TINY HOUSES AS A SOLUTION FOR URBAN PLANNING ISSUES

A qualitative study on Dutch tiny house initiatives and their possible function in tackling urban planning issues.



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Date: 17-08-2020

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Preface

This master's thesis marks the end of my studies at the University of Groningen. When I was starting my bachelor's in Psychology in 2014, I never expected to graduate on a topic in the urban planning field. But here it is, my master's thesis on tiny houses. The past half-year was a tumultuous period which entailed a global pandemic, a cancelled exchange to Seattle (US), moving between three different cities and a graduation process. Despite the chaotic period, I really enjoyed researching the topic of tiny houses and all the interesting conversations I had regarding this topic. I have learned a lot about doing research, and I will use this during my next master's in Social Psychology at the University of Amsterdam.

I am grateful for my family and friends, who supported me during the process of writing this thesis. I would also like to thank my supervisor Ina Horlings and the participants from the initiatives I studied. Gaining insights in the 'tiny lifestyle' was not only useful for my thesis, but it also inspired me in my personal life. Decluttering and smart storage solutions appear to be very handy if you move to an 8 m² room in Amsterdam. This thesis taught me to look at problems differently and I aim to use that in my work in the planning practice.

Hopefully, this study can function as an inspiration for using tiny houses as a strategy to tackle various urban planning issues. If there are any questions regarding this topic, I would be honoured to answer them.

Amsterdam, August 2020

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Abstract

Many urban planning issues in the Netherlands are categorised as complex problems. To tackle these complex problems, innovative strategies are needed. This thesis analyses how tiny houses can be used by local governments as a strategy to tackle urban planning issues by means of interviewing participants from five Dutch tiny house initiatives. The study focuses on the role of local governments in the emergence of tiny house initiatives, how existing and potential tiny house initiatives influence governmental thinking and how Dutch tiny house initiatives are influenced by the Tiny House Movement. The results show that tiny houses are successful in tackling urban planning issues, varying from problems faced on the housing market to the large ecological footprint of housing. The results also show that a facilitative local government is crucial for the emergence of tiny house initiatives and that existing and potential tiny house initiatives influence governmental thinking.

Keywords: Tiny Houses, Urban Planning Issues, Facilitating Government, Multi-Level Perspective, Transition.

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Chapter 1: Introduction

1.1 Urban issues

Are there sufficient houses in the Netherlands? Are houses safe, sustainable and affordable? And the type and location of these houses, do they align with the wishes of current and future occupants? These are a few questions that are currently posed by the Dutch government (Tellinga, 2019). Societies are changing constantly, therefore it is hard to give a straight answer to these questions.

It is, however, important to think of these questions and see how issues like these can be addressed. Right now, The Netherlands face different urban planning issues. One of these issues is that households are shrinking and that there is an increasing percentage of people living alone. Where the average amount of people per household was 3.93 in 1950, in 2019, this was only 2.15 people per household. Expected is that the amount of people living alone will be around fifty percent in 2050 (see table 1; Tellinga, 2019). Since the most common type of houses are single family homes, a trend like this demands a transformation of the housing stock on the long-term.

	1950	2019	2050 (expected)
Percentage of people living alone	<10%	> 33.33%	≈ 50%
Average people per household	3.93	2.15	≈ 2.10
Most common type of houses	Single family homes	Single family homes	?
Amount of people living in the Netherlands	≈ 10 million	≈ 17.3 million	≈ 18.5 million
Number of households	≈ 2.5 million	≈ 7.9 million	≈ 8.7 million

Table 1: Household size (CBS in Tellinga, 2019)

Another trend urban planning issue present in the Netherlands is the lack of affordable housing and arising therefrom, a stagnation in the flow on the housing market. There is a growing demand for houses and houses are getting more expensive, this makes it hard for first-time home buyers to buy a suitable house. It is also hard to get a suitable house for people with a middle-income, since they often earn too much for social housing and not enough to rent or get a mortgage for the houses they would like to have (MKB, 2020; Rijksoverheid, 2019). For households with one average income, only 4.7 percent of the houses on the housing market are within their financial range, compared to the 6.3 percent one year ago, this is a reduction of 25 percent available houses in one year (De Hypotheker, 2020).

Next to questions about the increase in one-person households and the lack of affordable housing, the government also poses questions about how to shelter homeless people. The issue of homelessness is another issue which is recently addressed by the Dutch Council for Health and Society (RVS, 2020). The estimated amount of homeless people in the Netherlands has doubled in the past ten years and this growing amount is partly caused by a 'new type of homeless people' (Trimbos, 2015). This new type of homeless people are individuals with severe problems but without mental problems or addictions (RVS, 2020; Trimbos, 2015). In their agenda for action, the Council for Health and Society pleads for creating a buffer in the bottom part of the housing market. The leading advice right is now, before anything else, provide housing, also called the 'housing first' approach (RVS, 2020). The Dutch Council on Health and Society also refers to the changing needs on the housing market and the increase in one-person households.

The last urban issue used as an example in this thesis is the large ecological footprint of housing. This issue receives attention from all kinds of disciplines in the Netherlands (Rijksoverheid, 2020). Nearly 20 percent of all Dutch CO2 emission comes from housing (Duurzaam Bedrijfsleven, 2019). Also, living in a house and the consumption linked to this is receiving more attention (Bespaarinfo, 2019; National Geographic, 2019). By owning less and sharing more, which decreases production, the ecological footprint of households can be reduced (European Environment Agency, 2015).

The increase of one-person households, the lack of suitable and affordable housing, homelessness with its housing first approach and the ecological footprint of housing are examples of urban issues in the Netherlands. In this thesis these problems are linked to tiny house initiatives and the possibility of using tiny houses as a (governmental) strategy to address these issues is discussed. These are complex issues since they touch upon different societal domains, involve various actors with dissimilar norms, values and perspectives (e.g. real estate developers, first-time home buyers, elderly people etc.), occur on varying levels (e.g. national, local) and require a very pro-active approach (Loorbach, 2010).

1.2 Tiny House Movement

The term Tiny House stems from the Tiny House Movement. This movement started in the United States and is "an architectural and social movement that encourages living a simpler life in a smaller space" (Tiny Home Builders, 2020). People from different segments of the society are more and more realising that a big house, and the high costs that come with it, are unnecessary and have a negative effect on their happiness (Tiny Home Builders, 2020). Different people and organisations see tiny houses as a solution for people with financial concerns and people who have the desire for more time and freedom (The Tiny Life, 2020; Tiny House Nederland, 2020b). The financial burden caused by owning or renting a house and furnishing and decorating this house is reduced, which, according to the view of the Tiny House Movement, leads to people having to work less and having more time for other things (The Tiny Life, 2020). The financial crisis of 2008 gave a large impulse to the widespread of the Tiny House movement (The Economist, 2009). Reducing the number of belongings, also called 'decluttering' (Forbes, 2016), is a central concept in the lifestyle linked to the Tiny House Movement. The aforementioned motives are all important reasons for people to join the Tiny House Movement. Another popular reason is the concerns people have about the environment and their wish to reduce their ecological footprint (Kilman, 2016; The Economist, 2009).

Tiny houses are often perceived as attractive, described as 'cool' and documentaries, television shows and Instagram pages are dedicated to the houses. Tiny houses are also a popular topic in papers and magazines, where both positive and critical remarks are made about the houses (e.g. Fox, 2020; Architectural Digest, 2016, Volkskrant, 2018; Volkskrant, 2020). The popularity of tiny houses seems to rise (Whyatt, 2016). However, despite the growing popularity of these tiny houses, there is no clear definition or maximum size found in the literature. In several descriptions of tiny houses, 37 m², 40 m² and 50 m² are used as maximum size (Roy, 2019; Whyatt, 2016; Brokenshire, 2018; International Code Council, 2018, Tiny House Nederland, 2020c). A possible reason of why it is hard to find an exact definition of a tiny house could be the legal status of tiny houses. In the Netherlands, the possibility of living in and building a tiny house differs per municipality, but in general people experience the process of actually building a tiny house as long and difficult (Tiny House Nederland, 2020a). Since tiny houses are relatively new in The Netherlands, municipal officers have to pro-actively look for 'loopholes' in the law in order to be allowed to build tiny houses. Also, worldwide it is an issue that living in a tiny house is often not considered legal (Living Big In A Tiny House, 2018; New Yorker, 2011).

Even though the Tiny House Movement and the tiny houses itself have risen in popularity, the tiny living vision is a way of looking at life that contradicts the global trend of the past hundred years. In

the past, the size of houses kept increasing. To illustrate this, the size of houses in the United States increased from 65 m^2 in 1900, to 93 m^2 in 1949, 154 m^2 in 1973 and an average of 234 m^2 in 2007 (U.S. Census Bureau in Wheeler, 2015).

1.3 Tiny houses as a governance strategy

The popularity of these tiny houses led the Low Income Housing Institute of Seattle, US, to build ten Tiny House Villages in different parts of the city. These tiny houses function as a shelter for homeless people. The villages in which the houses are located have basic amenities, such as showers, a laundry, a kitchen, and restroom facilities. The tiny houses are not as 'pretty' and luxurious as tiny houses that are seen in the media, but for many homeless persons, who are used to sleep in tents, these tiny houses with electricity, overhead light, and a heater are much safer than their tents. The houses are seen as an opportunity for homeless people to get back their dignity and build up a life (LIHI, 2020, Finkes, 2019). The approach of the homelessness crisis in Seattle functioned as an inspiration to study tiny houses in the Netherlands. If Seattle can use tiny houses for homeless people, how could these 'trending small houses' (Whyatt, 2016) be used as a strategy for addressing different urban problems in the Netherlands? Inspired by the Tiny Villages in Seattle, this thesis elaborates on tiny houses and on their possible function as a strategy to address urban planning problems in the Netherlands. For instance, what could adding tiny houses to the housing market mean for the flow on that market? Also, what could tiny houses mean for people who do not have a house in the broadest sense of the word? These are a few of the questions that caused this study on the topic of tiny houses.

However, having an idea about tiny houses as a strategy for addressing different housing issues does not mean that it immediately can be executed. After the decentralisation trend in Europe the last decades (Loorbach, 2010), local governments play a larger role in addressing local issues. Local governments in the Netherlands, often municipalities, decide about zoning plans, local problem approaches, and they implement national regulations in local decisions. For this reason, local governments can often decide whether a tiny house initiative is allowed in a municipality (Tiny House Nederland, 2020) and they therefore seem crucial in the emergence of tiny house initiatives in The Netherlands. In this thesis I study the impact of local governments on tiny house initiatives.

Concluding, as mentioned earlier, changing something complex as the housing stock, is not something that is done easily (Loorbach, 2010). Also, considering a strategy that is relatively unknown, will need a shift in governmental thinking. Do the different tiny house initiatives pressure local governments in such a way that a shift can take place in a way that governments will consider tiny houses as a strategy to address different urban issues?

1.4 Research questions

The main research question of this thesis is:

How can tiny houses be used by local governments as a strategy to tackle various urban planning issues in the Netherlands?

The sub questions that will help me answer this question are:

What urban planning issues are tackled by existing tiny house initiatives?

Who initiated the tiny house initiatives and how were the initiatives set up?

What is the role of local governments in these tiny house initiatives?

Can tiny house initiatives influence local governmental approaches to urban planning issues?

How are the tiny house initiatives influenced by the Tiny House Movement?

1.5 Relevance

The focus of this thesis is unique in the sense that it discusses the relationship between local governments and tiny house initiatives. It not only focusses on how local governments have an impact on the initiatives, but it also focusses on the pressure from initiatives on the government. Also, the literature on tiny houses, especially tiny houses in the Netherlands, is limited. This thesis will be a valuable addition to the knowledge around tiny houses in the Netherlands, their link to the Tiny House Movement and the different ways tiny houses can be used. The assumption central in this thesis is that tiny houses can be used as a strategy by (non-)governmental actors and institutions for addressing urban planning issues.

From a societal perspective, this study is also highly relevant. The last few decades local governments got more responsibilities in enforcing national policies (Loorbach, 2010). Also, with the new Omgevingswet (Environment and Planning Act) that is planned to take effect in 2022, municipalities get more freedom in adjusting local (environmental) standards and, by simplifying the laws on environment and planning, the cabinet aims to make it easier to start up projects (Government of the Netherlands, 2020). An example is given of how the construction of housing on former business parks can be developed faster since it will be easier for local governments to make decisions tailormade to the local situation. This tailor-making to the local situation is highly relevant for tiny house initiatives. Therefore, it is the right moment to explore the functions of tiny houses and present the findings of this thesis to local and national governments.

It is even more relevant since last May (2020), the Dutch foundation Tiny House Nederland and several partners of the foundation have written an official letter to the ministry of the Interior and Kingdom Relations (Tiny House Nederland, 2020e). In this letter, the Tiny House Nederland foundation called for more space for 'do it yourself building' in the new Omgevingswet (Environment and Planning Act). Many of the people that are linked to the foundation Tiny House Nederland are considered as 'do it yourself builders'. This letter is partly a reminder to minister Ollongren's statement a year earlier, in which she states the possibilities of tiny houses to the Second Chamber (Ministerie van Binnenlandse Zaken en Koninkrijksrelaties, 2019). This letter also illustrates the relevance of research on how tiny houses can tackle urban planning issues.

1.6 Cases

In this thesis, five Dutch tiny house initiatives are studied. The first initiative is Tiny Village Kleinhuizen in Zeist. People have different personal motives to live in the tiny village, however, the main function of the initiative is temporarily guarding the terrain, comparable to property guardianship. The second initiative, BouwEXPO tiny housing, is located in the city of Almere. The inhabitants of these houses have, just as Tiny Village Kleinhuizen, different motives to live here. For instance, it was a possibility for young people to enter the housing market and there is a company that owns one of the houses to let to their expats. Another initiative is located in the city of Nijkerk, it is commissioned by a housing association and people with different backgrounds live there, namely asylum status holders, young people, and urgent seekers. Another initiative built on behalf of a local housing association is the tiny houses initiative in Drachten. The people who live here were about to become homeless and needed a little help to get back on their feet, however, they are not eligible for intensive help. The tiny houses are seen as a step in the process of getting a 'real house'. The last case is Tiny House Ede, an initiative that did not (yet) succeed in finding the right place to put tiny houses.

Studying these different initiatives, the different urban planning issues they address, exploring the pressure performed by these and other initiatives on thinking about these issues, and examining the

role of local governments and the Tiny House Movement on the initiatives will be a valuable addition to both literature and current societal debates.

1.7 Thesis outline

In the current chapter different examples of urban planning issues in The Netherlands are mentioned, the concept of tiny houses and the Tiny House Movement are discussed and based on this, a main research question and several sub questions were formulated. Chapter two consists of the theoretical framework and underpins the analysis of this research based on international literature. The third chapter entails the methodology, it discusses the choices made on how to collect data and the ethical considerations regarding qualitative data gathering. The data collected during the interviews are presented in the fourth chapter. Thereafter, the findings are discussed in relation to the theoretical framework and the research questions are answered in chapter five. This last chapter also entails a reflection on the performed study.



Figure 1: Thesis outline

Chapter 2: Theory

2.1 Introduction

This chapter entails an exploration of what has already been written about topics relevant to my study on tiny houses. By reviewing this literature, I aim to clarify the concepts *transition*, *governmental facilitation*, *niche-innovations* and *governmental regime*, the latter two as part of the Multi-Level Perspective. The concepts discussed in this and in the previous chapter are combined in a visualised conceptual model at the end of this chapter. The concepts in this model form the basis for the methodology and are translated into interview questions.

2.2 Literature review

2.2.1 Transition

In the last decades, there has been a shift from nation-states that are based on a centralised government, towards decentralised, liberalised and market-based societies in modernised European democracies (Loorbach, 2010). Policymaking structures and processes are more stratified and national governments that implement policies in a top-down manner seem outdated. The current practice of governments in Western European nations, and therefore the Netherlands, is based on the idea of interaction with a diversity of societal actors, what usually leads to temporary consensus and support base from these actors (Loorbach, 2010). However, this approach will not suffice in dealing with the complex and unstructured set of issues that Western societies face nowadays, for instance, issues on the housing market. Sustainable strategies need to be found, but these sustainable developments usually do not often happen spontaneously (Loorbach, 2010). New modes of governance must be found in order to deal with these complex problems. Ideally, there will be a new balance between the market, society and the state. This new balance will contribute to the effect of decisions made by governments and to sustainable long-term changes in society.

The transition concept (Loorbach, 2010) aims to find out how networks, organisations, regimes and individuals are interrelated and how this interrelation can lead to nonlinear change in seemingly stable regimes. Transition can be described as a shift from one societal regime or "dynamic equilibrium" to another (Hölscher et al., 2018). Examples of these transitions are changes in economic-, social-, technological- or institutional regimes. Transition theory analyses focus on the processes and dynamics producing patterns of change to explain 'how' the non-linear shift from one state to another is supported or hindered. In this thesis, the transition theory is used as theoretical perspective to find out what the interrelation is between tiny house initiatives and the governmental regime and how this interrelation can lead to a nonlinear change in this regime. Later in this chapter, I will elaborate on this nonlinear change.

In the first chapter, a few issues were mentioned that could possibly be addressed with tiny houses. These issues are perceived as highly complex since they occur on different levels, the actors that are involved have different norms, values and perspectives and they are rooted in a variation of societal domains. One of the examples of a problem on the housing market is that it is hard to find a suitable house for young people (Rijksoverheid, 2019). This issue can be local in the sense that a municipality does not have a sufficient amount of houses, however this can also be seen as a national issues since the demographics changed nation-wide (or even globally) and the national housing market has not (yet) adjusted to this problem (Tellinga, 2019). Actors involved in this issue are housing associations, municipalities, national or local governments, but also individuals with different priorities. Homelessness is another example of a highly complex issue. A problem like this often manifests locally, however, national policies and other global and national trends can impact the life of homeless people.

As mentioned in the first chapter, a growing amount of people are becoming homeless as a result of having severe problems but without mental problems or addictions. In the current Dutch society, these people often fall through the cracks of the social system (RVS, 2020) and do not have a place to go to. A shift in the governmental view on urban planning issues might be required, so these regimes start to think differently about issues like ones on the housing market.

An analytical approach to these complex issues will not suffice as there are no direct solutions to these problems (Loorbach, 2010). Therefore, Loorbach (2010) states, the approach of issues like housing problems, which face structural uncertainties, needs to be innovative and requires a strategy that is experimental, explorative and reflexive on the short-term and sustainable in the long term. This thesis will discuss whether a tiny house initiative could be that innovative approach which is reflexive, explorative and experimental and whether these initiatives could function as a catalysator for a transition within a governmental regime.

2.2.2 Niche innovation and governmental regime

As stated in the previous paragraph, the idea of governances based on transition management is that short-term innovations are stimulated but that long-term sustainable visions and solutions, linked to desired societal transitions, are also developed (Loorbach, 2010). The complexity perspective on societies shows that societal change is characterised by nonlinear processes of change and innovation, uncertainties and emergence (De Haan in Loorbach, 2010). Change in these societal systems is also driven by existing patterns and mechanisms (De Haan in Loorbach, 2010). Within this thesis, there is a focus on the different responses local governments can have to tiny house initiatives, and the large role they consequently play in the emergence of tiny house initiatives. I will elaborate on this government role later in this chapter.

Within societies, formal and informal networks are created by societal actors, which can come from e.g. overlapping interests in tiny houses (Loorbach, 2010). Within these networks, there are negotiations, decisions are made, and these decisions are implemented. These activities can lead to a change in structures and this change can structure governance patterns. How do existing tiny house initiative play a role in pressuring these governance patterns? Also, could a change in governmental thinking lead to local governments considering tiny houses as a strategy for addressing urban planning issues? This change in governmental thinking could potentially lead to a transition in those long-term sustainable visions and solutions linked to the desired societal transition mentioned earlier.

Loorbach (2010) emphasises that transition management focuses on the frontrunners in society that promote sustainable development by committing to desired sustainability transition. In this thesis, I will take a closer look at tiny houses and if tiny house initiatives could promote that sustainable development by committing to a transition. If tiny houses are perceived as innovations that may start a transition in governmental thinking about urban planning issues, how can this be put in context? In this thesis, a part of the Multi-Level Perspective on transitions (Geels, 2002; Geels & Schot, 2007) is used (see figure 2). The three levels that are distinguished by the Multi-Level Perspective are the sociotechnical landscape, sociotechnical regimes and niche-innovations (Geels & Schot, 2007). To see how tiny house initiatives are positioned in a wider context, an explanation of the different perspectives is useful.

The *sociotechnical landscape* is representing the exogenous environment that is beyond direct influence of the other two levels (Geels & Schot, 2007). The sociotechnical landscape level represents cultural patterns, macro-political developments and macro-economic developments. In the light of this study, one could think of an increased awareness of climate change, the role consumption plays in this, or demographic changes. Changes in this landscape usually take place slowly and could take up to

decades. The *sociotechnical regime* is the situation within the existing regime. It is 'dynamically stable' and consists of markets, industry, science, policy, culture and technology (Geels & Schot, 2007). This thesis focuses on local governments and their policy toward tiny houses. Therefore, from now on, this level will be called *governmental regime*. The housing market is also a regime that is reflected upon in this thesis, however, this market is not explicitly included in the conceptual model. The reason for focusing on the governmental regime instead of the housing market regime is that the possibility of using tiny houses for urban issues that are not limited to issues on the housing market is explored. The last level in the Multi-Level Perspective theory is the *technological niches* level, which forms the microlevel (Geels & Schot, 2007). On this level progressive new ideas emerge, which in the first instance are unstable sociotechnical configurations that have low achievements. Small networks of dedicated actors carry out and develop these niche-innovations. Geels and Schot (2007) use the Multi-Level Perspective for technological changes and therefore focus on sociotechnical innovations. This study, however, uses the regime and niche levels to describe the existing situation in local governments and the way *niche innovations* like tiny houses are pressuring this existing regime.

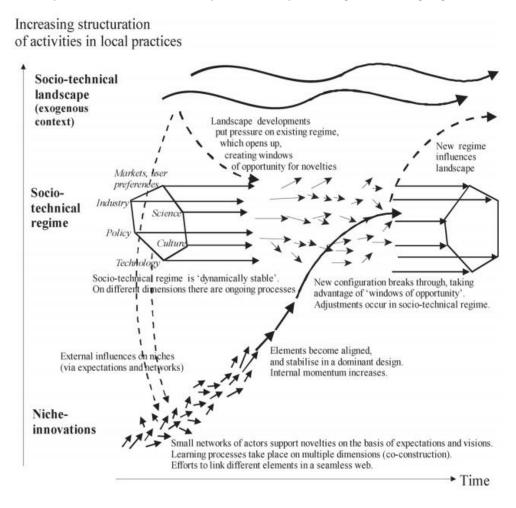


Figure 2: Multi-level perspective on transitions (adapted from Geels, 2002, p. 1263)

As mentioned above, there is a focus on the regime and niche level of the Multi-Level Perspective Theory. The assumption made in this thesis is that tiny house initiatives, both initiatives that are already constructed and groups and individuals that are searching for a location, function as niche-innovations and pressure the governmental regime. By seeing successful tiny house initiatives and by being aware of a growing interest in tiny houses, a shift in governmental thinking can take place. As a result of this, governmental actors could be more willing to consider an innovative approach like tiny

houses as a strategy to address urban issues. Also, policies could be altered in a way that it is easier to facilitate or initiate tiny house initiatives.

2.2.3 Government role

In this thesis, not only the influence from tiny house initiatives on the governmental regime is studied, the role of the local governments on the initiatives is also discussed. Earlier in this chapter it was stated that new modes of governance must be found in order to deal with complex problems. Ideally, there will be a new balance that leads to sustainable long-term changes in society and there will be an increased effect of decisions made by governments. Also, creating new avenues for citizen input has a positive effect on participation (Jun & Bryer, 2017) and could contribute to this new balance. A situation will be created in which innovations and new ideas, like tiny houses, can emerge. (Loorbach, 2010).

But how can there be a better balance between the market, society and state in the situation of tiny house initiatives? How can tiny house initiatives be facilitated by local governments? When citizens want to start an initiative, for example based on the vision and ideas of the tiny house movement, governmental institutions play a large role (Bakker et al., 2012; Jun & Bryer, 2017). Three different local government roles regarding tiny house initiatives are distinguished. First, the government can have an *initiating* role, this means that a local government is the initiator of a tiny house initiative. The second role is the *facilitating* role, in which the local governments work together with the (actors of) the initiative, this can take on different forms. The last government role distinguished is the *restricting* role, which means that the local government restrains an initiative from happening, this can be based on policy or on motives from local governmental actors.

Bakker et al. (2012) distinguished two facilitative approaches by governments that I will use to look into the facilitating role of local governments in the emergence of tiny house initiatives. The authors focus on governmental facilitation of citizens' initiatives in The Netherlands. Despite the fact that the initiatives studied in this thesis are not merely citizens' initiatives, the two facilitative approaches are a useful way to clarify the facilitative role of local governments in the emergence of a tiny house initiative.

The two facilitative approaches used to structure the facilitative role of local governments are facilitation by network structuration and facilitation by process management. Facilitation by network structuration involves mobilising citizens and creating a positive framework of domain-specific formal and informal rules. Laws and statutes on national, provincial and local level are regarded as an exogenous condition for local governmental officers (Bakker et al., 2012). However, sometimes formal and informal domain-specific rules can influence the exogenous conditions of the initiative. These domain-specific rules play an important role in facilitation by network structuration, since facilitators can structure the network by developing or altering these rules. In the case of tiny houses, an example of this could be an altered zoning plan. With this, the local government can create a fruitful climate for successful collaboration between the government and an initiative. Another possible way in which governments can facilitate by network structuration is the activity of mobilising citizens. Thus, facilitating by network structuration means that local governments can create more or less favourable conditions to stimulate initiatives and to recruit participants for an initiative (Bakker et al., 2012).

The other option for facilitation, facilitation by process management, is focused on steering the interaction in a way that it may help citizens reach their goal or solve joint problems (Bakker et al., 2012). This could be done by verbal acts, e.g. supporting or informing citizens, or physical acts, e.g. transferring resources like a site where tiny houses can be built. Facilitation by process management can be useful since bureaucratic systems and formal language have a discouraging effect on citizens

(Bakker et al., 2012) and are perceived as major obstacles for initiators of tiny houses (Tiny House Nederland, 2020d).

2.2.4 Tiny house initiatives

In the introduction, the rise in popularity of tiny houses is already mentioned. The term tiny house became more widely used since the Tiny House Movement of Jay Shafer started in the United States in 1977 (Tiny House Talk, 2020). The tiny houses that are inspired by this movement are characterised by efficient interiors that can consists of convertible couches, clever shelving solutions, foldaway tables, sleeping lofts, and small bathrooms (Kilman, 2016). However, despite the small space, a lot of attention is given to the aesthetics of the tiny houses. Many tiny house enthusiasts resist infinite consumption and the idea that that would bring happiness, instead, they find happiness in experiences and living without high financial burdens (Kilman, 2016, Brokenshire, 2018). Important to note is that traditional tiny houses were often built on a trailer bed, this way American restrictions and zoning codes could be circumvented (Kilman, 2016). These so-called 'tiny houses on wheels', named and built for the first time by Jay Shafer (Living Big in A Tiny House, 2018), were the start of the Tiny House Movement.

As mentioned in the introduction, there is no clear definition of a tiny house. However, maximum dimensions of 37m², 40 m² or 50 m² are mentioned by several sources (Roy, 2019; Whyatt, 2016; Brokenshire, 2018; International Code Council, 2018, Tiny House Nederland, 2020c). Some authors also make a distinction between tiny houses on wheels and tiny houses that are permanently fixed (Brokenshire, 2018). Also, tiny houses can be both on-the-grid or off-the-grid, a distinction referring to the connection to the sewage system, water pipes and electricity (Brokenshire, 2018). Even though the tiny houses inspired by the Tiny House Movement are often characterised by roughly the same motives, e.g. freedom, every tiny house can be different since another element of the Tiny House Movement is that people can customise their house to their own wishes (Kilman, 2016). The tiny house initiatives studied in this thesis were not selected on specific characteristics but are initiatives that explicitly describe themselves as a tiny house initiative or project.

Also, since there is no clear definition, the difference between tiny houses and small homes is not always obvious. According to Tiny House Nederland (2020c), a tiny house is linked to tiny living. This entails living more consciously in a smaller space. Therefore, according to Tiny House Nederland (2020c), the size of a home is not always decisive in labelling a house as a tiny house. The size of a house is also dependent on the context. For example, the general size of a house in Hong Kong is 14m2 (UBS, 2017). These houses are often located in high buildings in a dense urban area and are not perceived as tiny houses. Even though there seems no literature explicitly stating that a tiny house has to be detached or located at the ground level, tiny houses linked to the Tiny House Movement seem to fit this qualification. This is also where a distinction is made with stacked container homes used for e.g. students. In the interviews, attention is given to this topic and more opinions on the definition of tiny houses are processed.

The main question of this thesis is how tiny houses can be used as a strategy by local governments in tackling urban planning issues in the Netherlands. Since tiny houses are a relatively new concept, not much is written about it yet, however, Brokenshire (2018) mentions different potential ways of using a tiny house. The author focuses on tiny houses on wheels in Australia, despite that the situation in Australia is different in many aspects, some of her ideas can function as an inspiration for a Dutch context. Brokenshire (2018) state that tiny houses can be utilised for emergency aid relief housing after natural disasters, for cooperative housing, housing for remote location, and offering a place for people who are experiencing homelessness. Other benefits mentioned by Brokenshire (2018) is that a tiny

house can be moved in case of an emergency and that tiny houses on wheels have a negligible impact on nature, since an off-the-grid tiny house can be placed somewhere without a connection to utilities or the requirement of removing trees to make the house fit. Tiny houses can also play a role in a range of housing challenges, e.g. having a larger range of available housing choices and having more economical and sustainable housing than conventional housing (Whyatt, 2016). An owner of a tiny house related company interviewed by Whyatt (2016) states that only 28 percent of owners of tiny homes have mortgages, while more than two-thirds of the conventional homeowners have mortgages. Even though this is a statement from only one tiny house seller, it gives an impression of the difference between the percentage of mortgages for tiny houses and conventional houses.

This relatively low number of mortgages is in line with the statement that after the 2007 - 2008 global financial crisis, the idea of home ownership has changed (Brokenshire, 2018). After an era of economic growth, the demand for larger houses and an increase in home ownership proportions, people became more conscious of mortgages and its unsustainable lending (Brokenshire, 2018). Emphasised in the article of Brokenshire (2018) is that if living in a tiny house on wheels would be legitimised, various economic barriers would diminish, since it is easier to obtain financing and insurance for tiny homes when they are acknowledged and legal. Introducing planning regulations around tiny houses, should increase the amount of financial institutions that are willing to provide a loan (Brokenshire, 2018).

2.3 Conceptual model

To systematically order and show relations between the concepts discussed in this chapter, a conceptual model is drawn up (figure 3). The model can be read from top to bottom and from left to right and starts with the local urban planning issues. A couple of urban planning issues are given as examples; homelessness, the lack of affordable housing, the large ecological footprint of housing and the increasing number of one-person households. These are issues that are described in the introduction as well. Important to keep in mind is that these are examples of urban planning issues and that this is a small impression of planning issues that can be approached by tiny house initiatives in The Netherlands. There are intentionally put in dots, so people are encouraged to think of other issues that could be solved with tiny houses.

There are arrows from the top section of the model to the tiny house initiatives, this part of the model visualises the reasons for different tiny house initiatives. The arrow pointing from the right side of the model indicates the role local governments play in the tiny house initiatives. These governments can either initiate, facilitate or restrict the development of tiny houses and are therefore a crucial factor in this model.

In this thesis, I assume that tiny houses can function as niche innovations. These niche innovations (white box) put a constant pressure on the existing governance regime (grey box). This pressure can be carried out by citizens who want to build their own tiny house and ask the municipality for permission, this can be done by non-profit organisations that are dedicated to tiny houses, e.g. Tiny House Nederland, but this can also be done by existing tiny house initiatives in the Netherlands or in other parts of the world. Being exposed to these initiatives over and over and seeing its successes and possibilities, these niche innovations can lead to a shift in governmental thinking and eventually, which may eventually lead to a transition in the governmental regime. The assumption is that after the shift in governmental thinking, implementing tiny houses as a governmental strategy to address urban planning issues will be considered.

As can be derived from the model, it is assumed that the tiny house initiatives are influenced by Tiny House Movement has an impact on the tiny house initiatives. The extent to which the houses are

inspired by this movement differs per initiative, but assumed is that all tiny house initiatives are influenced by the movement to a certain level.

The overall assumption made in this model is that there is an interplay between the local governments and the tiny house initiatives. The initiatives need the local governments in order to be developed, but the initiatives also pressure the local governments which can cause a shift in governmental thinking about tackling urban planning issues and a potential shift in the governmental regime.

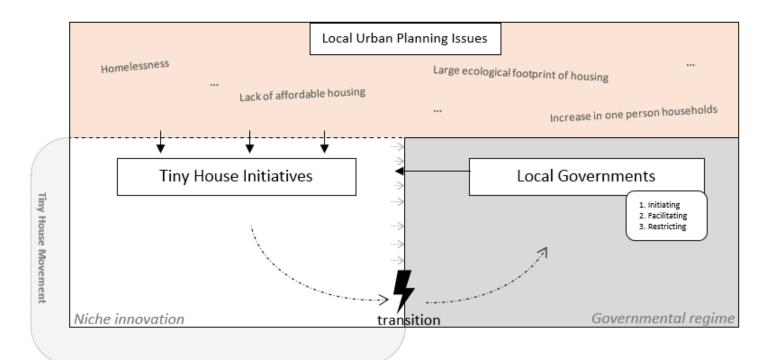


Figure 3: Visualised Conceptual Model

Chapter 3: Method

To answer the question: "How can tiny houses be used by local governments as a strategy to tackle various urban planning issues in The Netherlands?" a research is performed. This chapter entails the justification of the method used for this study and will elaborate on choices made in the process of collecting and analysing data.

3.1 Qualitative research

In this thesis, a qualitative research method is used, namely a comparative case study. Qualitative research provides in-depth, holistic accounts and attempts to reflect the interactive, interpretive, contextual and complicated nature of the social world (Staller, 2010). Since the goal of this study is to gain deeper insights in several tiny house initiatives, the urban planning issues they address, their residents, their motives and their relation to the government, qualitative research is a suitable research method to use. Especially since tiny house is a relatively novel term with a limited amount of literature written about it, qualitative research is particularly appropriate to find answers in an explorative manner (Yin, 2003).

A comparative case study can be used to study several cases in detail and learn about them (Punch, 2014). By collecting qualitative data, cases can be compared in a descriptive manner. After performing a comparative qualitative case study, conclusions can be drawn regarding differences and similarities between the groups, however, causal explanations cannot be drawn (Salkind, 2010). For this thesis, a comparative qualitative case research design is ideal since it allows to obtain deeper insights in five tiny house cases in The Netherlands and compare them. The fact that no causal explanations can be derived from analysing the data is not an issue since the study can be seen as an exploration of knowledge around tiny houses.

3.2 Data collection

3.2.1 In-depth interviews

In qualitative research, empirical evidence is commonly non-numeric and can be collected through observations, through documents and artifacts and through interviews (Staller, 2010). In this thesis, the different tiny house initiatives are inquired through the latter collection technique, interviews. The reason for choosing this data collection technique over other techniques, e.g. discussion meetings, is that the purpose of interviewing is to explore meaning, interpretations, and understanding of the interviewees (Staller, 2010). The interview data forms a comprehensive image of the experiences surrounding several tiny house initiatives. Also, personal motives can be discussed and specific questions, for example revolving the role of the government, can be asked. Six semi-structured indepth interviews were conducted on experts from six different tiny house initiatives in the Netherlands and in Seattle, US. However, after conducting the interview with an expert on a tiny house initiative in Seattle, an alteration was made to the scope of the research. As a result of the COVID-19 crisis it was no longer possible to go to the United States to study the initiative in Seattle, which resulted in changing the scope of this thesis to Dutch tiny house initiatives. The consequences of the COVID-19 crisis, however, were also experienced while reaching out to Dutch tiny house initiatives. The interviews were planned to take place in April and May, not long after restrictions on interpersonal contact were imposed by the Dutch government. Potential participants did not response at all or indicated that due to the crisis, they were not available for an interview. The five semi-structured interviews with Dutch tiny house initiatives were analysed and used to answer the main research question.

A semi-structured interview is the most powerful way to gain understanding of others and to access the meanings and perceptions people have towards a situation (Punch, 2014). Semi-structured interviews are interviews in which self-consciousness, partial structuration and order are central (Clifford et al., 2011). This also means that the questions are formulated open-ended, which offers room for participants to fully answer the question (Staller, 2010). The open-ended questions also allow the interviewees to potentially elaborate on topics that were missed in the literature review. These characteristics ensure flexibility within a steered conversation. Concluding, according to Longhurst (2019) semi-structured interviews provide insights in subjectivity, politics and power, topics that are highly relevant for this thesis, especially since the role of the local government is examined.

The interviews were conducted in May and June 2020, lasted between 38 and 70 minutes and the spoken language was Dutch. Due to the COVID-19 crisis and the restrictions for municipal officers to meet in person, it was not possible to conduct the interview of the BouwEXPO in real-life. This is unfortunate since face-to-face interviews are the preferred way of verbal interchange and allow for exchanging information that can be difficult to exchange over a phone call (Dunn in Hay, 2016). Fortunately, this interview, performed during a phone call went well. The other four interviews were performed in real-life, keeping in mind the 1.5-meter distance rule. The interview with Tiny Village Kleinhuizen was performed in the open-air of the terrain, the interviews with Tiny House Drachten and Tiny House Nijkerk were performed in the buildings of the housing associations which were adjusted to the latest COVID-19 rules, and the interview with Tiny House Ede was performed in the house of the interviewee with at least 1.5 meter distance.

3.2.1 Justification of interview guide

An interview guide was composed to eliminate the risk of neglecting essential questions during the interview and to structure the interview. The questions listed in the interview-guide are based on the conceptual model showed in the second chapter. The first part of the interview was focused on the local urban planning issues that are tackled by the initiatives, on obtaining more insight in the participants' definition of a tiny house, and the initiative itself was discussed. A clear image of the initiatives and the perception of a tiny house was necessary in order to put the answers from the participants in context. After this, the role of local governments was discussed. Questions were asked about the role of governments during different phases of the process. By asking these questions, a clear image of the role of the local and national government towards the tiny house initiative was provided by the interviewee. An important aspect of the interview was on the personal experiences of the interviewees, these are factors that could not be found online or were written anywhere. Knowing how local governments are experienced is valuable information for answering the main research question.

3.3 Selection of cases and research participants

Compared to quantitative research, qualitative research uses different strategies to sample. Where quantitative researchers use random, representative and large samples, qualitative researcher often purposively sample participants (Stellar, 2010). In theory, participants can be chosen because they are extreme, critical, typical or atypical and because they represent a diverse pool of participants (Stellar, 2010). In this thesis, the cases were sampled purposefully and were chosen based on a preliminary assessment of different sources. The cases studied in this thesis represent a diverse pool of tiny house initiatives since the initiatives have different motives, they are initiated by different types of actors and are located in different places in the Netherlands. The website of Tiny House Nederland was consulted and their 'Tiny Database' and 'Tiny House Map' was used to find tiny house initiatives (Tiny House Nederland, 2020). BouwEXPO tiny housing and Tiny Village Kleinhuizen were selected through this database and map. By using Google, it was possible to find tiny house initiatives that were focused on

a specific goal, for instance the tiny houses in Drachten that tackles the problem of homelessness. The tiny house initiative in Nijkerk is in close proximity to the place I grew up, this made the initiative somewhat familiar. Lastly, Tiny House Ede is selected based on stories about the initiative and supplementary Google searches. This latter case is selected since it has not been developed yet. In order to study a variety of tiny house initiatives, the experiences of the participant were expected to be different than the experiences from participants from initiatives that are developed already.

The selection of interviewees was done by purposive recruitment, meaning that individuals who are 'information-rich' were interviewed (Hennink et al., 2011). For this reason, people with various roles and relationships to the initiative were selected. This were individuals from housing associations, individuals from a municipality and citizens. Despite that the participants were selected based on their information-richness, it needs to be recognised that the experiences from a citizen can differ from the experiences of a municipal actor. Therefore, this variety has a negative influence on the generalisability (Longhurst, 2010). The interviews are however still valuable, since the information gathered during the conversations is not available somewhere else and experiences of individuals are highly relevant for this thesis. The participants were recruited through e-mails and LinkedIn messages.

The specific interviewees are chosen because of their knowledge of and their relation to the initiative. This is essential, since this helps understanding the process and choices made (Longhurst, 2010) during the different phases of the tiny house initiative. By having in-depth interviews with initiatives in different parts of the Netherlands, the depth and breadth of differences and similarities between the initiatives can be explored. This is valuable to gain insight in how governments possibly can facilitate these tiny houses initiatives.

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Initiative	Interviewee	Organisation	Date of interview
Tiny houses in Nijkerk	Employee	Local housing association (WSN)	20 th of May, 2020
Tiny houses in Drachten	Employee	Local housing association (Zienn Drachten)	27 th of May, 2020
Tiny Village Kleinhuizen	Inhabitant of tiny village who is also a board member of Tiny House Nederland	Citizen Tiny Village Kleinhuizen & foundation Tiny House Nederland	29 th of May, 2020
BouwEXPO Almere	Employee	Municipality of Almere	3 rd of June, 2020
Tiny House Ede	Former group member, wanted to live in a tiny house	Citizen & Tiny House Ede	11 th of June, 2020

Table 2: List of interviewees

3.4 Data analysis

After conducting the interviews, the audio records were transcribed verbatim, which means that the interview is transcribed word-for-word. Verbatim transcribing has a positive effect on the quality of data since it not only captures the main message, it also contains the information of the interviewees in their own words, expressions and phrases (Hennink et al., 2011). These details are in particular valuable for qualitative studies like the one performed in this thesis and will permit more accurate

coding (Persaud, 2010). Another benefit of transcribing in such detail is that the researcher can get familiar with the data, this benefits the analysis of the data (Dunn in Hay, 2016).

Subsequent to transcribing the interviews, the transcriptions were processed in ATLAS.ti and codes were assigned to the answers of the participants. The act of coding is a systematic process of assigning specific names, labels or tags to pieces of data (Punch, 2014). This process helps structuring the data and makes it possible to give meaning to the data. The first phase of coding consisted of assigning codes that were derived from the theoretical framework, these codes are called deductive codes and reflect the more obvious themes and patterns (Cope in Hay, 2016). Ideally, an analysis of a transcript is based on both deductive and inductive coding, since this combines theory and the stories of interviewees that were not included as code prior to the coding process (Hennink et al., 2011). Therefore, the next step in the process was open coding. This means that codes were assigned based on the answers given by the participants. After all interviews were transcribed, these codes were merged into several final inductive codes. To systematically analyse the interviews and to structure the result chapter, a code tree was drafted (see Appendix III). Since the spoken language during the interviews was Dutch, the quotes used in the result chapter are translated to English, considering the verbatim nature of the transcripts.

3.5 Ethics

Within all research, it is important to be aware of ethical responsibilities, however, ethical challenges in qualitative research are even more distinct. To address these ethical challenges, different tools are used in qualitative research. In this thesis specifically the issues of confidentiality and anonymity were relevant. Confidentiality is a researcher's statement that all data are kept private, stored securely and accessible only to the researcher (Hennink et al., 2011). Anonymity, the removal of personal identifiers from data, was partly promised. All the participants agreed to link their data to the initiative and to be linked to their relation to the initiative. In practice, this meant that the overview in table 2 can contain the information it does now, and it makes it possible to be aware of the role of the interviewee towards the initiative.

The confidentiality and anonymity were included in the informed consent (see Appendix I), a form constructed to inform participants about the procedure of the study. Another section of the informed consent is dedicated to making sure participants made a free and informed decision about whether to participate. These informed consents were sent to the participants prior to the interviews and were signed.

Since most data in qualitative research is extracted from interpersonal contact, researchers have to be aware of their position towards the participants and the topic of research. This 'positionality' (Flowerdew & Martin, 2005) can shape interactions and can therefore have an impact on the data. Being reflexive, meaning that a researcher is self-critical and self-conscious (Flowerdew & Martin, 2005), is essential for a well-performed research. The most important position in this study is the position of the researcher towards the topic of tiny houses. The topic within this thesis, tiny house initiatives, is chosen because the researcher is interested and fascinated by tiny houses. Consequently, even though the study is performed neutral and with a critical view, the positionality of the researcher has to be acknowledged. This could mean that, as a researcher, I hypothetically reacted more elaborate on answers that are in favour of tiny houses as a strategy to tackle urban planning issues than on critical notes toward this option. However, being aware of this bias resulted in a more neutral view from me as a researcher during the interviews.

Chapter 4: Results

4.1 Introduction

In this chapter the results of the interviews are presented. After empirically collecting data and analysing it as described in the previous chapter, this chapter starts discussing the use of the 'tiny house' term. In order be able to see the results in the right context, a short description of the initiatives studied in this thesis is presented in section 4.2. After this, the urban planning issues that are addressed by the tiny house initiatives are described and the different roles of governments in these initiatives are discussed. The chapter ends with a section about the influence of the Tiny House Movement on the different tiny house initiatives.

4.2 What is a tiny house?

Before discussing the other findings from the interviews, the definition of tiny houses from the view of the participants is briefly discussed. Besides the fact it was valuable for me as a researcher to have a clear image of how the interviewee defines a tiny house, the importance of this was also brought up by one of the participants. In the introduction chapter it was mentioned that within this thesis, initiatives are studied if the initiative itself or the public perceives it as a tiny house initiative. One of the reasons to pay attention to the definition, is the ambiguity of the term both in literature as in real life. When asked to the participants, a wide range of definitions were given.

BouwEXPO tiny housing "People in the Netherlands are using the term tiny house for anything and everything as long as it is a small home"

The data show that participants give diverse answers to the question of how they would describe a tiny house. Some of the initiatives deliberately considered whether they could use the tiny house term and others used the term less explicit and more because of the positive associations linked to tiny houses. An example of the latter situation is the initiative of Tiny House Drachten. The interviewee stated that their tiny houses are more like studio apartments, but that the term tiny house sounds appealing and that it attracted a lot of positive media attention.

Tiny House Drachten: "What we think a tiny house is, is a studio, with everything included. And well here, it has a maximum of 30 square meters."

In contrast to Tiny House Drachten, BouwEXPO tiny housing made a conscious choice on calling their initiative 'tiny housing' instead of 'tiny house' and during the interview, the participant is referring to small homes instead of tiny houses. This seemingly small change was made in order to not give the impression that the initiative is linked to the tiny house movement (more on this in section 4.7).

BouwEXPO Tiny Housing: "I started seeing tiny houses as 'small homes', smaller than 50 square meter, and as something that should also be an interesting and important part of the Dutch housing market. (...) What we wanted, was showing: Dutch and municipal building instructions [bouwopgaven], what are the possibilities if we talk about small living?"

BouwEXPO Tiny Housing, Tiny Village Kleinhuizen and Tiny House Ede mention a maximum size of 50m², the possibility of tiny houses with wheels, and the ability to move a tiny house. Also, the possibility for living off-the-grid was brought up and the requirement of permanent residency was mentioned. However, the interviewees from the three aforementioned initiatives do not perceive

these characteristics as crucial in calling a place a tiny house. For instance, for the interviewee from Tiny Village Kleinhuizen it is more important to look at how people live in a tiny house.

Tiny Village Kleinhuizen "In my opinion, it is not the tiny house that defines it, it is the tiny living. I think that is way more interesting. For me tiny living is when people deliberately decide to live in a small place, using less stuff, owning only what you really need and share a lot with neighbours."

Typical tiny house

It seems that all the participants make a distinction between 'the typical tiny houses' and other tiny houses. These so-called typical tiny houses seem to match the tiny houses from the Tiny House Movement. The characteristics of this movement are described in the introduction and its relation to the tiny house initiatives is discussed in section 4.7 of this chapter. Participants describe the typical tiny house as one that is on wheels, is easy to move, looks attractive and is off-the-grid. However, according to this interviewee, even though the tiny houses in the Netherlands may not be the same as the ones from the Tiny House Movement, it may be a representation of the 'small living' trend.

Concluding, the term tiny house is used for a variety of small homes. The participants of the four other initiatives would probably not use the term tiny house to describe the tiny houses of the initiative of the housing association in Drachten, but labelling these houses as such did provide the Tiny House Drachten initiative with a lot of positive media attention. Overall, apart from the maximum size of 50 m², there does not seem to be a clear definition of a tiny house that is shared by all the participants. This reflects the statement of the participant from BouwEXPO tiny house that people in the Netherlands use the term for "anything and everything as long as it is a small home".

4.3 Tiny house initiatives

The tiny house initiatives are already shortly introduced in the introduction chapter, however, after interviewing the participants linked to these initiatives, a more extensive image can be drawn. This section is dedicated to the five initiatives studied in this thesis and answers the sub question related to the initiator of the initiative and the process of setting up the initiative.

Tiny Village Kleinhuizen

This initiative is a collaboration between Rijksvastgoedbedrijf (Governmental Real Estate Agency), HOD – a vacancy managing company that normally focuses on anti-squatting of housing - and the residents of Tiny Village Kleinhuizen. A group of tiny house residents had to leave their previous tiny house location in Wageningen and were looking for a place at the same time when the Rijksvastgoedbedrijf and HOD were looking for a temporary solution for a vacant military site from the Rijksvastgoedbedrijf in the municipality of Zeist. The parties found each other and a few more spots were available for other tiny houses, which were only accepted if they already had a tiny house and could move there on a short notice. The goal of the initiative itself is guarding the terrain for a period of approximately a year. Up until now, the initiative is successful in the sense that inhabitants are guarding the site and notify the local police when something is happening in the proximity of the tiny village. However, the residents of the initiative, a diverse group of citizens who are willing to live with the uncertainties linked to living in a tiny house in the Netherlands, are also actively improving the area by making it 'more beautiful'. Other addressed issues can be read in section 4.4 of this chapter. The tiny houses in the Tiny Village are mobile, attractive, on-the-grid, vary in size but are all less than 50 m² and spread out over the large military site.



Figure 4: One of the tiny houses from Tiny Village Kleinhuizen ©Jeska de Ruiter

BouwEXPO tiny housing

The initiative BouwEXPO tiny housing is initiated by the municipality of Almere in collaboration with the Woningbouwatelier (Housing Construction Atelier), an organisation within the municipality of Almere. In 2016, the municipality organised an ideas competition and attracted 245 potential ideas. The reason for organising a competition was that they wanted to attract creative and innovative housing concepts linked to living in a smaller home. With the tiny housing initiative, the municipality wants to figure out and show what is possible with small homes. With the shrinking household trend, they think it is important to look at housing differently and this initiative functions as an inspiration for this. Twenty-five winners were selected to develop their tiny house, but had the choice whether they wanted to actually develop the house and whether they wanted to live there, wanted to sell the house or wanted to rent them out. The current residents of the sixteen permanent and temporary tiny houses are a diverse group of one- and two-person households. The interviewee states that residents can be divided in three groups; a group that consists of somewhat older people that choose to live smaller and choose to 'declutter', a group that lives consciously and wants to reduce their ecological footprint and a group that could not find an (affordable) house on the housing market. The houses, with a maximum size of 50m², are experimental in the sense that they use innovative energy and water systems and are all different. To illustrate this; a few houses are mobile and off-the-grid, others are stacked in a tower, but there is also a house that is cylindrical and can rotate.



Figure 5: BouwEXPO tiny housing ©Adrienne Norman Photography

Tiny House Nijkerk

Tiny House Nijkerk is an initiative from the local housing association WSN. The housing association works in close collaboration with the municipality and was initially meant for the growing influx of asylum status holders. However, the influx decreased, and the scope changed to three groups; asylum status holders, young people and urgent seekers. The tiny neighbourhood has a balanced and mixed distribution of different people, which results in the integration of the asylum status holders and a social safety net for all residents. People rent the tiny houses from the housing association and can live in the tiny houses for a maximum period of time. The asylum status holders and young people can live in the houses for a maximum of five years and the urgent seekers can live in the tiny houses for a maximum of two years. The 28 tiny houses are all the same HeijmansONE houses, have a standardised efficient interior with a mezzanine - an intermediate floor in a building which is partly open - and the ground floor area is 39 m². Since there is a temporary exemption of the zoning plan for ten years, it is crucial for the initiative that the tiny houses are moveable and can possibly be moved to another site in ten years. The housing association emphasises that these tiny houses are seen as a steppingstone to a regular house.



Figure 6: Tiny House Nijkerk ©Jeska de Ruiter

Tiny House Drachten

Tiny House Drachten is also an initiative from a local housing association. The housing association Zienn uses five tiny houses of around 30 m² to shelter homeless people. The initiative works in close collaboration with the municipality and is located in the garden of the care institution of the housing association. The residents are people who are in urgent need for housing, since they are (becoming) homeless and experience mental issues. These people are not eligible for residential care and by sheltering these people in their own living environment, Zienn prevents that they have to leave to an emergency shelter somewhere else in the province. By offering ambulatory support, the housing association helps them to get back on their feet as soon as possible. According to the interviewee, sheltering these people in their own municipality and supporting these people in getting back on their feet saves a lot of public resources. Homeless people are allowed to stay in the tiny houses for a maximum period of a year and can hopefully move on to a regular house after this period. The tiny houses differ from the other initiatives in the sense that they are not detached and are quite similar to a so-called studio apartment, a single room that combines the different functions of a home. The plan is to keep the tiny houses for at least ten years.



Figure 7: Tiny House Drachten ©Estea

Tiny House Ede

The Tiny House Ede initiative is the only initiative that has not been built. From 2016, a group of tiny house enthusiasts is looking for a location in the municipality of Ede, but so far, they have not succeeded in this. The start of the initiative went well and there was a positive relationship between the municipality of Ede and the initiative. Everyone who is interested in living in a tiny house in the municipality of Ede could join this initiative and over time people left and joined the group. After rejecting two locations proposed by the municipality, the group started looking for a location by themselves. According to the participant, the political situation is a reason why it is hard to find a location and to this moment, the group has not found a suitable place where it is allowed to build the tiny houses. The interviewee emphasises that finding legal loopholes is how they, together with a legal advisor, tried to find a way to be allowed to build their tiny houses. The members of the initiative do all have different personal motives that vary from living more sustainably, living in a green area or living more simplistically. The design of the future tiny house of the participant was approximately 40 m², however, with a smart construction, the living space could be extended to approximately 52 m².

4.4 Urban planning issues

This section elaborates on the urban planning issues that are tackled by the studied tiny house initiatives. This thesis discusses both the urban issues that are tackled as main goal of the initiative and the issues that are tackled as a result of a secondary effect. This contributes to answering the main question of this thesis. A couple of examples of urban planning issues were already introduced in the theoretical model (see chapter 2); homelessness, lack of affordable housing, large ecological footprint of housing and the increase in one-person households. This section elaborates on the issues that are addressed by the initiatives studied in this thesis.

The urban planning issues tackled by the tiny house initiatives are summarised and presented in table 3. The issues are explicitly mentioned by the interviewees and the interviewees state that all initiatives are experienced as successful in tackling the urban planning issues. For instance, the Tiny House Nijkerk initiative is successful in improving integration between asylum status holders, urgent seekers and young people. The details of the tackled issues are discussed later in this section. Since Tiny House Ede has not been built (yet), the initiative is not addressing any urban planning issue at this moment. After analysing the tackled issues, the issues have been grouped in seven overarching urban issues (see table 3); changing housing demands, societal issues, problems faced on the housing market, temporary housing, community building, ground guardianship and reducing the ecological footprint. These overarching urban planning issues represent a broad variety of urban issues in the Netherlands and according to the interviewees, tiny houses can be a strategy to tackle these.

Overarching urban	Issues mentioned		Tiny house Initiatives				
planning issues	by interviewees	Tiny House Nijkerk	Tiny House Drachten	Tiny Village Kleinhuizen	BouwEXPO Almere	Tiny House Ede	
Changing housing demands	Increase one- person households	Х			Х		
	Wanting to live smaller			Х	Х		
Problems faced on the housing market	First-time home buyers				X		
	Affordable housing	Х		Х	Х		
Societal issues	Housing for young people	Х					
	Sheltering asylum status holders	Х					
	Sheltering (nearly) homeless people	Х	Х				
Temporary Housing	Housing for urgent seekers	Х			X		
	Housing for expats				Х		
Community building	Improving neighbourhood connection and integration	X		Х	Х		
Ground guardianship	Guarding the terrain			X			
	Improving the area/ground of initiative			Х			
Large ecological footprint of housing	Reducing ecological footprint			Х	Х		

Table 3: Schematic presentation of tackled urban issues

4.4.1 Changing housing demands

As mentioned in the introduction, households are shrinking and an increasing percentage of Dutch people is living alone (Tellinga, 2019). This is one of the issues that is approached by two of the tiny house initiatives studied for this thesis. Since there is a large amount of one family homes at this moment, the housing stock is not adjusted to this growing number of one-person households. For the BouwEXPO tiny housing, this demographic change was one of the reasons to start the initiative. As mentioned earlier, the BouwEXPO tiny housing was specifically interested in the concept of small living. The tiny house initiative is used as a tool to discover what possibilities there are for one-person households and what the options would be for these shrinking households. At this moment, the BouwEXPO exists of a mix of one- and two-person households. The interviewee stated that the small homes are successful in offering a suitable home for persons who live alone and that the small homes function as an inspiration. For Tiny House Nijkerk, it was not a deliberate goal beforehand to create houses for one-person households, but it was more a result of the pressure on the housing market.

The increasing demand of people looking for a house, partly caused by those persons looking for a place to live alone, makes it hard for people to find a house.

BouwEXPO Tiny Housing: "That obviously was also underlying, those demographic changes. A third of the people in the municipality of Almere is living alone, and on national scale this is even more, while we have a large stock of one family homes. In other words, what are we going to build? Of course, that is also one of the reasons to start this."

Tiny House Nijkerk: "That is clearly also a big thing at this moment. There are more one-person households, which increases the pressure on the housing market even more, since all these people do want to have a house."

Not only a change in demographics leads to different housing demands, there are also people who deliberately choose to live smaller, even though they are not a one-person household. Living in a tiny house - or small homes as BouwEXPO tiny housing prefers to call them - is one of the options to live smaller. Especially in the initiatives of BouwEXPO tiny housing and Tiny Village Kleinhuizen, this is a topic that is addressed.

BouwEXPO tiny housing: "People who leave their owner-occupied property or who leave their larger house or apartment and then want to live smaller. They deliberately choose for 'decluttering', living smaller and more orderly. In this initiative, these are the somewhat older people."

Tiny Village Kleinhuizen: "I have never felt at home in a house, but we never figured out what would be the alternative"

Tiny houses can be a type of house that may fit to the changing demands of people that want to live smaller, but do not want to live in an apartment block or high-rise building. According to the interviewees, these apartments are often the only alternative when people want to move out of their 'regular' one-family homes and live smaller. It is important to note that living smaller obviously is dependent on the context. Therefore, when the issue of people wanting to live smaller is addressed, it is seen in comparison to a 'regular' one-family home.

4.4.2 Problems on the housing market

In general, the increase of one-person households has led to a mismatch on the housing market. At this moment, there is a relatively high amount of one-family homes while housing demands are changing, and people want to live smaller and with less people. The result of these changing demographics is that more people are looking for a home, which makes it harder to find a suitable home. Also, the alternatives, e.g. for elderly people who want to move and do not want to live in an apartment, are limited. Also, moving to a small apartment can be more expensive than staying in a family home, this has a negative influence on the flow on the housing market. The results from the interviews show that two of the initiatives are explicitly tackling issues faced on the housing market. However, indirectly every initiative is, to a certain extent, impacted by problems on the housing market. The interviews have shown that especially first-time home buyers and people who are looking for 'affordable' housing face problems on the current housing market. A lack of flow on the housing market seems to be the reason in several cases.

As mentioned in the introduction, it is hard for first-time home buyers to buy a house, since prices and the pace they increase are relatively high at this moment (MKB, 2020). At first glance, tiny houses could

be an affordable alternative to regular houses since they are much smaller and generally consume less energy and water. However, after analysing the interviews, differences were shown per initiative whether tiny houses actually are an affordable solution. It depends on how 'luxurious' the tiny houses are and whether there are built multiple houses of the same type. This is because building similar houses can lead to lower production costs as a result of a more efficient building process (Tellinga, 2019). However, the most crucial factor in experiencing a tiny house as affordable is whether it is possible to get a mortgage on the tiny house. As mentioned by Brokenshire (2018), it can be hard to obtain a mortgage, since banks are reluctant to lend money for tiny houses. Although the author discussed the situation in Australia, the participants in the Netherlands came up with the same issues.

Tiny House Ede: "It is not some cheap small project you just do. If you find it too expensive to rent a cheap house and then think, well, then I will go live in a tiny house, you should be ready to spend around €50.000 from your own pocket. (...) It is pretty expensive and also very hard to get a mortgage for it."

Tiny Village Kleinhuizen: "Another reason for cancelled tiny house projects is because people start to realize that everything is much more expensive than expected. Some people think, ahh well, it is such a small house, that must be very cheap. However, it still is quite some money. You also can't get a mortgage and you have to pay for the ground you are on. (...) I can imagine that a bank thinks, if you go bankrupt, what on earth do I do with a tiny house."

Tiny Village Kleinhuizen: "Seniors or retirees stay in their one-family home for a long time because they don't really have an alternative. The alternative is a small apartment, and then they have to spend all their money as well, or they stay in their family home. And that small apartment often is more expensive than the house they live in now. Plus, you don't have a garden, in our initiating group there were quite some elderly people who wanted to have a garden and a house on the ground floor. (...) And it doesn't have to be a tiny house per se, it can also be a smaller house that does not need a lot of maintenance. Especially these people, the group that stays in those large homes, can be convinced to move out."

Tiny House Nijkerk: "Well, the fact is, there just aren't enough houses and the housing market is locked up. Yes, well, then this is a solution for a short period of time."

However, if it is possible to get a loan or mortgage, tiny houses can be an affordable housing option since the total costs of a tiny house is often lower compared to a regular house, even though the average costs per square meter are higher. It is important to note that this is dependent of the area in which the tiny house is built. A tiny house will be a relatively more affordable option to buy in an area of the Netherlands where the average housing prices are high, compared to an area with lower housing prices.

BouwEXPO tiny housing: "Every now and then I check Funda [Dutch housing website] to compare the houses that are for sale. These houses [small homes from inititiative] may cost quite a bit and people all think these house are so expensive, but in this price range, there is just nothing else for sale."

BouwEXPO tiny housing: "People who could not find something else that was affordable, that are the people who live in those tiny towers. They just weren't able to find something on the housing

Another issue on the housing market is that it is hard to buy a house for first-time home buyers. Where the other initiatives were not specifically focused on this group, BouwEXPO had a way in which they made it easier for this group to buy a house. In the BouwEXPO tiny housing initiative it was possible for some residents to start 'climbing the housing ladder'. If the people that were selected to build their own tiny house (more on this in section 4.3.) could not secure the necessary funding, leasing land was an option. Also, every year these people have the chance to end the ground lease and buy the ground for the prevailing land price. This construction, the ability to lease land, makes it easier for people to build a tiny house compared to the initiatives in Ede and the Kleinhuizen initiative since the residents can arrange a deal for the ground. However, the tiny houses still need to be built and people still need money to invest in this.

4.4.3 Societal issues

Another overarching urban planning issue that is addressed by the tiny house initiatives studied in this thesis are societal issues such as housing young people, sheltering asylum status holders and sheltering homeless people. As can be read in table 3, the two initiatives addressing these societal issues are housing associations, namely Tiny House Nijkerk and Tiny House Drachten. These housing associations see tiny houses as an ideal form of their social housing that can be rented out to the aforementioned groups. The initiatives differ in the sense that Tiny House Nijkerk has different target groups and Tiny House Drachten only focuses on homeless people. However, both initiatives emphasise the positive feelings people have because they can live in an actual house by themselves. The young people in the Tiny House Nijkerk initiative, who find it difficult to find a home, now have their own place instead of living at their parents' house, asylum status holders have a place from where they can build up a life, and the people in need of some extra mental and practical support have a place where they can practice with living on their own, but still have the possibility to receive ambulatory care. This latter point is relevant for both the Tiny House Nijkerk as Tiny House Drachten initiative. Both the initiatives see the tiny houses as a steppingstone to 'regular' houses for their target groups, a maximum duration of living in the tiny houses, which varies between a year to five years, enforces this.

With their tiny houses, both the housing association work according the 'housing first' principle (Raad van Volksgezondheid en Samenleving, 2020). Tiny House Drachten shelters people who are or who are becoming homeless but are not eligible for intensive care in an institution. These are precisely the people that the Council for Health and Society (2020) and Trimbos (2015) identify as the 'new type of homeless people'. The idea is that by sheltering people in close proximity of the homeless persons' daily life shortly after they have become homeless, is cheaper, easier and more pleasant for the municipality and homeless person. This is in line with the plead of the Council for Health and Society for creating a buffer in the bottom part of the housing market.

Tiny House Drachten: "(...) so people who become homeless can get out of that homeless situation really fast and can move to a house without having to go through a lot of steps. Because, if you convert these steps to money, it would cost a ridiculously amount of money. (...) Sheltering in a crisis shelter and all the red tape [bureaucracy] around it costs tons of money, with this, you can just solve it close to the source. In that sense, it is an extra shelter for homeless people, in their own region."

However, in multiple conversations, the efficiency of tiny houses was discussed. Sheltering homeless people in a tiny house is less efficient than sheltering homeless people in a high-rise apartment building. It is therefore important to make the goal of a housing association clear. Do they focus on offering as many houses as soon as possible, or is it more important to offer a specific type of house

to a certain target group, e.g. a small home in a small community that can function as a social safety net. In Nijkerk for example, the goal is stimulating integration between the different 'types of residents'; asylum status holders, young people and urgent seekers. In Drachten, it is now possible to offer ambulatory care from the care institution next to the tiny houses. In this specific case, the garden of the care facility is used for the tiny houses. The fact that the houses were 'tiny' made that it was possible to fit them in the garden. This is why the efficiency of tiny houses depends on the goal it aims to tackle.

Tiny Village Kleinhuizen: "Cheaper houses, you could say that, however a friend of mine, she works at a housing association and she says; a tiny house is definitely not cheaper than regular social housing. Maybe it is even more expensive to develop and rent out. (...) plus, obviously you could put more people in an apartment block.

Tiny House Ede: "Well, to be honest, but that is just me looking at it from a business perspective, I don't think it is very efficient. In the same square meters, you could build a gigantic apartment block where way more people can live, that is just more optimal, period. That is also something that is impossible for me to explain to a municipality when they ask why we want to have a an acre for ten tiny houses. What do I say? Because we also want three goats and a food forest?"

4.4.4 Community building

As mentioned in the previous section, one of the goals of a tiny house initiative can be to improve integration amongst different residents. In a tiny house village or neighbourhood, living is less anonymous and community building is seen as an important part of the experience of living in a tiny house. Sharing (public) space, sharing stuff and looking out for each other, which leads to stronger bonds with neighbours, is something that was mentioned as an advantage of tiny houses. A tiny house 'village', a place where multiple tiny houses are located, is a place where people can easily talk to each other and feel connected to each other. In the Tiny House Nijkerk case, the housing association stimulates the residents to help each other out and this community feeling led to the stimulation of integration of asylum status holders and an experienced social safety net.

Tiny Village Kleinhuizen: "We had some elderly people who wanted a garden, but they did not want to have full responsibility of that garden. They would rather see that younger people were going to help them with that. That is something I think is very interesting." (...) Another thing I believe in is community building, just being connected to your neighbours. If you see how we do it here, that is just fantastic! (...) We don't have any fences between the houses, you share everything, and you just care for each other."

Tiny House Nijkerk: "Eventually it is important to us to have a balanced distribution of the different groups. A place where you can support each other and can improve integration, but also can help the young people. The social part is just very important. At the moment that someone realizes that he or she has a safety net, that just feels good. (...) And I have to say that, well a community is maybe a bit too elusive, but it really feels like a village, a small city on its own."

4.4.5 Temporary housing

As was already mentioned in section 4.3.3, some initiatives have fixed periods of time in which people are allowed to live in a tiny house. However, not only housing associations use these houses as temporary houses. The results show that a tiny house can be an ideal option for people who are in need of temporary housing and for people who are so-called 'urgent seekers'. These urgent seekers

need a place to live on very short notice and a tiny house can be a good option for these people. A group that was mentioned by different participants is the group of recently divorced people. In this situation, the divorcees that live in a tiny house will have a full functioning home and can look for another place from there.

Tiny House Nijkerk: "You notice that people get some air. Often these people are going through a divorce, they have psychological problems caused by this and here they get some rest, a place for themselves."

BouwEXPO Almere: "And not completely unexpected, with the houses that are used to rent out to other people, the divorced man or woman comes into the picture. Also, we have two other tiny houses that are bought by an international company in Almere which let their expats live in the houses."

Another way people can use tiny houses temporarily is, as can be read in the quotes above, as a place for expats during the period they work for the company.

4.4.6 Guarding a vacant site (ground guardianship)

Another possible function of tiny houses is guarding a vacant site, also called ground guardianship. A vacant site can be temporarily guarded by a group of tiny houses and their residents. In this way, a site that otherwise would be empty and unused for a period of time, can now be used. Also, the residents of the tiny houses can keep an eye on what happens on and around the terrain. Only one of the initiatives studied in this thesis acted as ground guardian, however, this is something that could be interesting for other places as well. Tiny houses can be an ideal solution when ground owners need a short-term solution on a short notice. Since tiny house owners often face difficulties in finding a location, there are quite some people who have a tiny house that is already been built. This means that a vacant site can be guarded on a short notice and that tiny house owners found a location for their house. The fact that many tiny houses are mobile, makes them more suitable to use for temporary ground. In this way, tiny house owners can have a place to live for a period of time and a vacant site is useful again.

In the case of Tiny Village Kleinhuizen, the initiative that tackled the issue of ground guardianship, there is a leasing contract for the ground for approximately a year. This means that the tiny house residents do not obtain any rights by living at the terrain. This contract and construction make it easier for (local) governments to allow tiny houses as temporary ground guardians since the zoning plans are not jeopardised. Flexibility, however, is a crucial factor for this group of tiny house owners. Since ground guardianship is temporary, it could mean that the next available terrain is far away from the current one or cannot be found at all. Next to guarding the terrain in the sense that they are present, the residents also report to the local police when something suspicious is happening in the area of the site. In this way, they keep the area safe and prevent people from using the terrain for vandalism or other criminal activities. Another goal of the initiative is to leave the place more beautiful than when they came there. They for instance removed trash, old fences and created kitchen gardens.

The results show an example of how vacant sites can temporarily be used by tiny houses. There are a lot of temporarily vacant areas in the country and there are a lot of tiny house owners who are looking for a location.

Tiny Village Kleinhuizen: "In this case it was, well, "we have a piece of ground, but we do not have a place we can put those anti-squatters". Then the idea came, what if we let people bring their own house, then we immediately solve our problem."

Tiny Village Kleinhuizen: "Originally, there were buildings here. They removed it and there is a new plan for this terrain. We are just here in the meantime. So basically we're in between two zoning plans."

4.4.7 Reducing ecological footprint

The last overarching urban planning issue addressed by the tiny house initiatives is reducing the ecological footprint of housing. In the introduction it is mentioned that by owning less and sharing more, the ecological footprint of households can be reduced (European Environment Agency, 2015). In that sense, living in a tiny house could tackle the issue of the large ecological footprint of housing. The data also show that this is an issue tackled by several tiny house initiatives. Even though there are some critics toward the actual sustainability of tiny houses, the majority sees tiny houses as a way of living sustainably. Reducing the ecological footprint mostly focuses on living in a smaller house, which make people more conscious of what they own, what they need and how to consume less. It seems important to be aware of the materials that are used, since building new houses always has an effect on the environment. Building a tiny house is often accompanied by installing new systems and using qualitative materials. Being aware and looking for the most sustainable options seems to be important when wanting to reduce to ecological footprint of housing.

BouwEXPO tiny housing: "A part of the residents are people who consciously want to contribute in a sustainable way."

Tiny Village Kleinhuizen: "For me personally, I do believe that by living smaller, living more consciously and sharing more, you are reducing your ecological footprint. So yes, of course, it is a drop in the ocean, just a couple of tiny house residents, but you can be an example, you inspire."

Tiny house Ede: "Minimalistic living is nice of course, but that is also possible in a regular house. The same goes for living sustainably, I mean, I am a vegetarian in this [regular] house and we can also put solar panels on our roof here."

As can be concluded from the aforementioned examples, tiny houses could be that innovative approach which is reflexive, explorative and experimental, since a tiny house can be built on a very short term, the house are often relatively easy to move and tiny houses are experimental. It seems therefore reasonable to assume a tiny house can function as niche innovation. Later in this chapter, this assumption and its pressure on the governmental regime is discussed.

4.5 Role of government

As mentioned in the theoretical framework as well as in the conceptual model, three different local governments' roles are distinguished; the initiative role, the facilitative role and the restrictive role. These roles are studied by using the experiences of the participants. The data show that not only the local government, but also the national government can play a role in the emergence of a tiny house initiative. This section is organised based on the three distinguished roles in the conceptual model. It will first show the results linked to the national government role and after that, the role of the local government is discussed. In the end of this section, the influence of the general political situation is shortly mentioned.

Gove	rnmental role	Tiny House Nijkerk	Tiny House Drachten	Tiny Village Kleinhuizen	BouwEXPO tiny housing	Tiny House Ede
	Initiating				Х	
Local government	Facilitating by network structuration	Х		Х		Х
	Facilitation by process management	Х	Х		Х	Х
	Restricting					Х
National government	Initiating			Х		
	Facilitating by network structuration					
	Facilitation by process management	Х			Х	
Nation	Restricting					Х

Table 4: Governmental role experienced by interviewees

4.5.1 Role of national government

The Dutch national government has general laws and rules to which the initiatives have to comply. The results show that building codes and zoning plans are the most relevant regulatory frameworks for the initiatives studied in this thesis. A building code is a set of national rules in which the standards of constructed objects are specified by the national government, and a local zoning plan decides how a certain plot, land or area can be used and is constructed by a local government (Netherlands Enterprise Agency, 2020; Bregman et al., 2019). These local governments, the level of the Dutch government that is mostly affiliated to the tiny house initiatives, also have to comply to the national regulatory framework. As mentioned in the second chapter, within this national regulatory framework, they can create a more fruitful climate for initiatives by *facilitation by network structuration* (Bakker et al., 2012). One of the aspects of network structuration is creating a positive framework of domain-specific rules within this national framework of laws and rules. Next to setting a regulatory framework, the national government can also play a more active role towards the initiatives, namely an initiating or facilitating role. These two roles, and a restrictive governmental role are discussed.

Initiating role

An unexpected result was that Tiny Village Kleinhuizen was initiated by a national governmental organisation, namely Rijksvastgoedbedrijf (Governmental Real Estate Agency). A collaboration with a vacancy managing company (leegstandbeheerder) made it possible to rent out their military grounds. Since the tiny house residents do not build up any legal rights during their time at the military plot, the Rijksvastgoedbedrijf can use the plot again after the contract ends. With this initiative, the

Rijksvastgoedbedrijf offers a location for tiny house owners who are willing to live somewhere temporarily.

Tiny Village Kleinhuizen: "This is a plot from the military and almost all military grounds are property of Rijksvastgoedbedrijf. They just wanted guards on their terrain and so they cranked this up."

Facilitating role

As expected, in many of the studied initiatives the role of the local government was larger than the role of the national government. However, next to the national regulatory framework, the national government did some facilitation by process management with the Tiny House Nijkerk initiative. The initiative was indirectly subsidised by the national government, since the property tax was lowered after the tiny houses were built. Also, the national government offered support to BouwEXPO Almere, if the initiative would experience any problems with the building prescriptions.

Overall, several interviewees mentioned or hinted at the Omgevingswet. With the Omgevingswet, the national government constructs a regulatory framework which is more flexible and open for bottom-up ideas like tiny houses. One of the components of the Omgevingswet — which is planned to be implemented in January 2022 - is that certain restrictive (environmental) standards will be easier to adjust to local standards. As a result of that, the local government will have more power to change (environmental) standards, so tiny houses could be facilitated more easily.

Restrictive role

The data show that the national government is experienced as restrictive by several interviewees. According to one of the interviewees, a major reason for not being able to find a suitable tiny house location are the national environmental standards. Restricting factors linked to the environmental laws were the protection of Natura2000 areas and the environmental zoning standards regarding smell, emission and wind. Despite the fact that only one of the studied initiatives has not been built, the building codes and environmental standards were experienced as most restricting factor in the process, also by other initiatives. However, except for the Tiny House Ede initiative participant, most of the other participants also acknowledged the value of these rules.

Tiny House Ede: "Well yes, its [national government] influence was mostly negative. I really have the idea that the municipality of Ede said, we are also bound by the national and provincial laws, so a lot of things are just not allowed."

Tiny House Ede: "Then you have those noise pollution and environmental laws (...) So, there was a very beautiful meadow, from about one acre, well in this part *points at a part* you cannot live because there is a piggery and in this part *points at another part* it was not allowed because there is a transportation company. So, we would end up with a tiny piece of ground we could use to build on and had to pay around €600.000 for it."

BouwEXPO Almere: "For example, in our case there is a large wind load, since we are located in a polder. That means that some of the houses, as a result of their shape, needed to have concrete building piles."

4.5.2 Local government role

Apart from the aforementioned situations, most of the initiatives were mainly influenced by their local government. The planning system in the Netherlands is constructed in such a way that lower levels of governance have the authority to make a lot of decisions regarding local issues like zoning plans, the approach of local problem and how they implement general national regulations in local decision (Loorbach, 2010).

Initiating role

The BouwEXPO Tiny Housing is the only initiative studied in this thesis in which the local government, the municipality of Almere, was the initiator. Together with the Woningbouwatelier (Housing Construction Atelier), an organization within the municipality of Almere, they initiated the tiny house initiative. According to the interviewee of BouwEXPO tiny housing, the most striking difference compared to other tiny house situations in the Netherlands, was the fact that the municipality started the process with offering a piece of ground instead of tiny house enthusiasts who had to search for a place. The fact that the local government had an initiating role seemed to have a very positive effect on the process and organization of the initiative of BouwEXPO tiny housing. According to the interviewee, residents were satisfied with the process, and except for a view tiny house builders who faced difficulties to comply to the general Dutch building code requirements, the interviewee did not mention any complaints regarding the role of the local government. However, even though the interviewee was in close contact with the residents and the tiny house initiative is indeed successful, it is important to keep in mind that the interviewee was part of the municipality and could therefore have a different experience than residents.

Another aspect linked to the initiating role of the local government that was shown by the data, is that in both the housing association cases, Tiny House Drachten and Tiny House Nijkerk, the local government functioned as driver for the initiatives. The local governments stimulated the housing associations to address the problems they currently tackle. However, in these cases, the local governments did not have anything to do with the actual tiny houses. The idea of using tiny houses and the initiative itself is initiated by the housing associations.

BouwEXPO Almere: "That was that initiating part, this also was associated with us [municipality of Almere] making available a piece of ground. That is a huge difference compared to other situations in the Netherlands."

Facilitating role

As mentioned in the theoretical framework, two different kinds of facilitation are distinguished in this thesis, facilitation by network structuration and facilitation by process management. Both of these types of facilitation were offered by the local governments studied in this initiative. Overall, facilitation by local governments was an important factor for the tiny house initiatives. The respondents indicated that a facilitating local government was not only useful for the realisation of the tiny house initiative, a good relationship with the local governments is also important for the participants since the parties are often in close contact during the process. Table 5 presents the different ways in which local governments have facilitated the tiny house initiatives.

Facilitation by network structuration	Facilitation by process management
Creating addresses for tiny houses	Supporting with obtaining right permits
Mobilising people who are interested in tiny houses	Providing accurate information
Temporary exemption of the local zoning plan	Asking critical questions within municipality
	Offering a location
	Preparation and maintenance of location
	Offering a specific municipal employee who was available for questions and support

Table 5: Facilitation by the local governments studied in this thesis

The first type of facilitation discussed here is facilitation by network structuration. As mentioned in the second chapter, facilitation by network structuration entails creating a positive framework of domain-specific rules and the act of mobilizing citizens (Bakker et al., 2012). This type of facilitation happened in several initiatives. Arranging a temporary exemption of a zoning plan, for example, is a facilitating action that was experienced as very pleasant by interviewees. Other examples of facilitation by network structuration can be read in table 5.

Tiny Village Kleinhuizen: "The municipality of Zeist was quite flexible and made that we had an address for our time here. That was really nice."

Tiny House Nijkerk: "The actual zoning plan of this location is different, but the municipality arranged an exemption for ten years."

The other type of facilitation, facilitation by process management, is also experienced by several of the interviewees. This type of facilitation is focused on steering the interaction in a way that it may help citizens reach their goal or solve joint problems and this can consist verbal or physical acts (Bakker et al., 2012). Four of the five studied initiatives experienced local governments that facilitated through process management. Table 5 shows how local governments facilitated by process management.

Tiny House Ede: "We were in close contact with a local councilor who helped us a lot. For example, he asked an alderperson during meetings why it was taking all so long."

Tiny House Nijkerk: "Well, the municipality guarantees an available location for at least two periods of ten year. (...) and they rent out the ground for a fixed price!"

Striking is that despite the fact that this facilitation helped the majority of the initiatives, it does not per se lead to a successful initiative. The municipality of Ede mobilized citizens, an enthusiastic local counsellor helped during the process of obtaining approval within the municipality and asked critical question. The municipality of Ede also proposed two different locations and offered an employee as contact person who organized meetings for the initiative group. However, the tiny house initiative group has not found a suitable location. The participant indicates that the municipality was keeping them in suspense, while they already knew that there was no real support base from within the local political parties.

Tiny House Ede: "Yes, they arranged a contact person for us, but to summarize it a bit disrespectful, that person did not really get it. (...) There was also one very enthusiastic local alderperson, but he also knew that the rest did not really shared his enthusiasm. So, my summary is that were kept in suspense, because they already knew there was no support base."

Restrictive role

The lack of support base mentioned in the previous paragraph is, according to the interviewee of Tiny House Ede, the main reason that the initiative has not found a place to build their tiny houses. Next to the national environmental standards and personal preferences that hindered the initiative group of Tiny House Ede to find a suitable place, the local government is also been perceived as blocking the tiny house initiative from being allowed at several grounds. In the end, voting within the bench of Mayor and Alderman restricted the tiny house initiative from happening on two of the around 50 proposed locations by the tiny house initiative.

Tiny House Ede: "The municipality of Ede has a lot of land as a result of buying the chicken farms that produced too much ammoniac. So we have a lot of land, however, the political farmer party is really big in Ede, and they protect the farmers. So, they just want that the land is used by a farmer."

Not only in the case of Tiny House Ede, but also with the other tiny house initiatives, the political situation of a local government is often decisive in allowing a (tiny house) initiative in a municipality. Not only the political preferences in a city council or bench of Mayor and Aldermen can determine the chances of a tiny house initiative, also the governmental agenda's, e.g. a coalition agreement, can influence the emergence of a tiny house initiative. Moreover, the fact that the Netherlands is 'locked up in zoning-plans' makes it also hard for tiny house initiatives to find a suitable location. With the upcoming Omgevingswet, it might be easier for local municipalities to alter these zoning plans. However, as the interviewee from BouwEXPO tiny house emphasises, zoning plans exist for a reason. It makes sense that governments are reluctant to just alter a zoning plan.

BouwEXPO tiny housing: "Zoning plans are quite frozen in the Netherlands, there are almost no zoning plans that allow you to just build a couple of tiny houses there."

BouwEXPO tiny housing: "A zoning plan is not something the municipality use to bully citizens, it actually is a document that functions between governance and citizens, the government is guarding this. This is because people want some kind of guarantee that if they buy a house for €600.000, no one will unexpectedly build a giant tower next to it."

Ideal role of local government

When the interviewees were asked what the ideal role of a local government was, all interviewees indicated a preference for a facilitating local government. Within this facilitating role, being honest about the chance of succeeding, was an important aspect. More practical facilitation included exemptions on local laws, like environmental standards and zoning plans.

4.6 Shift in governmental thinking

Not only does the conceptual model (figure 1) represents the assumption that initiatives are influenced by the local governments, it also shows the assumption that the tiny house initiatives act as niche-innovations that pressure the governmental regime in such a way that a shift in governmental thinking can take place. This shift in governmental thinking focuses on considering tackling urban planning issues with tiny houses.

More tiny house initiatives are emerging in the Netherlands (Tiny House Nederland, 2020d) and the existence of these tiny house initiatives inspire other people to live tiny. The data show that future and existing tiny house initiatives put pressure on local governments and can also use other initiatives to do this with. For example, Tiny House Ede used existing initiatives to show their local government how

other municipalities facilitated the tiny houses. Also, existing tiny house initiatives have an effect on actors who decide about social housing. The participant from housing association Zienn, linked to Tiny House Drachten, stated that they were inspired to think differently about housing and, in this case, sheltering homeless people.

The difficulties faced when searching for a location for a tiny house are discussed with multiple interviewees. This shows that a lot of initiatives in the Netherlands still find it difficult to find a suitable location for their tiny houses, however, the data also show that the local and national governments studied in this thesis, seem to be open to the idea of tiny houses. This openness towards tiny houses shows in the high level of facilitation by many local governments. It also seems that this can be a result of pressure of tiny house initiatives looking for a location, existing tiny house initiative and the existence of the Tiny House Movement (more on this in section 4.7).

Tiny House Drachten: "Yes, in Sneek you rent them for quite a low price and in Hardegarijp you can buy them, that is even better! (...) Simply amazing! That is also how I became 'infected by the virus', there are so many possibilities beyond regular housing."

Tiny House Ede: "Oh, for sure. We also went to see some other initiatives: In The Hague and Nieuwegein. Also on the internet, on the Facebook page from Tiny House Nederland, people share a lot. We even have used plans of other municipalities which we showed the municipality of Ede."

4.7 Tiny house movement

As mentioned in the previous section, the Tiny House Movement and its influence on the tiny house initiatives are also studied in this thesis. When looking at the influence of the Tiny House Movement, it is important to note the difference between the influence of the attention given to the Tiny House Movement by media and the influence of the actual vision and ideas of the Tiny House Movement. The data show that all initiatives studied in this thesis are directly or indirectly influenced by the publicity around the Tiny House Movement and three of the initiatives are also (at least partly) influenced by the vision and ideas of the movement.

Influenced by the attention for the movement

The aforementioned indirect influence means that interviewees got familiar with the concept of tiny houses as a result of the spread of the Tiny House Movement. For example, two initiatives from the housing associations, Tiny House Drachten and Tiny House Nijkerk, were inspired by the Tiny House Movement in the sense that they liked the tiny houses without linking it to the visions of the movement. It made them consider tiny houses as a strategy to tackle the issues of their municipality instead of using conventional housing.

BouwEXPO tiny housing: "For me it is important that what can be seen in Almere [BouwEXPO tiny housing], isn't a direct result of the Tiny House Movement. It coincidentally came together. However, it was also not that coincidental. Apparently the time is right to think about living smaller in the Netherlands."

Tiny House Drachten: "It is not that we look at it as a way of life, but of course, we saw how these tiny houses look and what advantages they have. (...) So, we did use the idea of a tiny house and the examples we saw, however, we changed it to our units.

Tiny House Nijkerk: "Yes, I've heard of it. (...) there are people who also like to live off-the-grid and stuff (...) but that has nothing to do with this."

Tiny House Ede: "Eh.. well yes, I think for a lot of people it is a motivation, living simply and stuff, but everyone also has their personal motives. However, I do think that it [the initiative] started when the hype was there. So yes, I think that it lifted on the hype and that that was a reason to start the initiative."

Influenced by the vision of the movement

As mentioned above, two of the five studied initiatives are not based on the principles of the Tiny House Movement. The other three initiatives, however, do endorse the vision and ideas of the movement at least to a certain level. The participants from these initiatives refer to the Dutch foundation Tiny House Nederland as an organisation that is based on roughly the same principles as the Tiny House Movement. Tiny House Nederland is a foundation that aims to make living in a tiny house possible for a large group and aims to spread knowledge about tiny houses and its possibilities. It sees tiny houses as a basis for living more consciously and sustainably and they think tiny houses make people aware of what they need. So, instead of living according to the thoughts of the American Tiny House Movement, it appeared that these initiatives feel more connected to the Dutch 'version' of the Tiny House Movement. A possible reason for this could be that the planning culture in the Netherlands is different than the planning culture in the United States. One participant mentions that the freedom that is linked to the American Tiny House Movement does not fit the Dutch planning culture. The fact that a tiny house initiative is initiated by a government is, according to the interviewee from BouwEXPO tiny housing, per definition in conflict with the thoughts of the Tiny House Movement, since this movement focuses on bottom-up initiatives from citizens. This participant referred to a large group of tiny house owners who chose to live in a tiny house during the financial crisis of 2008 because of financial reasons. They did not want to be dependent on financial institutions for a mortgage and wanted to live freely.

It is important to acknowledge that within the initiatives, individuals have different personal motives to live in a tiny house. This is also why it can happen that some inhabitants do identify with the vision of the Tiny House Movement and others do not.

Tiny House Kleinhuizen: "Yes I think you can say that, that is what excites people. It [Tiny House Movement] causes that people build a tiny house and start looking for a location. By the way, there are more people who live here and work at Tiny House Nederland. Within that small network, people help each other. So in that sense, yes, I think it starts with the movement. More and more people are joining that movement and that causes an increase in the need for tiny house spots."

Chapter 5: Conclusion, discussion and reflection

This thesis aimed to answer the main research question "How can tiny houses be used by local governments as a strategy to tackle various urban planning issues in the Netherlands?". This chapter discusses and interpret the results in the context of the conceptual model and the literature review. It also contains a conclusion of the results

5.1 Discussion

Tackling urban planning issues

The studied tiny house initiatives tackled urban planning issues linked to the changing housing demands, problems faced on the housing market, various societal issues, temporary housing problems, community building, ground guardianship and the large ecological footprint of housing. All the initiatives seem successful in tackling these issues and can function as an example of how tiny houses can be used to tackle urban planning problems. However, a few of these tackled issues and the efficiency of these tiny house initiatives need a critical perspective.

Using tiny houses to tackle societal issues can be efficient, however its efficiency seems to depend on the specific societal goal. Tiny houses seem to be useful when housing is needed on a short term. Tiny houses can be built and placed on short notice and it therefore seems to fit in the 'housing first' advice from the Council for Health and Society (Raad voor Volksgezondheid en Samenleving, 2020). Tiny houses also seem successful in improving integration from e.g. asylum status holders in the Dutch society. However, if the goal is to shelter high amounts of people, tiny houses are not the most efficient strategy. A large apartment block may not be stimulating integration like tiny houses do, it can however shelter significantly more people. The efficiency discussion is also present when tiny houses are used for temporary housing. It is therefore important to acknowledge the value of having a 'real' house, but in a tiny size. This could be valuable for companies that arrange housing for their expats or for a recently divorced person who needs housing on a short term. In both examples, regular housing and apartments are still a possibility as well, however, a tiny house could be more fitting to the wishes of these groups.

The strategy to use tiny houses to tackle problems faced on the housing market and to responds to changing housing demands, seems reasonable. By adding a new type of housing to the housing market, one-person households are able to move to a house that suits their household size. This may include elderly who still live in a one-family house and who are not ready to go to a nursery, or include parents whose children left the house and who do not want to live in an apartment block. A tiny house could also be an option for young single people who are looking for a place where they can live alone, but who do not want to live in a one-family home. By moving these people to a suitable house, it seems plausible that the flow on the housing market is stimulated. Important to emphasise is that this addition to the housing market focuses on a new type of small housing and not on a typical tiny house per se. However, Tiny houses seem to be a representation of the 'small houses' trend.

Another function of tiny houses discussed in this thesis is ground guardianship, which is a solution for both governmental institutions with temporary vacant areas as for tiny house owners looking for a location. A flexible mindset from both these groups, however, is crucial. It is therefore important to realise that this tiny house function relates to a specific group of tiny house owners, namely the type of people who aim to not settle down at one place permanently. Especially this characteristic can be found within people who want to live in tiny houses. This, and the fact that tiny houses often have the

possibility to be moved, make tiny houses an ideal strategy for temporarily guarding and using a vacant area.

Using tiny houses to reduce the ecological footprint of housing is also subject of discussion. Tackling this issue with tiny houses is mostly focused on living sustainably. Living in a tiny house often means that less energy and water is consumed and there even is a possibility to be self-sufficient. The counterargument is that living sustainably is also possible in a regular home. Since all tiny houses are different, it seems that the sustainable lifestyle that is often linked to tiny houses, is most decisive in the argument whether tiny houses reduce the ecological footprint of housing. Specific research on comparing emission of tiny houses with existing houses, newly constructed houses, and renovated houses could provide more insights in the extent to which tiny houses reduce the ecological footprint of housing.

Transition

It is assumed that existing and potential tiny house initiatives act as niche-innovation and that they influence the governmental view in such a way that it would consider tiny houses as a strategy to tackle urban planning issues. Without being able to conclude that a shift took place in the national and local governments in general, it can be concluded that a national governmental institution and a municipality used tiny houses to tackle an urban planning issue. It can also be concluded that other non-governmental actors, namely actors from housing associations, used tiny houses to tackle housing issues that usually are addressed differently. It can therefore cautiously be assumed that the increase of existing and potential tiny house initiatives can lead to a change in thinking about urban planning issues and the governmental approach of them.

The other assumption is that the shift in governmental thinking can potentially restructure governance patterns. The term *transition* is used to describe the latter and is also defined as a shift from one governmental regime to another (Hölscher et al., 2018). The assumption included that long-term sustainable visions and solutions could be developed in a 'new mode of governance'. A mode of governance in which there is a new balance between the market, society and the state. It is possible that the Omgevingswet, which is planned to be implemented in January 2022, is that new mode of governance. Despite that no direct causal relationship can be found between the influence of tiny house initiatives and the new law, the national government is constructing a regulatory framework which is more flexible and open for bottom-up ideas like tiny houses. This is in line with the Dutch government's aim to stimulate responsible and active citizenship (Bakker et al., 2012). Citizens who are actively committing to tackle sustainability issues and who are willing to act as guardians on a vacant site, are precisely the group that should be facilitated by this new law. Another component of the Omgevingswet is that certain restrictive (environmental) standards will be easier to adjust to local standards. As a result of that, the local government will have more power to adjust these standards, so tiny houses can be facilitated more easily.

Role local governments

Regarding the role of local governments, three different roles are distinguished; an initiative role, a facilitative role and a restrictive role. Facilitation by local governments seems to be crucial for the emergence of a tiny house initiative and a good relationship between the two also appears to be important. In the light of the new Omgevingswet, it is however interesting to be critical towards the facilitating government. Possible facilitative actions of local governments can include granting (temporary) exemptions on local laws or mobilising people, which is referred to *facilitation by network structuration* (Bakker et al., 2012). They can also facilitate by actively supporting citizens or other

initiators with obtaining the right permits, by offering them a piece of ground for the tiny houses, site preparation and other activities that are categorised as *facilitation by process management* (Bakker et al., 2012). The critical view on a facilitating government comes from, amongst others, a study on civic self-reliance with a critical view on the idea that citizens should fill up gaps from governments in the society (Ubels, 2020). It seems therefore important to emphasise that the new mode of governance mentioned earlier in this chapter, with its new balance between market, society and the state, should not solely rely on active citizenship in tackling urban planning issues. It is also interesting to mention that even though a municipality can be facilitating in the start of the process, it can still be experienced as restricting as a result of local legal frameworks, political fragmentation and lack of joint vision. From a municipal perspective, it may be useful to reach consensus on the topic of tiny houses, so that it is clear for tiny house initiatives whether it is possible to start a tiny house initiative in a certain municipality.

Not only the local, but also the national government played a role in the emergence of the tiny house initiatives. Within that role, it was the national legal framework that had the biggest impact on the tiny house initiatives. Strict rules regarding nature preservation and building prescriptions such as the required concrete building piles, could not be adjusted by the local government and could therefore be experienced as a restricting factor of the national government. However, again the new Omgevingswet was mentioned as a way to diminish the restrictions from the national government. A surprising result was that the national government can be an initiator of a tiny house initiative as well. By owning many sites and buildings in the Netherlands, the Rijksvastgoedbedrijf can play a large role in the emergence of tiny house as ground guardians. Especially the collaboration with a vacancy managing company was successful and can be seen as an opportunity for local and national governments in facilitating tiny houses on vacant sites. With this construction, tiny house residents do not build up any legal rights, this means that after their contract ends, the residents have to leave the site and government can use their grounds again. This is also an opportunity for a specific group of tiny house owners, who are looking for a place where they do not have to settle permanently.

Tiny House Movement

As mentioned in the introduction, the term tiny house originally stems from the Tiny House Movement, a movement that started in the United States. Their vision and ideas have spread, and the concept of tiny houses reached other parts of the world. The vision and ideas of the Tiny House Movement can be summarised as living freely without relying on financial institutions, decluttering in order to become happier, reducing the ecological footprint and most important, encouraging to live a simpler life in a smaller space. The results show that all initiatives studied in this thesis are at least indirectly inspired by the movement, mainly as a result of the publicity around the Tiny House Movement. The results also show that it is hard to compare the visions of the American Tiny House Movement to the Dutch tiny house initiatives, since both countries have different planning cultures. For example, the Dutch planning system is not adjusted to individuals who do not want to settle in a place permanently.

This foundation also promotes living consciously and sustainably and states that tiny houses make people happy. The difference with the Tiny House Movement is that Tiny House Nederland gives information, organises workshops and is actively promoting tiny houses in the Dutch governmental context. The active role of the foundation can be linked to the statement of Brokenshire (2018) that various (economic) barriers would diminish when tiny houses are acknowledged as a housing option. The Dutch foundation actively commits to the acknowledgement of tiny houses and it therefore seems that the foundation Tiny House Nederland plays a larger role in the emergence of tiny house initiatives in the Netherlands than the Tiny House Movement that started in the United States.

Concluding, it seems that the American Tiny House Movement can function as a direct or indirect inspiration for Dutch tiny house initiatives. The Tiny House Movement made tiny houses more well-known via media and this caused an increase of attention for and growth of actual tiny houses in The Netherlands. This increase made that actors, who do not identify with the thoughts of the movement, were inspired to use the tiny houses for other purposes, such as homeless shelters, than just the purposes of the Tiny House Movement.

5.2 Conclusion

5.2.1 Sub research questions

Who initiated the tiny house initiatives and how were the initiatives set up?

The tiny house initiatives studied in this thesis were initiated by housing associations, a local government, a national governmental organisation, and a group of citizens. Some initiatives started with an urban planning issue that had to be tackled, another initiative started with people who wanted to live in a tiny house and who were looking for a location and one initiative combined an urban planning issue that had to be tackled and a group of people who were looking for a location. One initiative even started with an ideas competition from where tiny houses were selected that could be constructed. It can be concluded that there are many differences within tiny house initiatives studied in this thesis.

What urban planning issues are tackled by existing tiny house initiatives?

Tiny houses seem to tackle various urban planning problems. Thirteen different issues are mentioned by the participants in this thesis and seven overarching urban planning issues were distinguished, namely the changing housing demands, problems faced on the housing market, societal issues, temporary housing, community building, ground guardianship and the large ecological footprint of housing.

Can tiny house initiatives influence local governmental approaches to urban planning issues?

Existing and potential tiny houses seem to pressure local governments in such a way that they influence governmental approaches of urban planning issues. Tiny house initiatives can pressure local governments by approaching municipalities and indicate that the initiative is looking for a location, the foundation Tiny House Nederland is actively promoting tiny houses in the Dutch governmental context, and existing tiny house initiatives show the possibilities of the houses. Being exposed to existing and potential initiatives, and seeing its successes and possibilities, were reasons for both governmental- as non-governmental actors to use tiny houses as a strategy to address the aforementioned urban planning issues.

What is the role of local governments in these tiny house initiatives?

The results show that local governments play a large role in the emergence of tiny house initiatives and that a facilitating role is crucial for the existence of these initiatives. The results also show that a good relationship with the local government is important for the initiatives. Local governments facilitated the tiny house initiatives by mobilising citizens that are interested in tiny houses and by offering support during the process of obtaining the right permits. They also facilitated through (temporarily) exempting local laws, e.g. zoning plans, and, if local governments have that possibility, they could offer a location and prepare the site.

Next to a facilitative role, local and national governments can be experienced as restrictive as well, especially when there is political fragmentation and lack of joint vision within a municipality. The

national government can be experienced as restrictive as a result of the strict building prescriptions and national legal frameworks around environmental standards. The last role distinguished in this thesis was the role of initiator of a tiny house initiative. A local or national government as initiator had a positive impact on the process of setting up the initiative.

How are the tiny house initiatives influenced by the Tiny House Movement?

The results show that all initiatives were influenced directly or indirectly by the Tiny House Movement, which started in the United States. In general, the publicity of the movement in the media made people aware of the existence of tiny houses and made them consider this new type of houses. This meant that people were not per se inspired by the vision and ideas of the movement, but that the movement acted as inspiration to use tiny houses.

There were also initiatives that did identify with the pillars of the Tiny House movement; e.g. reducing the ecological footprint, living freely and decluttering in order to become happier. The Dutch foundation Tiny House Nederland, however, seems to play a larger role in these tiny house initiatives. Tiny House Nederland is a foundation that is roughly based on the same ideas as the Tiny House Movement, but its focus is on promoting tiny houses in the Dutch governmental context. It can therefore be concluded that the Tiny House Movement act as a direct or indirect inspiration for tiny house initiatives, but that Tiny House Nederland is more relevant for tiny house initiatives.

5.2.2 Main research question

"How can tiny houses be used by local governments as a strategy to tackle various urban planning issues in the Netherlands?"

Local governments can use tiny houses as a strategy to tackle various urban planning issues in two ways. They can actively initiate tiny house initiatives, or they can facilitate active citizens, housing associations or other parties in setting up a tiny house initiative. The results show that tiny house initiatives in the Netherlands successfully tackle several problems on the housing market and respond to changing housing demands. The initiatives tackle several societal issues, function as a solution for temporary housing problems and they can play a role in reducing the ecological footprint of housing. Next to this, tiny houses can function as ground guardians on vacant sites and can have a positive effect on community building and integration.

The results show that a facilitating local government is necessary for the emergence of a tiny house initiative. By allowing tiny house initiatives, local governments can give more space to bottom-up initiatives that are a result of active citizenship. This is in line with the goals of the Omgevingswet, which will be implemented in 2022. It also gives space to pro-active housing associations that aim to tackle societal issues with tiny houses. By facilitating these initiatives, e.g. by offering a location, by (temporarily) altering a zoning plan or by offering support during the process, many urban planning issues can be tackled by these groups. In this way, local governments give space to a new type of housing, and with it automatically tackles urban planning issues, without having to be heavily involved. This is in line with the idea that governments are promoting active citizenship (Bakker et al., 2012).

However, as mentioned in the discussion, it is important for governments to not solely rely on active citizens when it comes to tackling urban planning issues. By actively adding tiny houses as a housing option, local and national governments can respond to the changing housing demands and stimulate the flow on the housing market. Important to note is that many urban planning issues can also be tackled by small homes that do not look like the typical tiny houses. A shift in governmental thinking about issues and their approaches, for instance adding a new type of housing, seems more crucial than actually building tiny houses all over the Netherlands. It seems that tiny house initiatives represent a

new way of living, namely living in a small home instead of a large one-family house, and function as inspiration for this shift in governmental thinking. However, the shift should not only take place in governmental thinking, but also in commercial and non-commercial sectors.

What could this mean for urban planning practice?

This study contributes to our understanding of how tiny houses can function as a strategy for tackling urban planning issues. Urban planning is a field that touches upon a board variety of (societal) issues, some of which are also studied in this thesis. The tiny house initiatives studied in this thesis show that the houses are experimental, innovative, explorative and reflexive in the way they tackle urban planning issues. Tiny houses are therefore an ideal concept to take into consideration in the urban planning practice. The tiny houses can function as inspiration for urban planners and stimulate them to think differently about planning strategies, e.g. on the housing market. This study is an exploration of the different functions of tiny houses and can be an inspiration for local and national governments, housing associations, spatial consultancy companies and individuals.

Further research

Additional research on specific topics is necessary to gain more insights in the effectivity of tiny houses. This includes but is not limited to a study on what effect adding tiny houses as housing option has on the housing market and its problems, a study on the effectivity of sheltering homeless people in tiny houses compared to other shelter options, a study on the ecological footprint of a tiny house compared to other types of housing, a study on the wishes of different types of urgent seekers and a study on the effectivity of tiny houses that act as guardians on vacant areas.

5.3 Reflection

This explorative qualitative research contributed to the knowledge around tiny house initiatives and how these can tackle urban planning issues. However, several statements regarding the limitations of this study are necessary.

Considering the COVID-19 crisis, several adjustments had to be made during the research process. The scope of the study had to be changed, since my exchange was cancelled as a result of the COVID-19 crisis. Initially, the plan was to focus on a tiny house initiative that functions as a homeless shelter in Seattle in the United States. After the cancellation of the exchange, the focus shifted to tiny house initiatives in the Netherlands. As a result of this, one interview was not useful anymore. Recruiting participants was also difficult as a result of several restrictions linked to the COVID-19 crisis and because people had other priorities. Lastly, one interview had to be conducted over the phone, which resulted in a loss of non-verbal information and a less fluent conversation compared to the other interviews.

Since this thesis functioned as an explorative study, the generalisability of this study is relatively low. Also, since the goal of this study was collecting data on various types of tiny house initiatives, the cases were heterogenous. The study also had a limited amount of participants. Another limitation of the study is that participants played different roles within their tiny house initiatives, to illustrate this, some participants were the initiators of the initiative and others were inhabitants of a tiny house. Even though all participants were knowledgeable, their relation to the initiative could cause some variation in specific knowledge of the initiative.

As mentioned in the third chapter, the positionality of the researcher has to be acknowledged as well. Being reflexive, meaning that a researcher is self-critical and self-conscious (Flowerdew & Martin, 2005) is essential for a well-performed research. As a result of this awareness, the questions asked

during the interviews were neutral. In one of the interviews however, I caught myself defending tiny houses. Fortunately, it was at the end of the last interview I conducted.

Tiny House Ede: "(...) Look, if you don't want to have a big house, you can also just move to a studio or an apartment, then you have almost nothing."

Interviewer: "But you cannot live in an apartment in the midst of nature."

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Appendices

Appendix I: Informed consent

Appendix II: Interview guide

Appendix III: Code tree

Appendix I: Informed Consent

Dear interviewee,

This interview will be conducted for my masters' thesis of the Socio Spatial Planning program of the University of Groningen. Participation in this research is entirely voluntary. You may refuse to participate or withdraw your participation.

This interview will be recorded and will be transcribed. The results of the interview will be linked to the tiny house initiative and are therefore not directly traceable to you as an interviewee.

Purpose of my study

My research will answer the question of how tiny houses can solve problems in a city. I will look at the effect of the Tiny House social movement on existing tiny houses initiatives. I will also research how these existing tiny house initiatives are addressing problems. Examples of problems that are addressed by tiny houses are the high ecological footprint of the existing housing market or homelessness. Next to this, I am specifically interested in the role of (local) governments. How did they impact the development of the tiny house initiative and how do existing tiny house initiatives have an impact on the way in which tiny houses are perceived by governments?

If you have any questions about this research, you can reach out to me or my supervisor Ina Horlings.

Jeska de Ruiter: jeskaderuiter@gmail.com

Ina Horlings: L.G.Horlings@rug.nl

Your time and effort are integral aspects of my thesis and I appreciate your participation. Please read the following statements and sign at the next page.

- I understand that I can withdraw permission to use data from my interview within two weeks after the interview, in which case the material will be deleted.
- I agree to my interview being recorded.
- I understand that all information I provide for this study will be treated confidentially.
- I understand that disguised extracts from my interview may be quoted in a master's thesis and presentation.
- I understand that signed consent forms and original audio recordings will be retained in the personal database of the researcher until the end of 2020 the latest.
- I understand that a transcript of my interview, in which all identifying information has been removed, will be retained for two years.
- I understand that I am free to contact any of the people involved in the research to seek further clarification and information.

I agree that the organization and place where I work will be mentioned: yes / no

This form does hereby declare that agrees to an interview by			
Name interviewer:	Date:		
Signature:	Place:		
Name interviewee:	Date:		
Signature:	Place:		

Appendix II: Interview guide

Influence of the tiny house social movement, local urban planning issues.

- 1) How would you describe a tiny house/when do you think a place is a tiny house?
- 2) Who initiated the tiny houses project?
- 3) What are the motivations for starting this tiny house initiative?
- 4) What are the main goals/objectives of the initiative?
- 5) Are there specific issues or problems that are addressed with the tiny house initiative?
- 6) Why were tiny houses used as a strategy to address these issues instead of something else?
- 7) What are the prerequisites to live in these tiny houses?
- 8) Is this initiative influenced by the general tiny house movement or not? The tiny house movement is a movement that encourages living a simpler life in a smaller space. If the initiative is influenced by this movement, how?
- 9) Can you tell me something about the effectiveness of the tiny house initiative? What impact has the initiative on the addressed issues?
- 10) Did stories about/experiences from other tiny house initiatives have an impact on this initiative? How?

Role of the government

- 11) When the initiative started / during the process of setting up, what was the role of the local or provincial government (e.g. municipality)?
- 12) And do you know how this was influenced by national government (e.g. laws)?
- To what extent did the initiative align with the goals and agenda of the local government? In other words, can you tell me something about how the government reacted to the idea of tiny houses? (If necessary: Was it something that was completely new or were they open to it?)
- 14) How did existing regulation (national or local laws) influence the tiny house initiative during the different phases of the initiative? So how did existing regulation influence the initiating phase, the start and after it was implemented?
- 15) What actors/parties participated in this tiny house initiative so far?
- How did you experience the role of the (local) government(s) in the whole process of the tiny house initiative from start until implementation? What were supporting or restricting factors?
- Do you experience differences in the role of the government during different time periods? Also, how does the government react in times of crisis and does this impact the initiatives (e.g. COVID-19)?
- 18) What would, in your eyes, be the ideal role of governments in tiny house initiatives? For example, do you have ideas on how they should communicate, support financially or regulate tiny house initiatives?

General questions about tiny houses

19) Do you know failed tiny house projects? Yes: Do you know why they failed?

- 20) Do you have any ideas on how tiny houses can work as a solution for other (planning) problems?
- 21) This is the end of the interview, is there anything you would like to add?