a 'Hobbitstee evening', where they have once a month a communal meeting, once a month a social evening where they invest in group connection or personal development and the other Tuesday evenings they work in their smaller workgroups using scrum technique sometimes.
Change	They do not actively wish to change other people or processes, they believe everyone should decide for themselves how they live. However, they do wish to inspire people and show an example of how this can be done differently; for example with sharing things, owning collectively, having the circular mushroom farm and deciding together.
(3) Organizing	
Structure	They have an community meeting in which all main decisions are made and then they make workgroups for specific tasks or domains, such as the building group.
Daily organization	Individuals are free to do what they like, if they are part of a workgroup they have autonomy to make decisions within the domain of the workgroup and are responsible for the execution.
Legal Forms	The property is owned by a foundation called 'the new earth' which is run by members of the Hobbitstee and also some external people. As an association the Hobbitstee rents from that foundation. Some people in the Hobbitstee have their own businesses, such as the mushroom farm and bakery, these are owned by those individuals and not collectively.
(4) Framing*	
	* This aspect is covered in the narrative and vision framework

Framework for methods of collaboration, communication and decision-making

(1) Governance	
Over-arching structure	They use elements from sociocracy; they have a general ALV and several workgroups with each a specific domain of actions/ responsibilities. They make decisions with consensus, but when you say no to a proposal you have to explain that in depth and also collaborate on developing a new proposal.

Process	When Huzur joined the community in the early eighties a lot of people had left and there was not really a structure left so they went looking for several alternatives after which they decided on consensus. They first tried to have a completely shared communal cash system where everyone should give to their ability and take to their need, however this soon turned out to not work and they changed it to the obligation of giving 20% of your income to the community on top of the rent.
Contribution	They view it as a good tool to ensure an active attitude, prevent or resolve conflicts and create involvement, support and respectful interaction. It has enabled shared leadership, shared ownership, shared responsibility and shared and supported decisions.
(2) Process and communication skills	
Methods	They do not have a fixed method to work on self-development or group connection but once a month on the Tuesday evening they do something to stimulate the social interaction. Ranging from a specific workshop to just a round of how it is going with everyone. They do always use nonviolent communication in which they used to do a lot of workshops but now haven't done that for at least three years.
Group gathering	They meet every Tuesday evening and other than that they meet in separate workgroups or randomly on site. In the summer they have eetcafe and enjoy other activities together. Their WhatsApp group also really helps them get together spontaneously.
Process	This did not change much over time. They notice that new people recently have picked it up well. In the past they did not have a selection procedure for new members and simply allowed anyone who wished to live there. They changed this as such a diverse group led to conflicts and differences within the group. They did not try other methods like the forum or heart iq or the way of council. They noticed recently that their WhatsApp group which includes all members except three children without a phone, enables and stimulates meetings and group activities.

Framework for transition contribution

(1) Ambition	
	They do not have an ambition to change or influence other people. They do like to show other people what they are doing and how they are living. They bring their own values to everything they do and thereby, by doing, they demonstrate their values and ideals.
(2) Potential	
	They view their implementation of circular economy, their sharing of goods, their nonviolent communication and their ecological facilities and buildings as having potential to inspire others and set an example.
(3) Impact	
	They have not experienced anything happening because they were there. They did lead an action group once.

D.4

COMPLETED SETS OF QUESTIONS ECODORP BOEKEL

Framework for narrative and vision:

(1) Content of the narrative

Context	Past and current problems
	Lack of consciousness. Lack of easy alternatives for people that act unsustainable because those are the easiest options. Lack of connection with people around you; people do not even know their neighbors. Cars are everywhere, which makes it hard for children to play freely in the neighborhood. Lack of sustainability, for example of houses and in dealing with waste. We are dependent on large systems on which we have no influence; you cannot easily say no to something when you do not agree.
	Desired future or goal
	Being able to live sustainably, in connection to others. Both through collaborating with many other innovative actors and by living in a community. Cooperative ownership to ensure that all people who live somewhere have a say in how it is managed. This could be the same in businesses, where all people have insight in the company and can steer where it goes; this will create more involvement and responsibility. Also, cooperative ownership and financing of the neighborhood, including the homes, as the corporation relieves individuals or families of a mortgage and doesn't bind them to a place. Be less dependent on large systems on which you have no influence.
Actors	Small actors practicing something innovative and sustainable should collaborate to support each other. For example, they collaborate with KalkHennep Nederland, this lowers their expenses whilst helping promote this sustainable building material. They also want to inspire businesses and the government to organize differently and employ new forms of leadership, decision-making and ownership.
Plot	Events, experiences or activities leading to the desired future
	Small initiatives in innovative, sustainable things should collaborate to enhance their chances of growing or even scaling-up. They will create their own community of which they have collective ownership to ensure shared leadership and supported decision-making. They aim to achieve this by owning the land as a cooperative and also financing it as such, whilst organizing this using holarchy. Also, this will enable them to do things independent of large systems; for example by growing their own food and producing their own energy. By involving many organizations, schools, individuals and media, their impact of change will be the largest.
	Activities driving/hindering change
	By functioning as a stepping stone for other sustainable initiatives they drive change forward, in promoting these initiatives and enlarging their chance of success. For example their collaboration with KalkHennep Nederland and the Dutch institute for ecology. Large systems are hindering change by making it hard to act alternatively. Collaborating as a group is experienced as difficult, implementing holarchy has made

	this more manageable.
(2) Role of the narrative	
	Ad Vlems, the initiative holder, shared his narrative and ideas on a webpage, this brought together many likeminded people and from these people the group of ecodorp Bergen was founded. It still serves as a glue amongst the inhabitants.
(3) Production of the narrative	
	Ad Vlems and his wife developed the narrative, after which people who shared this narrative came to them.
(4) Vision arising from the narrative	
What?	They formulate their vision as 'creating a unique and inspiring example in Brabant of sustainable living in connection'. To this vision they have: participation, flexibility, self-reflection and trust. Participation means that you have to actively contribute to the initiative, flexibility that if things do not work you have to be able to put them aside and try something new, self-reflection when you experience strong feelings and trust, in decisions that have been made by others.
How?	Ad Vlems and his wife developed this vision from his narrative before a final group for ecodorp Bergen had been put together. The principle of trust means that new members should have a certain level of trust in decisions that have been made before they arrive, this helps ensure that they do not have continuous discussion from the start every time someone new joins the group. The vision is not open for discussion. The vision itself has not been changed over time.
(5) Aspects of the vision	
Effect	The vision inspires them to be an inspiring example of living sustainably; they try their best to share their knowledge, experience and message and collaborate with a lot of other partners to further promote sustainable living. The vision also provides direction as it serves as the ultimate goal, roles are defined in such a way that they lead to that goal. The vision therefor also serves as inspiration and motivation for the actions of the roles. Objections to proposals are tested to the functioning of the roles and thereby to the vision, through which the vision again provides direction.
Consistency & Robustness	There is not a lot of interpretative flexibility or adaptive capacity since the vision was set before the group was formed and is not open for discussion. However, one can argue that the vision is quite generally formulated and can therefore be interpreted quite broadly. Adaptive capacity is ensured for a bit through their principle of trust. If things are not going very well or are difficult they actively support each other and have faith in their vision. Adaptive capacity is also ensured through their to principle of flexibility. When they discover that something turns out to not work, they simply try something else.

Framework for social innovation activity

(1) Knowing	
Views	They believe national sustainability is really needed to give a future to their children and contribute to this by starting a sustainable village. They view living differently in that they believe people should live in connection again, knowing their neighbors and supporting one another.

	<p>They view ownership in another way, believing that shared ownership will create involvement and responsibility amongst all members and it will simultaneously give them freedom to leave without being in debt. They believe that holarchy will give them a goal-oriented organization with the responsibilities at the bottom; building on principles of equality without losing efficiency. They view systems in another way, believing that small and local systems will be better able to satisfy people because then they have the power to influence, change and shape the system. They believe buildings should be made of local and ecological materials. They view production of energy and drinking water in another way, believing this can be done independently on-site, this way they can also influence that it is done sustainably. They view financing in a different way, believing that people can collectively take a mortgage as a cooperative.</p>
Production	<p>They discovered holocracy and learned from it through a book and with the help of an expert.</p> <p>They try to actively contribute to the generation of knowledge on their viewpoints, for example, they are participating in the democracy challenge of the government and through their social media. They started a platform for ecovillage workshops, on which they promote workshops related to ecovillages, these are either given by them or by other parties.</p>
Evaluation	<p>They evaluate on how effective their method of holarchy is and adapt it, for example they changed their method for voting on people anonymously and then discussing it and voting again, to simply pointing.</p>
(2) Doing	
Practices	<p>Their governing structure is holarchy, meaning that there are circles with domains and in those circle each person has a specific role. In this structure there is a lot of space for experimenting, individuals in a role try things and when they do not work they try something else; there is no pressure for getting something perfect at once. They finance the project as a cooperative. They plan to build using local and natural materials, they grow their own food using bio-dynamic and permaculture principles, they make their own drinking water from rainwater, they filter their own waste water, they will generate their own energy.</p>
Interaction	<p>Most circles in the organization structure get together weekly and they have a general assembly every two weeks, they want to change this to once a month by starting to implement a village circle with representatives of all circles. Other than that they meet spontaneously, for example while working or eating.</p>
Change	<p>One of their main aspirations, also stated in the vision, is to be an inspiring example. By creating their community they hope to enhance change, or as they put it, they hope the Netherlands will tip over and become a sustainable society. They hope to change other people and society by creating an example, by supporting other sustainable initiatives, by participating in governmental programs and by sharing their knowledge and expertise through their webpage, workshops and in interviews.</p>
(3) Organizing	

Structure	They use holarchy to structure their organization. There are circles with domains and in those circle each person has a specific role, laying the responsibility at the bottom. This creates equality and still allows for efficiency in reaching the goal.
Daily organization	The structure of holarchy with the roles and domains makes it very clear to know who is going to do what. The individual with a particular role has relative autonomy to decide how he will fulfill the role, within the boundaries of the vision and the principles. If such an individual has a problem in reaching a goals they discuss this at the meetings.
Legal Forms	They are a cooperative and as a cooperative they finance the land. They currently do not own the land but have a five year lease from the municipality after which they can probably buy it as a cooperative. They will then be a collective private contractor.
(4) Framing*	
	* This aspect is covered in the narrative and vision framework

Framework for methods of collaboration, communication and decision-making

(1) Governance	
Over-arching structure	<p>They employ holarchy as a collaboration method and decision-making method, with responsibility at the bottom and enabling goal-oriented and effective working. Holarchy determined their organization structure, making it into several small circles with a specific domain in which there are several roles. It is crucial to define the goal of a circle and of the roles very carefully when they are developed, as this determines the effectiveness of the structure. In a meeting there is always a facilitator, a secretary and a chairman. And in every circle there is a lead-link and a rep-link. The lead-link is sort of like the driving force of the circle, all tasks that do not fall under a specific role are taken on by him and he is ultimately responsible. The rep-link is representative of that circle at the village circle, he communicates the actions and struggles of the circle to the entire village. The roles of 'leader' and representative are thereby taken apart.</p> <p>They describe the organization structure with principles of equality and effectiveness with a swarm of birds. Where at one point one bird can be the leader and when the swarm then changes another bird takes the lead. This also makes it a flexible organization, more like a tool to bring structure in what needs to be done. Their meetings only consist of tensions. Tensions are the gaps between the current situation and the desired future state. Each role probably has a tension and he explains this to the circle and the all focus on helping him develop a plan to overcome the tension.</p>
Process	<p>They implemented holarchy in an early stage, after looking for organization structures. They liked the effectiveness and goal-oriented nature of holarchy compared to other methods. They learned it from the book on holarchy but adapted it to their preferences and experience. For example they do not yet have a village circle where the lead-link and rep-link of each circle come together. The only have a general assembly where everyone meets. They chose to do this because their group is relatively small and they did not yet feel like leaving people out of those important meetings. However, now they are starting to grow and people are complaining about the long and often meetings, so they will implement it now.</p>

Contribution	It helped them to be effective while still creating equality among all members. Creating something with a group is very tricky and holarchy has contributed greatly to making it easier. It helped them coordinate the work, enabled them to think as a group about how to realize their goals and to feel connected. It has created equality and fairness and it has laid the responsibilities at the bottom. It has made them very goal-oriented. It has made replacing people easier since all roles and tasks and responsibilities are clearly defined.
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(2) Process and communication skills

Methods	At the start of every general assembly they have a 'sharing', which is a round among all people where they can talk about themselves and what is happening in their lives. This allows people to understand each other's position better and brings them together which makes conflicts less likely to happen. They have a social circle in their organization that is responsible for creating and maintaining a tight, closely connected group. They help resolve interpersonal conflicts, for which they use the method of Daniel Ofman. This is completely on a voluntary basis and does not happen in regular group meetings. Once every so-many months they do take a self-development workshop with the group. Once they took one on those core quadrants by Ofman, once on nonviolent communication and possibly more. They also have a social meeting every month where they simply come together and do something fun. The methods are viewed as effective in creating more connection in the group, for self-development and for better and more effective communication during the meetings. They help people self-reflect, which they view as a crucial skill needed to live in a community. They have used dragon dreaming in early stages.
Group gathering	They all meet at the general assembly once every two weeks. They have a social meeting every month and a development workshop every so-many months. Nothing is 100% obligatory but one is expected to attend.
Process	The social circle decides which workshop they will attend and if it is necessary to talk with particular individuals to resolve conflicts or help them self-reflect and develop.

Framework for transition contribution

(1) Ambition

	They have set a very clear ambition to be an inspiring example of sustainable living and state that the ecovillage will only be regarded as successful when more ecovillages start arising. They wish to give people energy and inspiration to also start contributing positively to a sustainable society in order to stop greenhouse gas emissions and environmental pollution. Also, they wish to be an example of specific elements in their ecovillage, for example with their building materials and techniques, their drink water production and their financial model. They envision to achieve their ambition by creating the example, by inviting documentary makers and other journalists, by participating in governmental programs and by sharing everything on social media. They serve as a stepping stone for other small initiatives such as KalkHennep Nederland. They invite a lot of volunteers whom they can offer a learning experience. They see it as planting seeds in people, which may take years to
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	germinate, but can then grow into all kinds of beautiful sustainable projects or ideas.
(2) Potential	
	They view their building materials and methods, their systems for energy, drink water and waste water, their food production, their organization model and their financial model as having potential to influence others in society in a positive way towards more sustainability. They are the first to bring holarchy to practice in an ecovillage, creating important experience and knowledge in this area. They notice that they are part of a movement which is happening nationally and to which their story connects. What all the people in the movement are doing enhances their project and they in their turn enhance others.
(3) Impact	
	<p>An entrepreneurs group of which one inhabitant is a member will also start working with holarchy after the inhabitant explained the method and its benefits.</p> <p>Other than that they do not see any direct impacts of their project, except being part of that bigger, national movement and in that way contribute to the creation of even more sustainability projects and support.</p>

D.5

COMPLETED SETS OF QUESTIONS VERENING AARDEHUIS

Framework for narrative and vision:

(1) Content of the narrative

Context	<p>Past and current problems</p> <p>Economic growth has led to CO2 emissions, intense use of land and high energy usage. Ambitions of Club of Rome in 1970s are not being reached. We have only one earth and it is not inexhaustible. Strange that everyone has the same stuff when we could share and that neighbors could help each other. Growth in smaller households, local energy production, public support of elections diminishes, inefficiency of government in dealing with problems.</p> <p>Desired future or goal</p> <p>Things are changing and to create a transition, mass is needed. This project can be of contribution to this mass, maybe it is like a drop in the ocean, but it is about the intention, the movement. Be a small step to set an example that it can be done differently. Governments should not halt citizen initiatives but facilitate them, acknowledge their organization strength. Show it is possible to be creative with the present situation, to live differently than what is seen as normal; than how we are programmed. Show the strength of doing things together, you don't have to do things alone. Connection in a neighborhood and support of your neighbors should come back, to give each other security.</p>
Actors	<p>Citizens can bundle their strengths and use their organization strength. Individuals can do what is in their power to do. Governments should facilitate these movements instead of halt them. Other organizations, companies and governments can get inspired by this example.</p>
Plot	<p>Events, experiences or activities leading to the desired future</p> <p>Building your own house with local, ecological materials as a citizen initiative which initiates, organizes and maintains the project and neighborhood. But still work in collaboration with the local government. By organizing tours to inspire and inform the public. On-site waste water treatment and energy production. Also the food should start to be produced locally and organically. Information evenings to involve the local people. Trying to organize and work in harmony with everyone, take in everyone's opinion and ideas. Invite volunteers to work on site.</p> <p>Activities driving/hindering change</p> <p>Collaborations with the municipality, waternet and housing association were difficult because it was such a new concept to them. Succeeding in developing a self-sufficient, ecological neighborhood as a citizen initiative. Involving surroundings and informing the public about their experience during the process. Their inexperience and organization troubles in the beginning slowed the process down almost causing bankruptcy. Organizing in a sociocratic manner stimulated the process.</p>

(2) Role of the narrative

Their narrative helped bring together people that had a shared ambition, which made collaboration possible.

(3) Production of the narrative

	The narrative was not actively produced but it was something that was shared amongst the initiative holders; it was a precondition to join the group.
(4) Vision arising from the narrative	
What?	Their vision is to 'built, work, dwell and live in harmony with nature, connection to each other and as inspiration to the world'. At the very beginning their vision was simpler, which was 'to realise a project involving earthships in a radius of 10 kilometres around Deventer'. Now they notice it may be time to reflect on the vision since the building aspect has been completed.
How?	Their vision arose from their narrative, or actually from the initiative holder and the small group attracted in the early phases. They wished to build earthships themselves, somewhere close to Deventer. Once they actually purchased the ground they revised their vision to formulate it more specifically in the way it is now. Currently they are particularly living the inspiration aspect in their vision, this is planned by their communication workgroup who try to carry out their message of living in harmony. The vision does still play a role in some difficult decisions. It also played a dominant role in all decisions being made in the past. The fact the vision played a decisive role in the decisions also helps newer members accept and understand decisions made in the past.
(5) Aspects of the vision	
Effect	The vision has in the past motivated them to build houses with their own hands and in harmony with nature; they remained persistent in meetings with other actors and in their decisions for building design, materials and installations. It now motivates them to keep inspiring others; they are developing a book with their stories and the overall story of the project. This is also how they got inspired to write the book; when they were reflecting on the vision the idea arose. The vision gives direction to people in their interactions with each other and the surroundings to remain in harmony or resolve any conflicts. It also gives direction for a future re-organization of the organization.
Consistency & Robustness	There is a lot of interpretative flexibility to the vision as 'being in harmony' can be interpreted in many different ways. In general this has enabled them to apply the vision to many different situations and decisions. However, it also sometimes caused problems when the group was too divided on how to interpret the vision. For example, when they could choose between strong wood from New-Sealand which would not have to be painted or local wood which would have to be painted every so many years to use as window frames. They could not reach agreement on this and decided to offer the choice to each family for their own house. Since the vision has several elements adaptive capacity is built in; a different emphasize could be laid on the vision in different stages of the project. First it was mainly on building in harmony with nature, now it is more on dwelling and living there as well as on inspiring others. They do notice that in some everyday happenings or decisions they do not always live up to their vision in a consistent way, however, it does help them reflect on this.

Framework for social innovation activity

(1) Knowing

Views	They view living in a neighborhood, both in physical ways as in social ways, differently. People should be more supportive of each other, while managing and maintaining their own neighborhood. They can built their homes themselves using local, ecological materials. Neighborhoods could be completely self-sufficient in energy and water, waste (water) treatment and partly in food. They view decision making and management differently by giving value to everyone's opinion and ideas and by clearly structuring the meetings and the domains of semi-autonomous workgroups.
Production	They got inspired by other, similar projects. They took training in sociocracy. They had some process managers from the outside to help in the process. They now produce knowledge themselves by providing workshops, tours and online information and in the future even a book.
Evaluation	They do not actively evaluate on their knowledge and competences. They do evaluate on how they can better/more share their knowledge and experience. They also evaluate on the effectiveness of the meetings, the meeting structure and the group alignment by how everyone interprets the vision.

(2) Doing

Practices	They initiated a project to build their own neighborhood, they built their own houses, they use only local and ecological materials, they are self-sufficient in energy and water. They share tools and cars, they share a communal building. They have sociocratic meetings and a sociocratic organization structure. They manage and maintain their own neighborhood collectively.
Interaction	The inhabitants interact with each other in various ways, but not on a regular basis. They have a general assembly with the total group only when they deem it necessary to decide something together. The different workgroups come together depending on how much work there is to do. They have a monthly soup-diner for all inhabitants and now start also with a monthly coffee morning. They have 'klusdagen' on Saturdays where they work together. They meet randomly on-site.
Change	By providing tours, workshops and information on their webpage they act to change others also.

(3) Organizing

Structure	They use a sociocratic organization structure, where they have a board, an ALV and several workgroups with specific domains. They take decisions using consent, meaning that one only if no one has a predominant objection to a proposal it will go through. The workgroups have autonomy over decisions within their domain. They use a clear structure in the meetings where they start with a check-in, have a question round followed by two rounds for arguments. Newer people sometimes have less discipline in the sociocratic structure from which some conflicts arise. A need for regular workshops about the practice of sociocracy is mentioned. The meetings can take long due to the specific structure which is why sometimes time becomes leading, which is experienced as a negative effect.
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Daily organization	Workgroups get responsibility over the specific tasks/domain they have assigned, they can delegate work to other inhabitants or external parties.
Legal Forms	The land was bought by the foundation, about half is still owned collectively and managed by them, the other half was sold as individual housing plots to members of the association. They founded a 'VVE' to manage the houses, they decide about maintenance and infrastructure.
(4) Framing*	
	* This aspect is covered in the narrative and vision framework

Framework for methods of collaboration, communication and decision-making

(1) Governance	
Over-arching structure	They use a sociocratic organization structure, where they have a 'bestuur', an ALV and several workgroups with specific domains. They take decisions using consent, meaning that one only if no one has a predominant objection to a proposal it will go through. The workgroups have autonomy over decisions within their domain. They use a clear structure in the meetings where they start with a check-in, have a question round followed by two rounds for arguments. Newer people sometimes have less discipline in the sociocratic structure from which some conflicts arise. A need for regular workshops about the practice of sociocracy is mentioned. The meetings can take long due to the specific structure which is why sometimes time becomes leading, which is experienced as a negative effect.
Process	At the beginning they only used consent decision-making and not a sociocratic organization structure, back then they had some conflicts and experienced inefficiency and delays in the project. After implementing sociocracy, the meetings went more efficient and the organization much more smoothly. They decided to use sociocracy since their founder, Paul Hendrikssen had come to know this method and they invited Fredjan Twigt from another ecovillage, to train them in sociocracy. Now they notice that people who joined the group later and did not experience this training do not have the same discipline for the technique nor do they fully understand it. New training is deemed necessary. And the procedure does ask something of people, in discipline, confidence, trust and of preparation. When the vision is not shared by everyone or interpreted likewise, the sociocratic method does not function properly, therefor they plan to have a separate meeting soon where they share their opinions on the vision to align them again.
Contribution	It has brought great peace in the meetings. They notice that new information arises since all people get to say something about everything. And everyone is heard, even when you have a complaint but do agree you can feel like people have heard your voice. Hearing everyone's opinion in the argument-round gives insight in how the group feels about a certain decision. It also provides clarity and purposefulness. It generates trust, if everything goes smoothly. It can also break trust, but that is part of being human, it remains 'mensenwerk'. It has fastened the decision-making process, it gave more structure, more clarity and space for everyone to give their opinion and not just the people that scream the loudest.

	Downside is that the whole meeting takes longer, especially with the check-in round. This can be annoying and also, it can cause the time to be leading in the meeting instead of reaching a good decision. And it can be difficult to have to voice an opinion right on the spot.
(2) Process and communication skills	
Methods	They do not have any practices in place for self-development. They briefly tried dragon dreaming but did not like it. They do use non-violent communication, which they call unifying communication. They had a one-time workshop in sharing needs and desires, not all people came, called GROK. When personal conflicts arise they try to work them out between the people involved and possibly with a facilitator.
Group gathering	At the start of the decision-making meetings they have a check-in round. They gather for soup and coffee both ones a month and they have klusdag and random parties. All are not obligated.
Process	They have a communication circle whose domain is both communication to the outside world and communication in the group. This group organized that GROK workshop, but since not all people feel a need for this they stopped that. The GROK workshop was organized because they noticed that sometimes people are triggered by things in a meeting, which are caused by the fact that they feel that some need or desire of them is not being met or being ignored. Anyone of the group can bring in a proposal for an activity.

Framework for transition contribution

(1) Ambition	
	In their vision they very clearly write the ambition to inspire people in the world around them. And they want to inspire them not only to build with ecological building materials or be self-sufficient in energy and water, but also inspire them in the fact that it is possible as citizens to start a project even in collaboration with the municipality and housing associations. And also inspire people to live together again where you have close contact with your neighbors and where tools are shared. Their ideal contribution is mainly to set an example that things can be done differently, to show them and make them think or get inspired.
(2) Potential	
	Telling their individual stories is seen as one of the most powerful things. Also the word-of-mouth spread of their achievements is viewed as one of the most important. Just as practicing this innovative structure in the meetings can be a good example for regular meetings. They show that it is possible to create something and see some options, which can inspire people.
(3) Impact	
	Plans are being made to realize an Aardehuizen 2.0 close to their plot. Another project is being built close by and they were definitely inspired by the sustainability and community elements of Aardehuizen. Two women of the ecovillage started a mediation and facilitation company using elements of sociocracy.

ORIGINAL DUTCH QUOTES

IEWAN

1.
 “Als je weet van, als ik het echt niet wil dan gebeurt het ook niet, dan kan ik gewoon mijn veto uitspreken, dan ga je ook met een heel andere manier met elkaar praten. Dan is het niet zo nodig om mensen te overtuigen, dus dat maakt dat je op een hele andere manier met elkaar omgaat.”
2.
 “Een op een hebben mensen dat misschien, doen ze dat, maar zo in groepsverband doen we niet zoveel aan zelfontwikkeling ofzo, of spiritualiteit. Wij hebben veel mensen in ons huis die zich daar heel ongemakkelijk bij voelen die zich echt vervreemd zouden voelen.”
3.
 “Dat gemeenschappelijk, dat heb je al wel wat meer... maar juist ook dat ecologische bouwen en wonen ook normaler wordt in de sociale huur, dat lijkt me wel mooi.”
4.
 “Volgens ons was het beter om met een kleine kerngroep te beginnen en de plannen vast scherp te krijgen en achter de contacten aan te gaan. Pas op het moment dat we echt met het ontwerp gaan beginnen dat we echt mensen gingen zoeken.”
5.
 “...die kernwaardes zijn heel open zegmaar, die kan je op verschillende manieren interpreteren. Dus, uhm, dat betekend dat je soms eerst een discussie moet voeren over hoe interpreteer je dit, en hoezo koppel je dit aan deze kernwaardes en staat iedereen daar wel achter en pas dan kan je het hebben over een verandering.”
6.
 “Dus op het moment dat we besluiten nemen dat we wel even kijken, dat we even terug komen op de visie van past dat binnen de visie. En het is ook iets wat we zo af en toe als los onderwerp nemen, dus dat we het met elkaar hebben over van hoe leven we hier nou eigenlijk en waarom.”
7.
 “Eigenlijk zaten we natuurlijk al een beetje in een alternatieve woonvorm. We wilden eigenlijk de goeie dingen van de Rafter meenemen en de slechte dingen wilden we verbeteren. Nouja, die ervaring die we daarin hadden van dat gemeenschappelijk wonen, dat dat ook minder goed kan gaan, dat is wel echt van invloed geweest op hoe wij de visie hebben vorm gegeven.”
8.
 “Omdat we met de provincie en gemeente en woningbouwcorporaties moesten onderhandelen eerst, want voor hun was het allemaal heel spannend en nieuw. Terwijl, jij kent het ook, ecologisch bouwen is helemaal niet zo bijzonder eigenlijk, het is niet raar, maar voor hun is dat echt heeeel bijzonder. Dus daarom heeft het echt acht jaar geduurd.”

9.

“De meeste ecologische woningen zijn wel heel mooi ecologisch maar wel echt voor mensen die kunnen kopen, die een hypotheek kunnen nemen, ja of voor mensen die heel primitief in een hutje in de hei gaan wonen maar dan moet je alsnog de grond kopen. En wij vonden nou juist van, het is juist iets wat de woningcorporaties moeten oppakken en zeker de sociale huursector.”

10.

“De materialen die we hebben gebruikt zijn op zichzelf niet bijzonder, een helofytenfilter is niet zo bijzonder, zonnepanelen zijn niet zo bijzonder of leem is niet zo bijzonder, en sociale huurwoningen zijn op zichzelf niet zo bijzonder of dingen in eigen beheer doen is op zichzelf niet zo bijzonder. Maar die drie dingen bij elkaar dat is uniek.”

11.

“Het is wel iets van deze tijd merk ik. Het valt heel erg samen met de participatiesamenleving en de mondige burger en ja.. mensen willen gewoon steeds zelf meer iets ondernemen en met name woningcorporaties die worden daar.. tot op zekere hoogte ook vanuit de politiek door gedwongen zegmaar”

ECODORP BERGEN

1.

“...het is net een instrument zoals ik zei, als je daar niet, niet goed op speelt dan wordt het hartstikke vals. En dan kan je niet zeggen de methode is niet goed, nee, jij moet gewoon leren op dat instrument te spelen...het is gewoon geduld hebben, dat instrument onder de vingers krijgen en kijken wat zijn de mogelijkheden allemaal.”

2.

“Als je een goeie vergadering hebt dan wordt je met z'n allen blij en dan creëren we met z'n allen iets wat we apart niet hadden kunnen doen, iedereen heeft een bijdrage en het gaat... het is een heel positief proces.”

3.

“Anders dan wat je in de normale samenleving kan doen, zeggen van ik ga naar huis, gaat het hier wat moeilijk. Dus je moet hier wat meer aan de gang en we zien dat als een stukje persoonlijke ontwikkeling, ... Dat ofwel je irritatie wat minder wordt of dat je de ander helpt om vanaf zijn kant wat bewuster te worden. Dat is echt wel ook een doel van onze gemeenschap, behalve al onze ecologische doelen, dat stuk. Zelfontwikkeling van hoe ga je goed met elkaar om.”

4.

“...dat gaat nog voor duurzaam bouwen, het gaat eerst over verbinding naar elkaar toe in een groep... en ook verbinding met dat verticale component, en daar volgt vanzelf uit dat je op een duurzame manier met elkaar omgaat, met de aarde omgaat.”

5.

“Je begint, als je met een groep iets begint, met een soort pseudo wij, jullie vinden elkaar allemaal geweldig, bijna verliefdheid, allemaal geweldige ideeën, helemaal halleluja en het kan niet kapot en iedereen blij en dan op een gegeven moment kom je dan toch verschillen tegen tussen elkaar en dat gaat dat gaat toch heel vaak irriteren en dan kom je bij een crisis uit, en dan is de volgende stap, en dat lukt vaak niet, om naar de true-we toe te gaan. Naar het echte wij, dat je elkaar inclusief verschillen kan accepteren en lief hebben. En dat gebeurt waarschijnlijk een paar keer op hogere niveaus ... en dat is een soort groei die je met elkaar doormaakt”

6.
“Voor mij is een visie, die geeft een richting aan en de waarde die geeft de weg aan. En ja die weg daar zijn we dan mee bezig, we hebben niet echt opgeschreven van dit zijn onze kernwaarden. Ook omdat we nog meer gevoel willen hebben van wat nou eigenlijk bedoelt wordt met een waarde.”

7.
“Het gebeurt niet alleen maar hier zo, dat we laten iedereen hierheen komen, nee, wij nemen dingen ook mee naar ons werk. Zo verspreid het zich...Dus door ieders netwerk...”

8.
“Laten we het zo zeggen, de systeem wereld, je kan het zien als een beetje een systeemwereld, dat geld, ons financiële systeem, het bureaucratische systeem van de overheid, ja dwingt mensen om op een bepaalde manier te leven. We hadden ook in een andere vorm kunnen leven als we met andere spelregels waren begonnen. Dus het zijn die spelregels, die willen we hier eigenlijk... die gaan we even wat loslaten.”

9.
“Volgens mij geeft dat wel een soort hoop, een soort alternatief. Want al het andere is gewoon meer van hetzelfde... we hoeven het nog niet eens allemaal goed te doen, maar het geeft wel een beeld van hoop en vuur en verandering en enthousiaste mensen.”

10.
“En je laat een stukje zingeving zien he. Mensen komen hier kijken, komen hier werken, niet omdat ze er zelf iets uithalen maar het geeft ze gewoon een goed gevoel: om aan zinvolle dingen mee te helpen.”

DE HOBBITSTEE

1.
“Die sociocratische besluitvorming en de geweldloze communicatie met elkaar... Dat is een actieve houding; je moet als mens je zelf toestaan om te willen leren van omstandigheden of van situaties en verhalen die je hoort, omdat je daarmee kunt leren hoe je dat zelf goed eigen maakt.”

2.
“Respectvol met elkaar omgaan, dus dat je respect krijgt vanuit je zijn. Dus dat je dus respectvol omgaat met jou gedachtengoed of met mijn gedachtengoed. Dat is dus eigenlijk wat consensus doet.”

3.
“Nou wat ik zelf heel erg merk is dat we zo vanuit een positieve houding naar elkaar communiceren en dat dat altijd voorop staat, dus ook... dat je niet kritiek geeft maar eerder feedback als dingen anders zijn ofzo.”

4.
“Nou ik zou graag gedeeld leiderschap willen... En wat je dan ook krijgt is dat je dan verantwoordelijkheid voelt voor je omgeving. Dus als grote bedrijven dus een plek hebben in die omgeving dat ze zich ook verantwoordelijk voelen voor het welzijn en welvaart van de omgeving en dat ze niet... of de natuur vernielen.”

5.
“... als je dan dus met elkaar afsprekt dat je een project start, wat dan met die vier

kernwaarden is. Dan is dat een vrijwillige keuze die je dan maakt, waar je dan wel verplichtingen aan vast. Ook als je een ander weg ziet stappen dat je dan met elkaar kan zeggen van wacht even, nu zijn we eigenlijk zo bezig dat zou niet moeten mogen.”

6.

“...ook de mate van spiritualiteit, dat kan je dan heel actief doen voor jezelf, maar je kan het ook niet...we hebben dus die waarden maar je kan er zelf je eigen, je eigen niveau van maken.”

7.

“Dat vind ik ook heel prettig aan deze plek er zijn wel ideeën en dat zijn ook gedeelde ideeën maar uiteindelijk bepaal je alles gewoon zelf. Uhm we leven hier ook echt samen vanuit ieders eigenheid eigenlijk Het is een hele positieve insteek eigenlijk en dat geeft ook heel veel energie. En elkaar die ruimte geven.”

8.

“Je begint al met je eigen leider te zijn. Dus het is je persoonlijk leiderschap en vervolgens kom je dus aan de waardigheid van jou als persoon.”

9.

“...ik voel niet echt sterk zo van ik ga jullie veranderen ofzo. Ik zou het wel uitdagend vinden... bijvoorbeeld ook, wij halen dan nu koffiedik ook bij bedrijven die er helemaal niet mee bezig zijn, nou dan zou dit misschien een manier zijn dat zij gaan nadenken of ook wat gaan doen. Maar dat is voor mij niet een doel op zich.”

10.

“...als je in vergaderingen zit of als je in werkgroepen zit... en je blijft daar jezelf, dan zien die mensen dat en van oja dat zijn dus die mensen van de Hobbitstee, daarmee laat je ook wat van je zien en van wat er hier gebeurt.”

11.

“Het gaat ook heel erg uit de dingen die ontstaan, doordat je van elkaar weet, en elkaar ziet wat en uitspreekt wat voor ideeën je hebt, ontstaat er een verbinding die je niet van te voren gaat zitten bedenken. En dat voel ik eigenlijk op steeds meer plekken, dat dit meer de manier van ondernemen wordt of samenwerken is.”

ECODORP BOEKEL

1.

“Holarchie is een nieuwe manier van het inrichten en besturen van organisaties waarbij de nadruk ligt op zelforganisatie en het ontwikkelen van collectieve kennis en creativiteit.”

2.

“Dus we kijken op kleine puntjes gewoon af als het ons goed uitkomt. En dat is ook holarchie, je probeert gewoon dingen uit en je ziet wel of het werkt... je kunt ook geen bezwaar maken als iemand iets uit wil proberen. Want dat is holarchie, je probeert dingen uit of het werkt, als het niet werkt dan probeer je iets anders.”

3.

“Wij zijn eigenlijk voor alle mensen die actief zijn, die moet je stimuleren, die moeten zoveel mogelijk hun doelen kunnen bereiken. En mensen die gewoon iets minder doen of die meer kritisch zijn, die mogen wel kritisch zijn, maar die mogen niet dingen tegenhouden.”

4.
“We hebben sowieso in het begin van elke ALV een sharing...En op die manier, ja, kom je dichterbij mensen je je raakt minder snel in conflict met mensen. Dus dat is een heel belangrijke.”
5.
“Het is absoluut effectief. Die workshops stellen je in staat om naar jezelf te kijken en vanuit die manier problemen aan te gaan. Dat is echt iets wat je moet doen als je in een gemeenschap gaat wonen, je moet echt in staat zijn om naar jezelf te kijken.”
6.
“En wat ik ook wel merk is dat die gesprekjes een op een die hebben ook wel echt heel veel toegevoegde waarde, voor de nee meer als voor de ander. Maar sommige mensen zitten echt lekker in hun vel door dat soort gesprekjes en ja niet iedereen vindt dat fijn of heeft dat echt nodig, maar uhm... ja, dat vind ik wel een succesverhaal.”
7.
“Ik vind op zich best wel heel veel dingen goed aan deze samenleving, want we hebben hartstikke veel dingen voor elkaar gekregen. Uhm, het enige jammere is dat het zo weinig bewust is... Volgens mij rijden heel veel mensen nog een benzine auto gewoon omdat het makkelijk is. En dat is op zich, ja, snap ik dat ook wel. Het moet gewoon een makkelijk alternatief zijn, wil je een grote groep mensen bereiken.”
8.
“Ik vind het prima dat er een overheid is, ik vind het prima dat er grote multinationals zijn, maar mensen moeten daar niet te afhankelijk van worden want dan hebben die mensen alle touwtjes in handen, dan heb je geen controle meer over je eigen omgeving. Dus ik hoop heel erg dat er meer van dit soort initiatieven gaan ontstaan waarin mensen minder afhankelijk gaan worden van die grote systemen en meer afhankelijk van kleine systemen. De voordelen, is een stukje, hoe noem je dat, dat je nee kunt zeggen tegen de dingen waar je niet achter staat.”
9.
“Als je het ecodorp ziet al een vlot zegmaar, wat gewoon meevaart op een kabelend riviertje. Dan gingen ze vanaf de zijkant, oh dat is wel leuk, en dan zetten ze 1 been op het vlot en dat gaat best wel pijn doen, omdat ze dan proberen om dat vlot tegen te houden zodat ze dat andere been ook erop kunnen zetten. En er is eigenlijk maar één manier en dat is erop springen en meedoen.”
10.
“Van alles daar mag je over gaan praten, maar de visie, daar moet je echt niet over gaan discussiëren. Want als je dat gaat doen... dan kun je net zo goed stoppen, want wie heeft er dan gelijk, want iedereen's visie is even waardevol.”
11.
“Wij hebben ook weleens, gewoon, dat we het even gewoon het vertrouwen kwijt zijn. Uhm, ja vertrouwen dat het gaat lukken en dat het ook zin heeft en dat er ook dingen veranderen in de samenleving en dat we op de goeie weg zitten. En dat je gewoon actief met elkaar ervoor kiezen om te vertrouwen.”
12.
“Het feit dat hier heel veel mensen langs komen, dat we met scholen samenwerken, dat we met allerlei organisaties samenwerken, is allemaal om die olievlek impact, om

een voorbeeld te zijn en te inspireren, zo groot mogelijk te maken.”

13.

“Ons dorp is pas geslaagd als Nederland kantelt, dus als Nederland duurzaam wordt, dus hoe wij... onze bijdrage is dat we dat kunnen versnellen, we hopen dat we dat kunnen versnellen.”

14.

“Bij alle mensen die hier komen of mensen die wat van ons horen; iets van het ecodorp raakt hun en dan komt er een soort van zaadje en het kan tien of twintig jaar duren voordat zo’n zaadje uitkomt, maar we delen wel van allerlei zaadjes uit.”

15.

“Dat dit echt een bron is zo van waar van alles mensen mee naar huis nemen om hun leven te veranderen, dat lijkt me echt heel leuk.”

16.

“Ik denk dat we gewoon deel uitmaken van een soort van beweging die überhaupt gaande is, dus iedereen is wel iets aan het doen... En dat wat andere mensen doen dat dat ons versterkt en dat wat wij hier doen andere mensen weer versterkt.”

VERENIGING AARDEHUIS

1.

“...voordat dit model er was...dat er voorheen veel meer conflicten waren, dat je veel meer het ego hebt die zeg maar aan het praten was, dat mensen geraakt werden ook... en dit model staat ervoor dat iedereen de kans krijgt om te vertellen wat hij wil vertellen en de vragen stellen die hij wil stellen en je wordt ook echt uitgenodigd om dat te doen.”

2.

“Bij een normale vergadering gaat het altijd van ik zeg iets en dan ga jij iets anders zeggen en had ik nou een vraag of heb ik alleen een opmerking en waar landt het, dat is allemaal niet helder. En met die kringen en met dat rondje... het is heel mooi dat het een gestructureerde manier van gesprek is en dat je een gezamenlijk doel met elkaar voor ogen hebt.”

3.

“Je wordt vaak getriggerd omdat je het gevoel hebt dat je iets... nouja dat je gevoel of behoefte niet gezien of gehoord wordt. Nou om dat zichtbaar te maken hebben we zo’n leertraject aangeboden, Maar wat je ziet is dat er met name zo’n groepje dames op af komt die daar in geïnteresseerd is en de heren blijven achter... nee je kan dat niet verplicht stellen.”

4.

“Dat vind ik ook gewoon uit de kracht van samenheid; dat je het niet allemaal alleen. Dat we niet allemaal een staafmixer moeten hebben als je weet dat je buurvrouw er ook een heeft.”

5.

“Heel veel kennis is er bij mensen aanwezig en dat gaat dan de organisatie kracht van die mensen dat overheden er ook wel belang bij hebben om dat te faciliteren in plaats van dat tegen te houden.”

6.

“Het was natuurlijk een hele lange weg, tien jaar, waarvan ik sowieso maar ik denk vier jaar... bij de groep ben als vrijwilliger. Dus ik heb heel veel van de beslissingen ook nooit meegemaakt, daar ben ik in meegegaan, daar heb ik een commitment voor gedaan, omdat ik wist waarom.”

7.

“Soms zijn de onderwerpen echt heftig, omdat er zoveel verschillende meningen zijn en ook hoe we tegen de visie aankijken, ook dat stukje duurzaamheid is voor iedereen weer anders er zijn echt heel veel verschillen.”

8.

“Uhm, nou dat de samenleving wat zachter mag worden naar elkaar toe, dat vind ik wel belangrijk, ook niet naar elkaar maar naar de aarde toe. En ook het idee dat wij zegmaar gevormd zijn,..., door hoe de dingen geregeld zijn in de maatschappij, dat je daar uitstapt.”

9.

“Dus ja, wat ik denk dat wij... gewoon een klein stapje zijn om te laten zien dat het wel anders kan... En ik heb nooit het idee van dat dit is nou wat de wereld gaat veranderen, want dit is ook maar een druppeltje op de gloeiende plaat natuurlijk. Want het is meer de intentie en de beweging.”

10.

“Aan de ene kant vind ik het best wel extreem wat we gedaan hebben en het heeft voor mij ook wel voor mijn gezondheid zijn tol geëist om zoveel jaren commitment te geven aan zo'n project. Maar dat je dan op die manier toch wel ook mensen kan inspireren en iets kan laten beleven. Dat vind ik het belangrijkste dan”

DISCUSSION

1.

“Dus een aantal, misschien initiatiefnemers of wat dan ook, die visie sterk in zich voelen en als het ware wat er gebeurt toetsen daaraan en daarmee ook, ja, een veto is een groot wordt, maar richting geven. En waarbij de visie dus eigenlijk een hele actieve rol speelt in het dagelijkse, maar op een manier die niet helemaal inclusief is.”

2.

“En ik ben persoonlijk eigenlijk van mening dat we een lerende.. ja dat we een evoluerend bewustzijn hebben met elkaar en dat we dat dus ook kunnen stimuleren bij elkaar, juist door die diversiteit en die uitwisseling. En, en dat dat ook heel belangrijk is.”

3.

“In Italië zijn ze met een wetsvoorstel bezig om een aparte status te creëren voor ecodorpen. Omdat in de huidige wet, Nederlandse wetgeving ook, is iets of agrarische bestemming of natuurbestemming of woonbestemming, nou het is allemaal heel erg gescheiden. Terwijl een ecodorp is geen boerderij, het is geen kerk, het is geen natuurgebied, het is geen woonwijk, het is heel geïntegreerd.”

4.

“Dus het idee dat je ook de sociale dimensie moet verzorgen, daar is minder bewustzijn op. Is mijn ervaring. En dat is dus iets wat ik zelf ook door GEN-Europe heb geleerd en GEN international, hoe belangrijk dat is. En dat is eigenlijk ook waar het clips project op gebaseerd is, want daar gaat het dus vaak juist op fout.”

5.

“Bijvoorbeeld, we werken samen met Kalkhennep Nederland, waarmee we dan duurzame huizen gaan bouwen van kalkhennep, om te laten zien van op deze manier kan je echt heel duurzaam bouwen en je hebt een prachtige woning. We werken bijvoorbeeld met het NIOO, het Nederlandse instituut voor de ecologie, die gaan een nieuwe soort geheel zuivering proberen te realiseren, dat je met behulp van algen alle voedingsstoffen uit ontlasting terug wint... Dus op die manier zijn we voor hun een proefproject, een springplank dat hun project groot kan maken dat het elders ook toegepast kan worden.”

6.

“In Nederland blijft altijd de gemeente verantwoordelijk en die gemeentes.. ja dus die zijn heel huiverig voor nieuwe onbekende materialen, bouwtechnieken en dat is logisch want zij zijn aansprakelijk,... want ik denk dat het namelijk ook voor gemeentes heel belangrijk is om te horen dat ze niet de enige zijn. Want een gemeente die denkt ook help, wat is dit nu?!”

DISCUSSION ECOVILLAGE NETWORK EVENT

On the 6th of January I presented at the Dutch ecovillage network event in Winterswijk. Roughly 30 people from around 8 different ecovillage initiatives were present at this presentation. I planned my presentation in such a way that I first provided an explanation of my research, followed by some intermediary results. After this, I organised discussion rounds around three different themes, where the participants formed four smaller groups to discuss in. For each discussion theme I had written several questions on the screen and the participants had 10 minutes to discuss these questions with each other in the small groups. After each 10 minutes I made a round asking one person of each group to give a short recollection of the most interesting things they had discussed. I wrote down some comments that the participants made and these can be read per theme below.

1: DECISION-MAKING AND ORGANISATION STRUCTURE

The questions that I put on the screen for this theme were:

- What type of organisation structure and decision-making method do you use?
- Which effects are experienced because of these in the organisation and collaboration? (both positive and negative)
- What are difficulties in living up to the structure or method?
- What happens when the group cannot reach a decision?

Some remarks made by the participants were:

- Performing sociocracy with a small group of people is hard as it results in everyone having to be in almost every circle. Or that man versus female circles arise. It is then also difficult to simply fill all the different roles of the structure and create double-links which can fill the top circle.
- The double-links with all the circles costs a lot of time in the meetings, several initiatives have for this reason stopped addressing the double-links in the meetings.
- Because everything has to be decided by the entire group it is not possible to execute some quick or small ideas or try something on your own; everything has to go through the entire group and decision structure, which can take quite long.
- It is difficult to fulfil all roles of a sociocratic organisation structure when you are with a small group.
- There is little difference between a traditional board and a village circle. When all the representatives of all circles are in the top circle than this is practically a board.
- It is not really clear to anyone what the difference between sociocracy and holocracy is.

2: ROLE OF THE VISION

The questions that I put on the screen for this theme were:

- How actively and in what way do you reflect on the vision or core values when making decisions?
- How do you deal with different interpretations of the vision?
- Do you believe that with every new group formation you should reflect on the vision or should this be the constant?

Some remarks made by the participants were:

- A vision which is formulated by the initiative themselves can be too dreamy or idealistic for the surroundings to understand it and consequently to support the initiatives and even for the members themselves to translate the vision to actions. However, when the vision is turned into a more concrete vision to ensure that the surroundings understand the vision, the members can no longer find themselves in the vision or be inspired by it as it is now more of a mission.
- The vision of an Anastasia village is that there is a multitude of visions. That there is space for everyone's individual vision is a starting point.
- Some are of the opinion that the world around an initiative is every changing and evolving and therefor it does not make sense if the vision is not open for change.
- Many people know of the research by Christian (2003) and hold her opinion that a vision has to be solid and unchangeable to have a successful ecovillage.
- There is insecurity among the participants about how to deal with creating boundaries to people's freedom in the vision; how determining to a person's lifestyle can the vision be?
- Some participants are of the opinion that a vision should be revised roughly twice a month to ensure consistent interpretation among all members of the group.
- There are very different visions about what a vision actually is; ranging from it being seen as a to-do list to it functioning as the ultimate ideal.
- They acknowledge that a vision is actually equal to creating boundaries, whilst one of the starting points of ecovillages is to accept every individual as they are, these two are contradicting to each other and this is seen as an issue which cannot really be solved.
- In Lelystad in the Sidhadorp which has existed for over 30 years there is an old guard of the initial people that are all in the board and very firmly hold on to their initial vision. However, newer inhabitants have trouble finding themselves in this vision since the times have changed and they would like to see the vision changed. The old guard does not want this.



Figure M.1. Picture taken during the discussion session, January 6th 2017.

3: PERSONAL DEVELOPMENT AND COMMUNICATION

The questions that I put on the screen for this theme were:

- Do you regularly have activities for personal development and/or communication?
- Why did you choose for this (or not)?
- Do you only work with these topics during planned meetings or do you have separate gatherings for them?
- What effects are experiences thanks to these gatherings/activities?

Some remarks made by the participants were:

- They question to what extent to work on each other's personal communication without turning into therapists, since everyone has a background with issues.
- One technique used at an ecovillage is to ask at the end of every day when they worked together if anyone still has any annoyances or conflicts and these are then tried to be solved so that everyone can go home at peace.
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- Fun is by everyone seen as very important, just as celebrations and having rituals, this really is experienced to bring people together and work in a connecting way.
- Co-counselling is a method one of the participants uses in an ecovillage in Norway
- The talking stick is by several participants mentioned as a good way to give everyone a chance to talk about themselves and to limit others who talk much in talking.
- Sharing how you personally feel with the group is seen as very important. Amongst others for creating group connection.
- Some ecovillages invite experts to come and give a workshop in some type of personal development or communication type, to enhance group connection or as support to the ecovillage project.
- Cohesion is experienced to be less when members do not share with each other as people then understand other people less; where they come from or what is going on in their lives.
- One participants mentioned five different pillars you can work on to create a tight group, these are personal involvement, alignment and intention in doing things together, fun and celebrating life, resolving conflicts and using the talking stick and rituals.
- In all ecovillages they work on these skills in very different frequencies and using different methods.
- Letting group connection or sharing arise naturally is seen as more preferable to inviting an outsider to guide activities for this.

CONCLUSIVE REMARK

All ecovillages look for recognition by local governments; scientific research could be of great support as it will make them look more serious and the governments will be better able to understand them. For example a benchmark comparison of ecovillages with regular neighbourhoods could demonstrate the advantages of an ecovillage.

