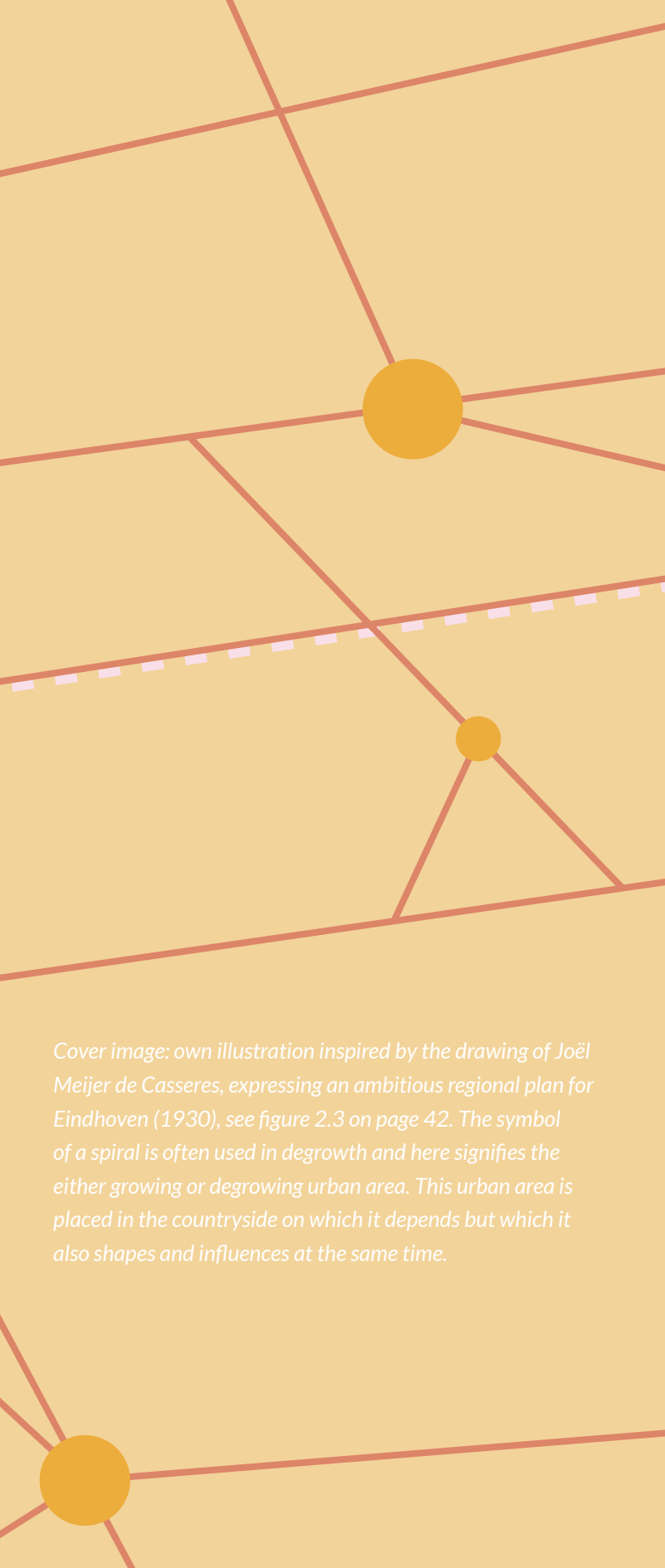




planning degrowth

*An explorative study into the value of
a degrowth approach for sustainable
urban planning in Amsterdam*

Laurens van der Wal



Cover image: own illustration inspired by the drawing of Joël Meijer de Casseres, expressing an ambitious regional plan for Eindhoven (1930), see figure 2.3 on page 42. The symbol of a spiral is often used in degrowth and here signifies the either growing or degrowing urban area. This urban area is placed in the countryside on which it depends but which it also shapes and influences at the same time.

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Master thesis, 4th of March 2020



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ADVANCED METROPOLITAN SOLUTIONS

ABSTRACT

Sustainable urban planning aims to decrease the ecological footprint of cities while maintaining or increasing social welfare, however it does not consider limits to economic growth and therefore undermines its own ambition. The upcoming field of degrowth offers a theoretical answer to this dilemma but the degrowth lens has only scarcely been applied to existing cities and the field of urban planning. This thesis addresses these gaps by exploring to what extent a growth mindset underpins planning in the city of Amsterdam and what the need and potential for degrowth could be in sustainable urban planning for the city's future. The qualitative research design includes a document analysis of degrowth proposals for urban planning, a historical analysis of urban planning focusing on degrowth precedents and finally interviews with

respondents related to sustainable urban planning and degrowth.

This study shows there is an urgent necessity for a degrowth approach in sustainable urban planning in Amsterdam which currently does not sufficiently address issues of global and long-term social and environmental impact. Degrowth can address these issues with a broad pallet of proposals from the planning process itself, to the design of public space and large economic policy changes. This study provides an overview of these degrowth proposals for sustainable urban planning but also shows that a degrowth implementation faces big obstacles. The study concludes that an example project such as the re-localization of the food system of Amsterdam can be a valuable showcase for a degrowth approach in sustainable urban planning.

Keywords: degrowth; sustainable urban planning; Amsterdam; policy proposals; historical analysis; interviews

EXECUTIVE SUMMARY

Today's economy is focused on scale-ups, expanding markets and ever-increasing growth. This economic growth, generally understood as the acceleration of goods and services as measured in GDP, might be the most common goal in economic policy around the world and across the political spectrum (Schmelzer, 2015). Much of this growth is currently attributed to urban areas, according to the McKinsey Global Institute 380 of the largest cities already generate 50% of the worldwide GDP (2011). For this reason, cities are often seen as 'engines of growth' or 'growth machines'. Urban life is also the dominant way of living as today cities house more than 50% of the world's population, which is only set to increase in the near future. However, cities are also places of mass consumption and pollution, they are responsible for 70% of the global energy use, 60% of the raw material use and two thirds of the world's CO2 emissions (C40, n.d.; Swilling et al., 2018).

At the same time, today's global society is at a dangerous and important predicament. There are more

human mouths to feed than ever, and inequalities are rising, but there are also large environmental threats such as dangerous levels of climate change and biodiversity loss that endanger the ecosystems humanity depends on. Recent concepts like the 'Planetary Boundaries' or the 'Doughnut Economy' place the idea that there are limits to the earth's carrying capacity firmly back on the agenda (Raworth, 2012; Steffen, Rockstrom, & Costanza, 2011). This raises the question how cities, these engines of growth, deal with these ecological limits, because alongside the economic growth, cities grow in terms of population, in terms of production and notably in terms of consumption of goods. And this is not just 'happening' to the city, it is a deliberate goal and agenda (Schmelzer, 2015). The well-known degrowth scholar Giorgis Kallis describes economic growth as more than a material process. According to him it is also a cultural, political and social process, growth is an idea produced, imagined and instituted, it is an ideology (Kallis, 2018). This idea, that economic growth expressed in GDP is something that is always good, inevitable,

necessary and essentially limitless is what many scholars call the 'growth paradigm' (Dale, 2012)

The organization of the urban environment is the responsibility of the field of urban planning. 'Sustainable urban planning' aims to decrease the ecological pressure that cities create while maintaining or increasing social welfare. Important goals of sustainable urban planning are creating healthy living and working environments today, working on future proof urban environments and ensuring wise and responsible use of natural resources (Dubbeling, Meijer, & Marcelis, 2012). Currently, the dominant idea in sustainable urban planning is that economic growth can be "decoupled" from environmental impact. In this way, it is asserted, economic growth can go on indefinitely, and at the same time the ecological situation can be improved, with less biodiversity loss, less climate change, less resource use and so on (Ellen MacArthur Foundation, 2015). Opponents of these theories claim that this might be an appealing idea, however recent research has cast serious doubt on the feasibility of this notion of decoupling economic growth from impact to the environment (Fletcher & Rammelt, 2017; Ward et al., 2016). This also goes for decoupling in the urban built environment (Xue, 2015).

As a response to the shortcomings of the growth paradigm, a research agenda is on the rise that proposes a radically alternative approach, under the banner of degrowth. Degrowth is a concept that challenges the idea of eternal economic growth as the dominant societal paradigm. While it has many strands, it can be generally defined as: a downscaling of production and consumption that increases human well-being and enhances ecological conditions and equity on the planet' (Research & Degrowth, n.d.). Degrowth goes beyond the ecological critique of GDP growth, stating growth is also not socially desirable any longer because despite a steady growth in GDP over the last decades, in many western countries happiness has not increased or has even declined (Easterlin, 2016) and growth barely reaches the poorer segments of global society (Woodward, 2015). Despite a reactionary name, degrowth proposals stretch far and

wide. Descriptions of degrowth talk about a society with a reduced complexity, a human scale, more autonomous, with diverse economic forms and different ways of reinvesting surpluses, based on other values (Kallis, 2018; Latouche, 2009).

Currently however, sustainable urban planning does not consider limits to growth, therefore it is undermining its own goals. This also goes for the planning in the city of Amsterdam. Yet the field of degrowth does not sufficiently consider urban areas, these big motors of growth and pollution, which due to their scale and impact compromises its entire agenda. Hence this thesis explores to what extent degrowth is necessary and possible in sustainable urban planning agenda in Amsterdam, leading to the following main question: 'is there a need and potential for degrowth in sustainable urban planning in Amsterdam?'

To answer this question, this thesis employed a qualitative research design existing of a background part, including the problem and question statement. This was followed by the development of a theoretical framework. Regarding data collection and analysis three different methods were selected, a document analysis, a historical analysis and finally expert interviews to gain knowledge and perspectives from actors related to degrowth and sustainable urban planning. Finally, the findings from the analysis were brought together in the discussion and based on that conclusions could be drawn.

The document analysis was used as an accessible way to identify and understand existing degrowth proposals related to (sustainable) urban planning. For this analysis ten articles and book chapters were selected that either directly or indirectly touched upon degrowth and (sustainable) urban planning. By means of the analysis the identified proposals were ordered in two ways, thematically and strategically. Regarding the thematical ordering, nine categories were identified based on a societal field of application, such as those

proposals pertaining to the housing and construction sector. For the strategic ordering a framework was used that originates with Marxist sociologist Eric Olin Wright (2010), adapted by Matthias Schmelzer and Andrea Vetter (2019). This was combined in a framework and several tables that give an overview of the proposed measures per theme (see figure 1.1). What stood out was that many degrowth proposals challenge the systemic underlying issues of unsustainability, such as issues of ownership, planning processes or the monetary system.

The historical analysis was done partly to gain a better understanding of the field of urban planning and in part to identify precedents for degrowth thinking. The main work entailed reading relevant books and articles and summarizing this into a coherent story of

the western history of urban planning from the industrial revolution onwards. A literal precedent of degrowth, as a planned downscaling in consumption and production, was not encountered. In that sense the current challenge can be described as unprecedented. On the other hand, several ideas, thinkers and historic events were identified that have a relation to critique of the growth paradigm or current degrowth policies. For example, there are interesting examples of historical communes that resemble today's 'back to the landers' movement. Furthermore, scholars such as Patrick Geddes and Lewis Mumford seemed to employ a strong sustainability mindset and embrace ideas of environmental limits. Additionally, the research showed that Ebenezer Howard, famous for his Garden City concept, was a proponent of communal land ownership, self-governing communities, companies in the

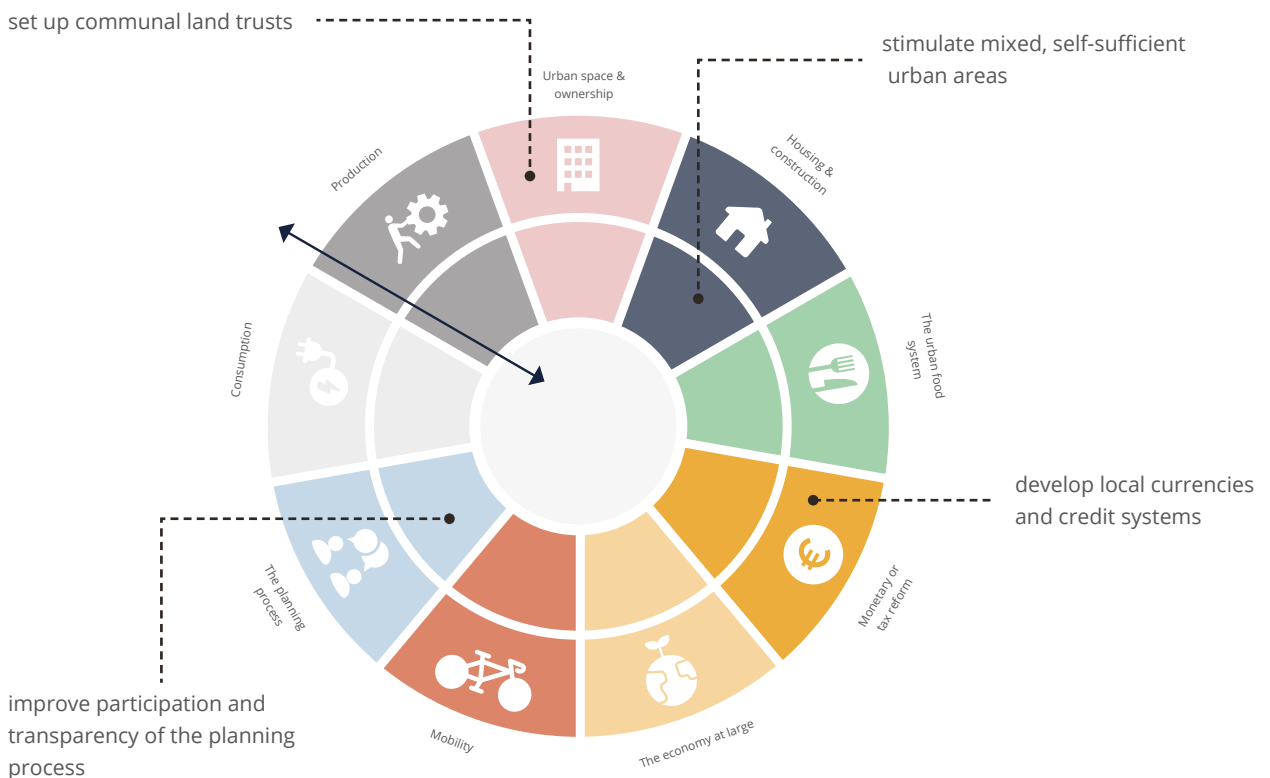


figure 1.1. framework of degrowth proposals for urban planning see chapter 3 section 1 for a complete overview of the proposals and the framework.

form of cooperatives and a clear limit to the size of cities, ideas that have strong relations to current degrowth proposals for urban planning. Despite the realization of several garden cities and many 'garden neighborhoods' his social agenda failed, at least in part because of a naïve faith in 'benevolent landlords' that should not seek private profit. Finally, also in the more recent history of Dutch urban planning interesting parallels can be drawn of failed policy proposals like the 'Grondpolitiek' that resemble the spirit of degrowth.

The interviews were used to gain knowledge from experts related to the topics. Nine respondents were selected, five of them related to degrowth and four related to sustainable urban planning in Amsterdam. Urban planning does not only happen in the municipal offices in the Netherlands, it is influenced by designers and developers, researchers and participation of civil society. Therefore, the 'quadruple helix' model was used to identify respondents from these different parts of society, the public realm, the academic world, the private sphere and civil society. The main outcome of the interviews were opinions on degrowth and its proposals, the identification of further degrowth proposals for urban planning and practices in Amsterdam and the identification of risks and challenges for degrowth in sustainable urban planning.

The interviews made clear that current sustainable urban planning is strong in tackling local and short term environmental and social impacts but quite weak in addressing global and long-term effects. The interviews also revealed how growth based urban planning in Amsterdam appears to be highly dependent of market activity and how thinking in terms of agglomeration benefits is dominant in the local sustainable urban planning, concentrating development for maximum economic growth. On the other side, almost all of the respondents were critical of chasing growth for its own sake and the respondents reacted most favorably towards the degrowth concept of re-localizing the economy. However, several respondents were afraid degrowth could weaken global cooperation. Furthermore, some new proposals emerged from the interviews such as

making social rental housing the norm again and focusing on a regional redistribution of the economy instead of an approach of fortifying agglomerations. Finally, the fact that degrowth questions established and widespread ideas of progress was deemed a serious obstacle in getting popular support for degrowth in planning, as were issues like the free rider problem and capital flight.

Taken together, this study shows there is indeed an urgent necessity for growth critical and a degrowth approach in sustainable urban planning in Amsterdam which currently does not sufficiently address issues of global and long-term social and environmental impact. The idea that current Dutch cities are sustainable was found to be naïve, showing an incomplete understanding of the urban metabolism. Furthermore, the dominant growth paradigm underlying sustainable urban planning and conventional urban planning in Amsterdam has negative effects on the field that further inhibit a powerful response.

Degrowth can address these issues with a broad pallet of proposals from the planning process itself, to the design of public space and large economic policy changes. These proposals challenge the systemic, underlying drivers of unsustainability such as the monetary system, land ownership, unequal power distribution and naive ideas about the urban metabolism and can therefore be a powerfull addition to the current repertoire of sustainable urban planning. This study provides an overview of these degrowth proposals for sustainable urban planning but also shows that a degrowth implementation faces big obstacles. The actual potential of degrowth for urban planning could for example be kept in check due to the interests of a powerful status quo, challenging established ideas of progress and finally behaviour like the free rider issue and capital flight.

The regionalization of the economy was something that most urban planning respondents reacted quite favourably towards, especially a re-localization of the food system. Furthermore, of current degrowth related practices already taking place in Amsterdam, many were

food related. The transitioning towards a regional food could be a good carrier for other degrowth ideas such as a general re-localization of the economy, green tax reform and stimulating active and public mobility. Taken together a choice for a specific topic like the food system contains the entire struggle of a degrowth versus a growth-based economy and planning system and therefore it can serve as a proof of concept and can be a case study that offers exciting lessons for a broader application of degrowth in sustainable urban planning. Finally, the historical analysis showed that the history of urban planning is full of critical and subversive thinkers and those are exactly the people needed today in these times of unprecedented ecological and social challenges.

PREFACE

Dear reader of this thesis,

first of all, thank you for taking the time to look at the end result of a year of hard work. I found the topics described in this document challenging but nonetheless very interesting. I do not think I am overstating things when I say this has changed the way I look at the world around me.

When I started this thesis adventure I had a hunch that I wanted to dive into an economic perspective on sustainability. Put differently, I wanted to explore the systemic drivers that make society unsustainable. After having learned for years about sustainable building materials, waste processing techniques, circular production and design, life cycle analyses and after having designed various sustainable houses myself I was still left with the feeling that on a higher level of scale something is undermining the ambition of simply living in a lasting harmony with the natural environment around us.

Little did I know at that point that this would lead me to dive deeply into the topic of urban planning, critique on the growth paradigm and the topic of degrowth. On the one hand, the idea that society cannot grow indefinitely on a finite world is such a simple concept that I am highly surprised I did not give it more thought before. But at the

same time, if writing this thesis has taught me anything, it is that a simple idea can be very hard to fully comprehend, let alone to bring about.

For the inspiring talks, support and their enthusiasm I would like to thank my two supervisors, Robert and Alexander. And I would also like to thank all of the respondents of the interviews for their time, thoughts and ideas that have contributed to this research. When the interviews took an unexpected direction, that was often a sign of an interesting and thought provoking discussion. The interviews were a great excuse to meet inspiring people and go to interesting places, from a beautiful houseboat, to large public offices and an urban farm.

Of course I could not have written this without the love and support of my friends, family and especially my girlfriend who by now must be almost as well versed in these theories as I am myself.

I hope this story makes you think just a little bit differently about the world as you know it. Even though this thesis discusses themes of macro-economic and urban scale levels, at heart the topic is deeply personal.

Kind regards,

Laurens van der Wal

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background



The background chapter introduces the problem definition, the goals of the research, the research questions and a delineation of these questions. This is followed by a readers' guide after which the background chapter continues with an explanation of the research approach which explains the strategy and design, methods and organization of the thesis. The research steps are visually represented and explained in the research design section. Subsequently, the three different research methods are explained. And finally, the research approach section gives an overview of the organization and planning of this research project.

figure 1.2. the former Sloterpolder in 1943, currently the place of the westelijke tuinsteden (adapted from: Dienst Publieke Werken, 1943)



1.

INTRODUCTION

Today's global society is at a dangerous and important predicament. There are more human mouths to feed than ever, and inequalities are rising, but there are also large environmental threats such as dangerous levels of climate change and biodiversity loss that endanger the ecosystems humanity depends on. It is well-known that this global society is now an urban society. Cities house around 55% of the world's population and according to the United Nations in 2050 nearly 70% of the world's population will live in cities. These urban areas put a huge burden on the environment, as they are already responsible for 70% of the world's CO₂ emissions and two thirds of the energy consumption (C40, n.d.). They contribute considerably to climate change, which means that adapting cities to become more sustainable is a very urgent matter. Many people look to cities as the solution to many of the contemporary socio-ecological problems. And many cities realize that they have a big negative impact which they could at least minimize and even potentially change to a large positive impact. Therefore, a lot of cities have set ambitious goals such as a reduction in CO₂ emissions and

energy use or an increase in share of renewable energy (Rosenzweig, Solecki, Hammer, & Mehrotra, 2010). Besides that, major cities have teamed up globally to tackle climate change in larger organisations such as C40, a group for cities with a leading role in addressing climate change (C40, n.d.) or the World Mayors Council on Climate Change, who want to improve governmental engagement with climate change (Rosenzweig et al., 2010).

This is also the case for the city of Amsterdam in the Netherlands, which with around 860.000 inhabitants is the biggest city in the Netherlands. The municipality of Amsterdam has also set goals back in 2015 to help prevent dangerous levels of climate change. They aim to reduce carbon emissions, reduce energy use and increase their production of renewable energy (Gemeente Amsterdam, 2015). Besides that, they are a member of the C40 organisation and in the structural vision 2040 in terms of measures to address climate change they state they want to work on climate adaptation, to densify, to stop greenfield developments, to invest in public transport and invest in sustainable energy production. The field of work occupying itself with the planning of sustainable cities is sustainable urban planning.

The other side of the story is that urban planning aims for growth, and that cities are spaces of growth. Growth of land, growth of production, growth of inhabitants and of housing size. Not so much as a consequence of economic growth but as one of the main causes of it. Today's society is directed by a mindset or a paradigm of growth, which asserts that economic growth is always good, necessary and essentially limitless and that it is the driving force behind many social and ecological benefits and should therefore be pursued (Schmelzer, 2015). Therefore, it is also dominant in sustainable urban planning worldwide as well as in Amsterdam. The city is seen as an important economic motor of the country, it is expected to grow in terms of its economy and population and it should be competitive internationally (Gemeente Amsterdam, 2011). This goal

of economic growth is expressed in economic growth rates such as the GDP, the gross domestic product. Questioning of this growth paradigm in the Netherlands is unconventional, it is usually an underlying assumption that is taken for granted (Kalse, 2019).

A. problem definition

However this idea of unlimited growth crashes into its bounds, the well-known 'Limits to growth' report first emphasized in a report dating back more than 40 years, which already warned that endless economic growth is impossible (Meadows, Meadows, Randers, & Behren, 1972). But these ideas, and the forms of state regulation used to address them, were abandoned in the neoliberal wave of the 1980's. Currently, the dominant idea is that economic growth can be "decoupled" from environmental impact. In this way, it is asserted, economic growth can go on, and at the same time the ecological situation can be improved, with less biodiversity loss, less climate change, less resource use etcetera. Economic growth can lead to "dematerialization" and a decline in environmental impact (Næss & Høyer, 2009). Despite a plea for genuine intergenerational justice and conservation of resources, sustainable development has come to mean that growth is the way forward in sustainability.

Opponents of these theories claim that this might be an appealing idea, however recent research has cast serious doubt on the feasibility of this notion of decoupling economic growth from impact to the environment (Fletcher & Rammelt, 2017; Ward et al., 2016). This also goes for decoupling in the urban built environment (Xue, 2015). And currently urban areas pollute much more than they did in the 1970's. Not surprisingly the limits to growth idea is back on the agenda, reinforced and popularized by current metrics like the ecological footprint, and the concepts of 'Planetary Boundaries' (Steffen, Rockstrom, & Costanza, 2011) or the 'Doughnut Economy' (Raworth, 2012),

which stress certain thresholds that we should not cross.

As a response to the shortcomings of the growth paradigm, a research agenda is on the rise that proposes a radically alternative approach, under the banner of degrowth. Degrowth is a concept that challenges the idea of eternal economic growth as the dominant societal paradigm. It has its origins in the fields of ecological economics, social ecology, economic anthropology and environmental and social activist groups (Martínez-Alier, Pascual, Vivien, & Zaccai, 2010). While it has many strands, it can be generally defined as: a downscaling of production and consumption that increases human well-being and enhances ecological conditions and equity on the planet' (Research & Degrowth, n.d.). Degrowth goes beyond the ecological critique of GDP growth, stating growth is also not socially desirable any longer because despite a steady growth in GDP over the last decades, in many western countries happiness has not increased or has even declined (Easterlin, 2016). Therefore, Degrowth includes a reflection on what constitutes a good way of co-existing together. Furthermore, growth rates in most western countries have already been receding for years and continuous growth seems more and more unrealistic because of trends like peak oil, over accumulation and financialization (Schmelzer, 2015). Yet slowdown destabilizes the inner workings of the growth-based system itself (Latouche, 2009).

Currently, sustainable urban planning does not consider limits to growth therefore undermining its own goals. This also goes for Amsterdam. And there is certainly no mentioning of degrowth in urban planning in Amsterdam. Yet degrowth does not look enough at urban areas (Orzanna, 2020), these big motors of growth and pollution. Due to the large scale and impact of urban areas, this compromises its entire agenda. Hence the importance of exploring to what extent degrowth is necessary or possible in an urban planning agenda.

B. research goal

This research project has several goals. The overarching goal is to contribute to knowledge of how degrowth concepts can be used to improve sustainable urban planning. In turn this can help to develop urban areas in a such a way that they can exist in a more harmonious balance with the natural environment on which they depend, thus making human society more sustainable.

Next to this major goal there are several minor or sub-goals:

research sub-goals

1. To determine how the growth paradigm currently shapes urban planning in Amsterdam.
2. To explore what is already happening in terms of degrowth in urban planning in Amsterdam.
3. To give an overview of existing proposals for a degrowth approach in urban planning.
4. To investigate how in the field of urban planning practitioners are guided by the growth paradigm and how they respond to the idea of degrowth in urban planning.
5. To determine possible risks for and downsides of a degrowth approach in urban planning.

C. question statement

Following the problem statement and research goals, the main question of the thesis is:

'Is there a need and potential for degrowth in sustainable urban planning in Amsterdam?'

To answer this main question, it was divided into several sub-questions with their own research methods. The following five sub-questions were formulated:

sub-questions

- A. How does the growth paradigm influence (sustainable) urban planning?
- B. Can a degrowth approach tackle urban planning issues not addressed (sufficiently) by current sustainable urban planning concepts?
- C. What are promising principles and concepts of degrowth with which to address issues of sustainable urban planning?
- D. What might prevent urban planning from implementing a degrowth approach?
- E. What could be downsides of a degrowth approach in sustainable urban planning?

D. question delineation

Limits were set in the starting phase of this research project to guarantee the its feasibility. This part only details the limits that were set at the onset of the study, not the limitations of the project that were encountered during and after the study was conducted. The latter limitations are discussed in the fourth chapter, conclusions and recommendations.

focus on Amsterdam

This thesis has a focus on Amsterdam firstly because it is a mandatory requirement of the MADE master at AMS institute. Of course, the topic of degrowth and urban planning would not have been selected if it was not relevant and applicable to the city of Amsterdam.

broad & explorative character

It is worth mentioning that this research has an explorative and broad character which will necessarily limit its depth. The goal is to generate content, principles, ways in which degrowth might support sustainable urban planning and to research their relevance, not to critically research a few of these principles in detail.

need and potential of degrowth for sustainable urban planning

The need and potential of degrowth for enhancing sustainable urban planning is what is being researched. Thus, the goal is not to deduct lessons from sustainable urban planning for degrowth, though an occasional learning point might implicitly be mentioned.

shrinking areas vs. degrowth

There is quite some research and literature into shrinking areas. And although some scholars refer to shrinkage as 'degrowing', degrowth does not equate to shrinking areas. The difference is that degrowth is defined as a deliberate choice to downscale production and consumption in a system that does not pursue

growth. Whereas in shrinking areas 'degrowing' is an inevitable consequence of a loss of population and industry in a system based on growth. Nonetheless it might be possible to extract lessons or principles from the way stakeholders react to urban shrinkage, though that is not part of this research project due to time constraints.

environmental or social sustainability

Sustainability is a very broad term, and sustainable urban planning is as well. Often sustainable urban planning encompasses both social and environmental aspects, but often these are also separated. It is a valid question whether this thesis has a specific focus on either of those topics. In other words, does this thesis research look into the environmental consequences of the (sustainable) urban planning growth mindset and if and how degrowth can help to diminish that? Or does this research look into social and distributive consequences of the (sustainable) urban planning growth mindset and if and how degrowth can help to tackle that? The answer is that degrowth deliberately does not separate the two processes. On the contrary, degrowth proposes a downscaling that unburdens the environment but in a socially fair way. Measures that decrease the environmental burden but increase inequality are not considered to be 'degrowth'. Since this thesis considers degrowth, it should consider social and environmental sustainability in unison.

urban planning in Dutch

Despite the differences, in Dutch urban planning and urban design are often taken together under one umbrella term, the Dutch translation of urbanism, 'stedebouw' (literally city building). The literal translation of urban planning (stedelijke planologie or stedelijke planning) is not a conventional word for the concept. Another word that is often used is in relation to urban planning is 'ruimtelijke ordening' which literally means spatial planning. Therefore, the clear distinction between either urban and regional planners or urban planners and urban designers that seems to exist in English seems less clear in Dutch. On the other hand, the English term urbanism seems much less

defined and more ambiguous than the Dutch 'stedenbouw', since urbanism can refer to the development of cities but also have the meaning of 'the characteristic way of city life'. Whereas 'stedenbouw' in Dutch only refers to the former, the action of adapting or creating cities (for more on the distinction between urban planning and design, see the theoretical framework).

The topic of this thesis is urban planning. One could wonder what the consequence of these language difference is for this research since the research will partly be done in Dutch (the interviews). In Dutch the topic will be introduced as either stedenbouw en planologie or ruimtelijke planning / ruimtelijke ordering toegepast op het stedelijk gebied.

“Now, the desire for money, Thomas Aquinas pointed out, knows no limits, whereas all natural wealth, represented in the concrete form of food, clothing, furniture, houses, gardens, fields, has definite limits of production and consumption, fixed by the nature of the commodity and the organic needs and capacities of the user. The idea that there should be no limits upon any human function is absurd: all life exists within very narrow limits of temperature, air, water, food; and the notion that money alone, or power to command the services of other men, should be free of such definite limits is an aberration of the mind.”

(L. Mumford, 1967, Chapter 12)

2.

READERS' GUIDE

This thesis consists of five chapters; chapter one deals with the research background, followed by chapter two which covers the theoretical framework, chapter three details the results and chapter four contains the discussion and conclusions. The final segment of the thesis is the literature & appendices chapter. After reading the introduction you have a basic idea of the content of this thesis. Before moving on, this short section explains the structure of this thesis to facilitate the reading process and a clear understanding.

background

The background chapter is what you are currently reading. In the introduction of this chapter (1.1) the problem has been introduced, the goals of the research and the research questions have been mentioned and delineated. That part is followed by this readers' guide (1.2) after which the background chapter continues with an explanation of the research approach (1.3.) which explains the strategy and design, methods and organization of the

thesis. The research steps are visually represented and explained in the research design section. Consequently, the three different research methods are explained consecutively. Finally, the research approach section gives an overview of the organization and planning of this research project, how was the project supervised on what was its time path.

theoretical framework

The majority of this study covers the theoretical framework and the results of the various analyses. The theoretical framework presents the most important concepts that play a role in the research project. It provides relevant terms, definitions and models of these concepts and thus outlines the context of the research project. Five topics are considered in the framework. As this thesis analyses the value that degrowth can offer for sustainable urban planning both degrowth as well as sustainable urban planning will be explored in the theoretical framework. However, to begin to define what sustainable urban planning is, first an understanding and definition of conventional urban planning is required (2.1) as well as an understanding of the concept of sustainability itself (2.2). Furthermore, this thesis considers the influence of the 'growth paradigm' on sustainable urban planning in Amsterdam. That begs the question how the concept originated and what it stands for. As this can also help to elucidate the concept of degrowth the growth paradigm will be detailed separately (2.3) After a general insight into these three topics has been established, sustainable urban planning is clarified in more detail (2.4). before elaborating explicitly on degrowth (2.5). Finally, these concepts are related visually in a simple conceptual framework (2.6).

results

The theoretical framework is followed by the results of the various analyses that have been described in the methodology section. This chapter starts with the document analysis (3.1) as this was the first research

step that was taken. This document analysis section covers the ways the degrowth proposals were ordered, presents a conceptual model of the proposals and offers a complete list of all the proposals ordered by theme and strategy. After the document analysis follows the historical analysis of urban planning (3.2). This analysis is organized in chapters that each cover a specific period of the history of western urban planning since the industrial revolution. It concludes with a short chapter that summarizes what might be considered as historic precedents for growth critical thinking and degrowth in urban planning. Finally, the results chapter describes the interview analysis (3.3). In this analysis the various interviews are synthesized per topic of the interview. This section is thus organized in according to these various topics.

discussion and conclusions

The fourth chapter brings all the results together. While answering the sub-questions the discussion part (4.1) synthesizes the various analyses and the theoretical framework. The discussion ends with a section on the implications of the findings considering the existing research. Consequently, the conclusion (4.2) summarizes the entire research project briefly and answers the main question posed in the introduction in three short sections. This is followed by an overview of the limitations of the study (4.3) and recommendations for further research (4.4).

literature & appendices

The fifth and final chapter of this research project is also the shortest one. This chapter contains the references and two appendices related to the interview protocol.

3.

RESEARCH APPROACH

The research approach explains the design, methods and organization of the thesis. The research steps are visually represented and explained in the research design section. Consequently, the three different research methods are explained. Finally, the research approach section gives an overview of the organization and planning of this research project.

A. research design

The research design (figure 1.3) has many parallels with the structure of this thesis report that was just outlined in the readers guide. This is not coincidental; the report has followed the steps of the research design to provide a clear structure that represents the way this research project was undertaken.

The research project started off with setting the context and background (step 1, figure 1.3). Coming up with a thesis topic was dependent on the interest and motivations of the researcher and on currently relevant topics.

The first idea was to work with the topic ecological economics applied to the urban sphere and the built environment. The focus on the built environment has to do with the background of the author via his bachelor in architecture and the master track of this thesis at the AMS institute. When a broad idea of the research topic was formed a more in-depth analysis of the problem followed, leading to a focus on the growth paradigm and degrowth related to urban planning. This led to the setting of goals and questions. The main question for this topic was consequently determined in unison with the development of several sub questions. These questions provided an idea of which topics and concepts needed to be explored in the theoretical framework (step 2, figure 1.3). This was the first step of the research that really went deep into the topics of study. After a rough version of the theoretical framework was finished the gathering of data could start.

Building on the theoretical framework topics of urban planning and sustainable urban planning, the historical analysis was used to understand the field better (step 3, figure 1.3). A second function of this analysis was to see what precedents there might be for critical thinking concerning growth and/or degrowth in the history of urban planning. A second analysis, the document analysis, was used to find out if there was already a current proposal for degrowth in urban planning and what this looked like. Finally, the two concepts, sustainable urban planning and degrowth, really came together in the interviews. Experts from both sides were questioned about their opinion on relation between the fields of sustainable urban planning and degrowth. The other two analyses together with the theoretical framework generated content for the questions and topics of these interviews.

Taken together all these results provided the input for the discussion where the sub-questions were answered. This led to the answering of the main question in the conclusion and the formulation of the limitations and recommendations as mentioned in the readers guide (step 4, figure 1.3).

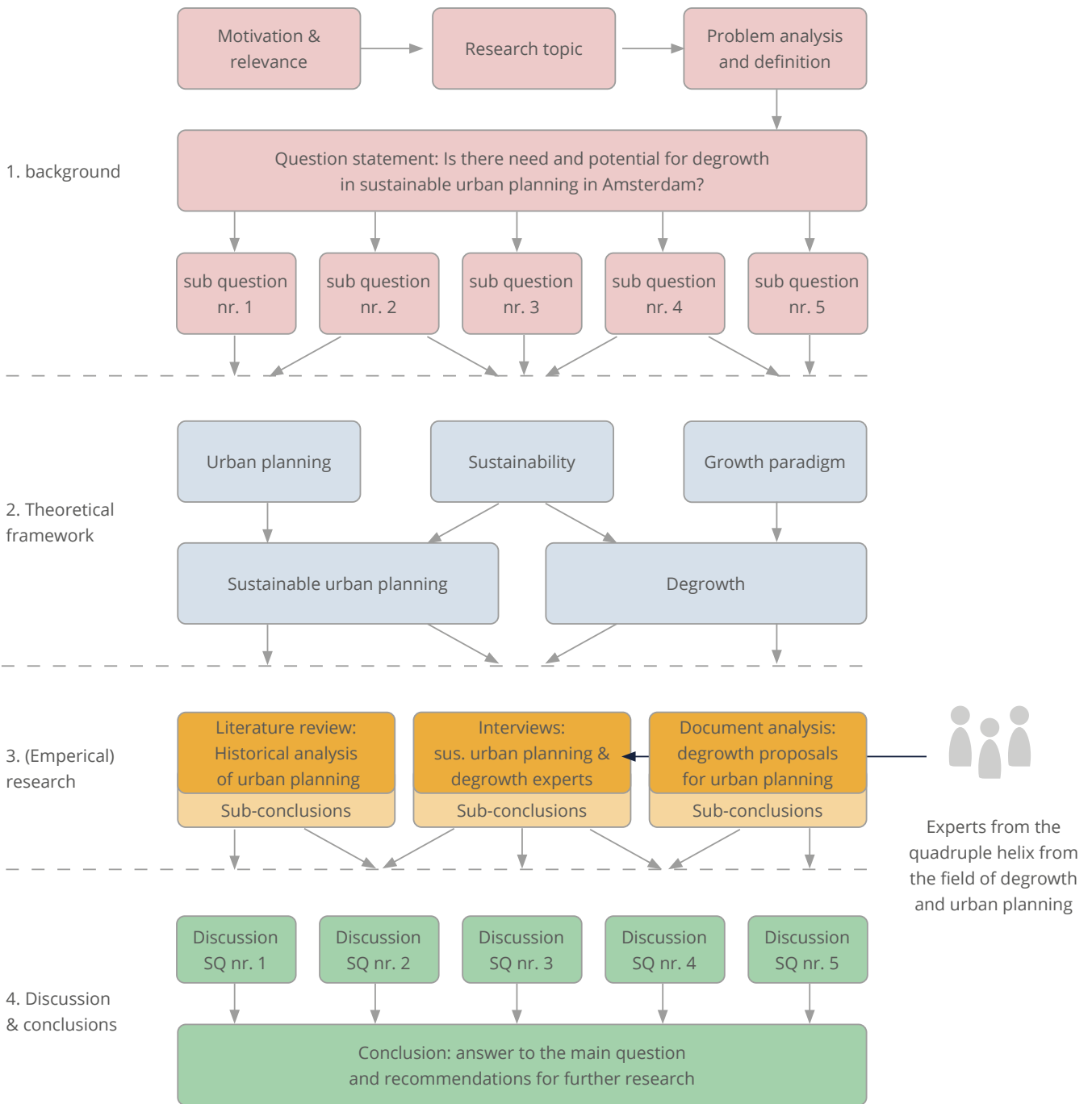


figure 1.3. research design

B. research methods

This thesis research employed qualitative methods. The rationale behind this was that the research topic was relatively unexplored, for example it was not clear what factors determined successful urban implementation of degrowth concepts. Besides that, gaining knowledge from current actors in the degrowth and urban planning field was a focus point. This meant the explored issues were complex and embedded within practice which made it a typical case for methods from the qualitative field (Reulink & Lindeman, 2005).

Literature research was used to set up a theoretical framework. In the framework first conventional urban planning, sustainability and the growth paradigm are explained after which degrowth and sustainable urban planning are elaborated (see chapter 2). Several methods were used for gathering and analysing data, a document analysis, a historical literature review and semi-structured interviews. This approach of using various research methods was a way to achieve triangulation to increase the validity of the research (Bowen, 2009). The choice for these methods and their respective way of collection and analysis are described in detail below.

1. document analysis: degrowth proposals for urban planning

Bowen describes document analysis as an efficient systematic way of reviewing or evaluating documents (2009). Documents are a useful for providing background information, context and supplementary data next to other methods, for example interviews (Bowen, 2009). Furthermore, documents can suggest questions that need to be asked and can help to verify findings from other sources (Bowen, 2009). Therefore, in this case document analysis was used as an accessible way to understand the main goals and ambitions of current degrowth proposals related to urban planning. On the one hand this directly helped to answer some of the sub-questions. On the other hand, this analysis supported setting up the interview topics and questions.

data collection

Scientific articles on degrowth were the main focus of the analysis, extended with a two book chapters. The articles were selected because they combine degrowth either explicitly with urban planning, such as the article 'Degrowth in City Planning' (Lehtinen, 2018) or because they touch upon urban planning aspects from a degrowth perspective such as the article, 'Can we prosper without growth? 10 policy proposals' (Kallis, 2015). A limit of ten articles was set as the maximum due to time constraints. Finally, only articles written in English were selected and no complete books but only book chapters because of their length and, again, the time constraint of this thesis.

A few more than ten articles were found that considered the topic of degrowth and urban planning. The choice for this specific selection had various reasons. Other articles either touched only very briefly on urban planning or were of lesser quality. Furthermore, one relevant book could not be obtained due to a high price.

data analysis

There are several methods for performing document analysis, two important ones are 'content analysis' and 'thematic analysis'. Though these two approaches have similarities, content analysis is geared more towards gathering quantitative results. Thematic analysis can be defined as a method to identify, analyze, and report patterns (themes) within data, for example articles (Braun & Clarke, 2006). The latter method seemed more in line with the goal of the document analysis for this study, generating an understanding of the current degrowth proposals for urban planning. However, some researchers state that document analysis is a combination of content analysis, for organizing the information into categories, and thematic analysis, for recognizing patterns (Bowen, 2009).

Neuendorf describes the goal of thematic analysis as developing a story from the texts of interest (2019).

nr.	title	author	year
1	A Prosperous Way Down, Principles and Policies (chapter 14)	H.T. Odum & E.C. Odum	2001
2	Cohousing's relevance to degrowth theories	Matthieu Lietaert	2009
3	The Impacts of Spatial Planning on Degrowth	Petra Wächter	2013
4	Sustainable housing development: decoupling or degrowth? A comparative study of Copenhagen and Hangzhou	Jin Xue	2013
5	Is eco-village/urban village the future of a degrowth society? An urban planner's perspective	Jin Xue	2014
6	Can we prosper without growth? 10 policy proposals	Giorgos Kallis	2015
7	Degrowth in city planning	Ari Aukusti Lehtinen	2018
8	Housing for degrowth (conference paper)	Anitra Nelson & Francois Schneider	2018
9	Degrowth in the Suburbs (chapter 7)	Samuel Alexander & Brendan Gleeson	2019
10	The urban drivers of economic growth	Federico Savini	2019

table 1.1. Selected data for the document analysis

She describes a six-step approach as developed initially by Braun and Clarke (2006) for thematic analysis:

1. Familiarize oneself with the data.
2. Generate and apply initial codes that identify important features of the data relevant to answering the research question(s).
3. Search for themes; examine the codes and collated data to identify broader patterns of meaning.
4. Review the themes; apply potential themes to the dataset to determine if they answer the research question(s); themes may be adapted, split, combined, or deleted.
5. Define and name the themes, develop an analysis of each theme.

6. Producing a report; weaving together the analytic narrative and data segments, relating the analysis to literature.

Source: (Neuendorf, 2019).

Braun and Clarke stress the importance of making explicit choices regarding the thematic analysis (2006). Two of these choices needed to be made before starting the analysis. The first choice was whether to use an inductive, bottom up, approach or a deductive, top down, approach. In this case the goal was to create an understanding of the current proposals for urban planning from degrowth. As such there was not yet a theory up front to provide a clear structure for processing the data. Therefore, the inductive

method was preferred, since it means a researcher generates codes while analyzing the data instead of trying to fit the data in a pre-conceived coding frame (Braun & Clarke, 2006). This approach is often used when it is unknown what themes are to be found in the data and the researcher aims to discern the important themes from the data (Fox, 2004).

The second choice that needed an a priori decision was the level at which the themes were to be identified, a semantic and explicit level, or a latent, interpretive level; *'with a semantic approach, the themes are identified within the explicit or surface meanings of the data and the analyst is not looking for anything beyond what a participant has said or what has been written'* (Braun & Clarke, 2006, p. 13). Whereas with *'a thematic analysis at the latent level goes beyond the semantic content of the data, and starts to identify or examine the underlying ideas, assumptions, and conceptualisations'* (Braun & Clarke, 2006, p. 13). The explicit or semantic approach seems to be enough to answer the research questions for the document analysis. It is also more feasible considering the time constraints of the thesis.

Erlingsson & Brysiewicz describe the different parts of qualitative content analysis, applicable to both thematic analysis and content (2017):

- Meaning units → the selected part of the text.
- Codes → a label or a name that accurately describes the particular meaning units, usually one or two words long.
- Categories → groups of content or context related codes, when there are many codes sub-categories can be useful. Category names are short and to the point.
- Themes → a label for two or more categories expressing a meaning found in these categories. Themes can be very descriptive.

Important to note is that this type of data analysis is a process that is not linear but iterative, where the researcher revisits the initial analysis to check and if needed, adapts the selected paragraphs, codes and

categories (Erlingsson & Brysiewicz, 2017). To facilitate this process, the free software QDA minder (lite) was used. This is computer assisted qualitative analysis software that allows easy coding and categorizing of text files.

In the final analysis articles were coded once, but new articles revealed new codes and categories of codes with which to revisit previous articles. Thus, in an iterative manner a wide selection of codes and categories of codes was set up. Consequently, some codes that were quite similar were taken together in categories and groups of categories became the themes. That way the categories represented the degrowth proposals for urban planning and the themes represent an ordering of these proposals that shared a specific societal field of application, such as those proposals pertaining to the housing and construction sector. These themes were then described. Finally, another framework was added to not only divide the proposals in a thematic way but to also describe their strategy according to a framework that originates with Marxist sociologist Eric Olin Wright (2010), adapted by Matthias Schmelzer and Andrea Vetter (2019). For more detail on this last step see chapter 3.1.

2. historical literature review: western urban planning

Snyder defines literature review as *'a more or less systematic way of collecting and synthesizing previous research'* (2019, p. 333). Goals of literature review can be advancing knowledge, facilitating the development of a theory, synthesizing earlier findings or identifying areas that require more research (Snyder, 2019). Brigid Lusk, in describing historical methodology for nursing research, defines several important aspects (1997). First of all, the selection of the topic is crucial according to Lusk, important factors are the availability of data, the scope of the topic and potentially the use of a framework (Lusk, 1997). To collect data sources background reading is useful, it can be used to identify primary sources and help in determining the elements

and questions to look for (Lusk, 1997). In this case background reading helped to identify several books such as 'Cities of Tomorrow' (Hall, 2014) and 'The City Shaped' (Kostof, 1991). Furthermore, speaking to experts in the field of urban planning resulted in several recommendations for publications such as 'Dutch Land-use planning' (Needham, 2016) and 'Nederland aan het eind van een Millenium, Bouwen en Ordenen 1965 – 2000' (Baalman, 2018). Moreover, Lusk mentions that some researchers explicitly mention a framework to express (purposeful) author bias such as a feminist framework that states men and women have different experiences (1997). In this case what loosely underlies the historical analysis is twofold. On the one hand the idea was get a better understanding of urban planning up until current sustainable urban planning, on the other hand the analysis was a way of looking for precedents in planning history that challenge the growth paradigm. Lusk also recommends choosing a topic that is not too broad as according to her specific limits such as natural boundaries or time periods contribute to the research (1997). In this case urban planning from the industrial revolution until recent times was chosen as the time period. This makes sense from a degrowth perspective since the growth paradigm came into existence from the industrial revolution onwards (Kallis, 2019; Schmelzer, 2015). Furthermore, it was assumed that Dutch urban planning was most influence by western urban planning ideas that took shape most notably in the United Kingdom and the United States.

The methods Lusk described for historical research is that of note taking by identifying the source and organizing notes per theme to facilitate writing of the historical 'story' later on (Lusk, 1997). Finally, internal and external criticism are two important points in historical research. External criticism has to do with the authenticity of source material and might require expert advice (Lusk, 1997). Internal criticism refers to assessing the reliability of the obtained information by the researcher (Lusk, 1997). Important here according to Lusk is being aware of any authors potential motives

and biases and any change in words and definitions over time (1997). In this case external criticism was less relevant as no primary sources or unpublished works were used. Internal criticism was facilitated by looking for multiple sources to corroborate events and ideas and by asking for feedback of a historical expert in architecture and urban planning, Dirk Baalman.

3. semi-structured interviews

Interviews are a popular way of conducting qualitative research. Interviews can be used to collect facts or gain insights into opinions, experiences, processes or predictions (Rowley, 2012). Specifically, interviews are useful as opposed to other means of gathering data when it is possible to identify a few stakeholders with key positions to understand a phenomenon, who are receptive to an interview for sharing their knowledge (Rowley, 2012).

There are many types of interviews; often these are ordered on a scale that measures the level of structure. Semi-structured interviews are the most common type of interview (Rowley, 2012). Anne Galletta, the author of a book on semi-structured interviews mentions their potential as follows: '*The semi structured interview is sufficiently structured to address specific dimensions of your research question while also leaving space for study participants to offer new meanings to the topic of study.*' (2013, p. 1). As the topic of degrowth in urban planning is quite novel and explorative this seemed like a good approach for this thesis. Furthermore, various scholars mention that semi-structured interviews are the most accessible form of conducting interviews for novice researchers (Rabionet, 2011; Rowley, 2012), another argument that made this approach a logical choice.

selection of respondents

One of the most important aspects of interviews is determining who to interview. There are many ways to select the respondents for the interviews. Purposive or purposeful sampling is the method that seems most adequate for this research. Tongco (2007) defines it as follows: '*The purposive sampling technique is a type of non-*

probability sampling that is most effective when one needs to study a certain cultural domain with knowledgeable experts within' (Tongco, 2007, p. 147).

Within purposive sampling there are still different sampling techniques such as homogenous sampling, extreme case sampling or expert sampling. Expert sampling has the preference for this case since it lends itself well for explorative qualitative research (Lærd Dissertation, n.d.). The experts or key informants that need to be found are members of a community who are observant, reflective and well informed and willing and able to share their knowledge (Tongco, 2007). To identify these people the first step was to define the qualities that they should possess. Consequently, the search could begin, which happened through various means such as via a personal network, by showing the list to others who could help to identify key informants and by looking for informants through online queries. Often in qualitative research the sampling continues until saturation is reached and no new information emerges from the data (Centre for innovation research and teaching, n.d.). However, in this case the constraints of time and resources limit the sample size.

Unsurprisingly perhaps, as a drawback of purposeful sampling many sources state that it is very prone to researcher bias (Centre for innovation research and teaching, n.d.; Lærd Dissertation, n.d.; Tongco, 2007). Different steps can be taken to prevent this:

- Triangulation with other methods of data collection and analysis (Tongco, 2007).
- Selection of informants based on clear criteria (such as a theoretical frame or expert elicitation) (Lærd Dissertation, n.d.).
- Finding competent and reliable informants (Tongco, 2007).
- Stating the possible bias and not generalizing the outcomes to a larger sample (Tongco, 2007).

As mentioned before, triangulation took place with the two other research methods, the document analysis and the historical analysis. Furthermore, the criteria for the

respondents are detailed in the following paragraph, which sheds light on the bias present in the selection procedure.

Since both urban planning and degrowth are broad fields of knowledge, actors from many different professions could be found who are occupied with these topics. Urban planning literature often talks of the 'planning system,' meaning urban planning is not only undertaken by professional urban and regional planners but all other sorts of stakeholders take part (UN-Habitat, 2009). There are for example urban planners working for the municipality or private firms but also active citizens that shape urban planning. Likewise, there are academics working on degrowth but also activists are involved in the topic.

In innovation and policy research over the last decades the idea came up that societal innovation and development has moved away from a separation between government, universities and businesses towards a more integrated collaboration. A model that explains this collaboration is the 'triple helix' model and the refined 'quadruple helix' model (Colapinto & Porlezza, 2012; Leydesdorff, 2012). Where the former is based on non-linear collaborations and interdependencies among the academic (universities), private (industry) and public (government) spheres, the latter adds civil society to the mix. This model has typically been used to stimulate the development of better product design, more efficient services and support economic growth (Colapinto & Porlezza, 2012). However, Karl-Filip Coenegrachts, strategic manager of the city of Gent and expert on people centered cities, proposes to expand the use of this model for tackling societal challenges such as climate change or poverty (2018). Coenegrachts argues that the government, the business sector, academic sector and civil society need to collaborate and combine all their means to get to future proof, innovative and well supported solutions to these wicked problems (Coenegrachts, 2018).

With that argumentation in mind, four interview respondents were chosen for urban planning and four

for degrowth, one from each strand of the quadruple helix. This way a good understanding of the entire field could be expected and an insight into internal collaborations between these groups. Besides other criteria for selecting the respondents were set, these are the following:

general criteria for all interview respondents

- Willing to share information
- Well acquainted with the city of Amsterdam
- Possessing several years of experience in their respective careers
- Both men and women, ideally a fair mix

specific criteria for the respondents from urban planning field*

- Familiar with sustainable urban planning
- if possible familiar with growth critique (to facilitate an understanding of degrowth)
- Working or has worked on projects in Amsterdam

** no further criteria have been listed for the degrowth respondents since the field is already quite small.*

In table 1.2 all of the interview respondents from the field of urban planning can be found. In table 1.3 the respondents from the field of degrowth can be found. One respondent wished to remain anonymous. Furthermore, it deserves mentioning that all actors in the urban planning field self-identified as actors from this field, however that is not the case for the degrowth group. As degrowth is a relatively new field of knowledge and practice it is hard to state what the public or private sphere of degrowth is. By looking at degrowth literature and after consultation with the thesis supervisors the PBL, the Dutch environmental planning agency, was selected as an example of what could be a public degrowth body as this organization is concerned with the quality of the environment, nature and space (PBL, n.d.). For the degrowth actors from private and civil society literature on degrowth practices was consulted. Local organic farming is a practice that aligns closely with degrowth values and Amsterdam has quite some urban farming initiatives, therefore for private actors this example was used. Additionally, degrowth is often mentioned with regards to affordable and sustainable (social) housing and co-housing. This field was chosen to find an actor from civil society as there are several co-housing initiatives in the city.

urban planning respondents

actor type	name	organization	function
public	Maaïke Zwart	Municipality of Amsterdam	Program manager sustainable area development
private	Rob van Leeuwen	Self-employed / member of various advice committees of the municipality	Urban planner / landscape designer
academic	Verena Balz	TU Delft	Assistant professor, Chair of Spatial Planning & Strategy
civil society	Anonymous	De Gezonde Stad	Director at nonprofit aimed at making the urban area of Amsterdam more sustainable

table 1.2. Selected actors from the field of sustainable urban planning for the interviews

degrowth respondents

actor type	name	organization	function
public	Corjan Brink	PBL, Planbureau voor de Leefomgeving	Environmental eco-nomist
private	Michel Kegels	Groenhartig, self-employed	Urban Farmer
academic	Ana Poças Ribeiro	Utrecht University	PhD Researcher on Sustainable Consumption
academic	Julien-François Gerber	Erasmus International Institute of Social Studies, The Hague	Assistant Professor of Environment and Development
civil society	Carla Huisman	SOWETO housing association, Nieuwland, TU Delft, RUG.	President of a housing association (and PhD researcher)

table 1.3. Selected actors from the field of degrowth for the interviews

the interview protocol

A semi structured interview needs an interview protocol. Rabionet mentions two parts that make up this protocol, the first part discusses how to introduce yourself as an interviewer (2011). This part of the protocol includes statements of confidentiality, anonymity, informed consent, use and scope of the results (Rabionet, 2011). The second part consists of the interview questions.

The first part touches upon ethical guidelines of interviews. The recordings of the interviews as well as the full transcript are kept confidential. The transcription that was used in the thesis analysis was sent back to the respondent for comments and consent. Regarding the anonymity, the preference was to mention the names of the respondents so that readers of the thesis can find their work and research and since it can increase the understanding and credibility of the research. But in one case, anonymity was requested. All this information was explained to the respondents in the consent form which they signed prior to the interview and of which they were sent a signed copy (see appendices).

Setting up the questions for the second part of the interview protocol required focus and attention. A

methodological research review into semi-structured interview mentions several characteristics of well formulated interview questions:

- participant oriented;
- not leading;
- clearly worded;
- single faceted;
- open ended.

Source: (Kallio, Pietilä, Johnson, & Kangasniemi, 2016),

The interview questions can be set up in two levels, main questions and follow-up questions. During the interview the researcher best moves from lighter and more accessible questions to the more complex and heavy questions and then back again towards the end (Kallio et al., 2016). Prompts can be used in combination with questions to get pre-planned specifics that interviewees might not mention by themselves (University of Michigan, n.d.).

To be able to develop good questions a good theoretical base is very important (Kallio et al., 2016;

Rabionet, 2011). When a first draft of interview questions based on the theoretical frame has been set up, many scholars advice to ask for feedback and guidance from other researchers (Rabionet, 2011) and to test the interview guide internally or with external experts or in the field (Kallio et al., 2016). The different methods of testing can reveal different errors and shortcomings. In this case the question list was developed and send to the thesis supervisors for feedback. After processing their feedback, the questions were tested in an interview with Ana Poças Ribeiro. As this interview was well received and provided interesting results the interview was included in the analysis. The interview protocol can also be found in the appendices chapter. The interviews were recorded with an iPhone, and a laptop was used as a backup recording device. The location of the interviews depended on the respondent's preference, in the end all interviews took place at the respondents' place of work or office.

data analysis

After collection, the interview data was analyzed. The data analysis of the interviews differed slightly from the data analysis of the documents. In the case of the document analysis prior knowledge was still lacking and consequently the approach was more open. As the interviews were conducted based on predefined questions and topics and after the theoretical frame and document analysis were set up, there was already a hypothetical answer to the main questions and a more defined conceptual framework and overview of ways that degrowth might be of relevance to urban planning. These answers, framework and measures were partially validated in the interviews next to new ideas that arose during the interviews. Therefore, the method that was used was 'directed content analysis' as described by Hsieh and Shannon (2005). In this directed approach content analysis starts with a theory or research findings to guide initial coding: *'The goal of a directed approach to content analysis is to validate or extend conceptually a theoretical framework or theory'* (Hsieh

& Shannon, 2005, p. 1281). In the case of interviews, open-ended questions followed by targeted questions or prompts regarding predetermined factors fits well with direct content analysis (Hsieh & Shannon, 2005). Several steps could be identified:

1. Conduct theoretical research and develop a conceptual framework regarding the variables of interest and their relationship.
2. Conduct the interviews transcribe them
3. Set up an initial coding scheme.
4. Code the interviews with the predetermined codes.
5. Identify data outside of existing codes, develop this into a new category or subcategory of existing codes.
6. Analyze the findings per category
7. Use the findings to refine, extend, and enrich the developed theory.

(Hsieh & Shannon, 2005).

Again, to facilitate this process the free software QDA minder lite was used. Interviews were transcribed and these transcriptions then coded once. Like the document analysis, new interviews transcriptions revealed new codes with which to revisit previous transcriptions. The codes for the interviews were grouped per theme, these themes corresponded largely with the topics of the topic list that was set up before the interviews. Tough some new topics that arose during the interviews were added.

This resulted in a wide range of codes per theme, yet it was hard to analyze and describe these findings as there were too many codes and they were too specific. Therefore, specific codes were taken together and grouped into several categories per theme. For example, a theme such as 'opinions on degrowth' now contains three categories; 'questioning of growth', 'critique on degrowth' and 'positive opinions on degrowth' which all describe certain type of opinions reflected in various codes. The number of categories per theme varies. The different categories were consequently used as basis for short paragraphs in the themes written by using the codes as a

guideline, sometimes quoting sections of code directly, at other times using several quotes to paraphrase findings and opinions. In the end this resulted in an extensive overview of the opinions of the respondents organized per theme.

C. research organization

This research project was executed under the guidance of two supervisors from the Delft university of Technology and Wageningen University and Research. Because of the multidisciplinary nature of the research project, combining degrowth and sustainable urban planning it was a deliberate choice to find two supervisors with different fields of expertise. From Wageningen the idea was to find a supervisor related to degrowth and fields of knowledge that have link with degrowth. From the TU Delft the idea was to find a supervisor with knowledge of sustainable urbanism design and planning.

Robert Fletcher took the role of the first supervisor for this thesis. He is an environmental anthropologist and associate professor, part of the staff of the department of Social Sciences of Wageningen. More specifically he is part of the subdivision Sociology of Development and Change. His expertise and interest lie in political ecology, conservation, development, ecotourism, globalization, climate change, social and resistance movements, and non-state forms of governance. He recently started a research project into degrowth and tourism.

Alexander Wandl became the second supervisor. Alexander is an urbanist and senior researcher at the chair of Environmental Technology and Design, at the Faculty of Architecture and the Built Environment. His research focuses on sustainable urbanism, urban metabolism, circular economy and suburban and peri-urban areas. He is the scientific coordinator of the Horizon 2020 financed research project REPAiR – Resource Management in peri-urban areas.

In figure 1.4 a timeline of the thesis process can be found. The thesis was supposed to start a bit earlier in

the year and be finished up a bit sooner. But due to other private projects and other master courses the start was postponed until January and the process proceeded a bit slower. Nonetheless thinking about the topic had started already before January. In the month January supervisors were found and an event was attended that discussed growth critique applied to cities at the UvA (The Post-Growth City). A formal start took place beginning of march with the signing of the thesis agreement form by both supervisors. In March a preliminary thesis proposal was drafted, and another supervision took place. Course of the MSc MADE master took most of the time of April, May and June and real work on the thesis did not start again in earnest until June. At that time the document analyses started, followed by the historical analysis in July, end of July a final thesis proposal was also agreed upon, which meant this chapter could be closed. The proposal was rewritten to a first outline of the final report. To make up lost time the holidays were used to work on the analyses and the theoretical frame around this time there were also two talks with people from degrowth and urban planning fields for advice on the topic. Interviews respondents were contacted in august at the same time the interviews were prepared. All interviews were conducted between September and October while in the meantime working along on the historical analysis. November and December were mostly spent on the transcription and analysis of all interviews and finishing up the document analysis. Beginning of December, a draft of the historical analysis was handed in (deadline 1 / DL 1). This was followed by rounding up draft versions of the document analysis and interview analysis beginning of January (DL 2). After that, a start could be made with synthesizing the results and putting the full thesis together. The discussion and conclusion chapter were handed in end of January (DL 3), a full draft was handed in end of February (DL 4) and after processing some final feedback this full thesis report was handed in beginning of March (DL 5).

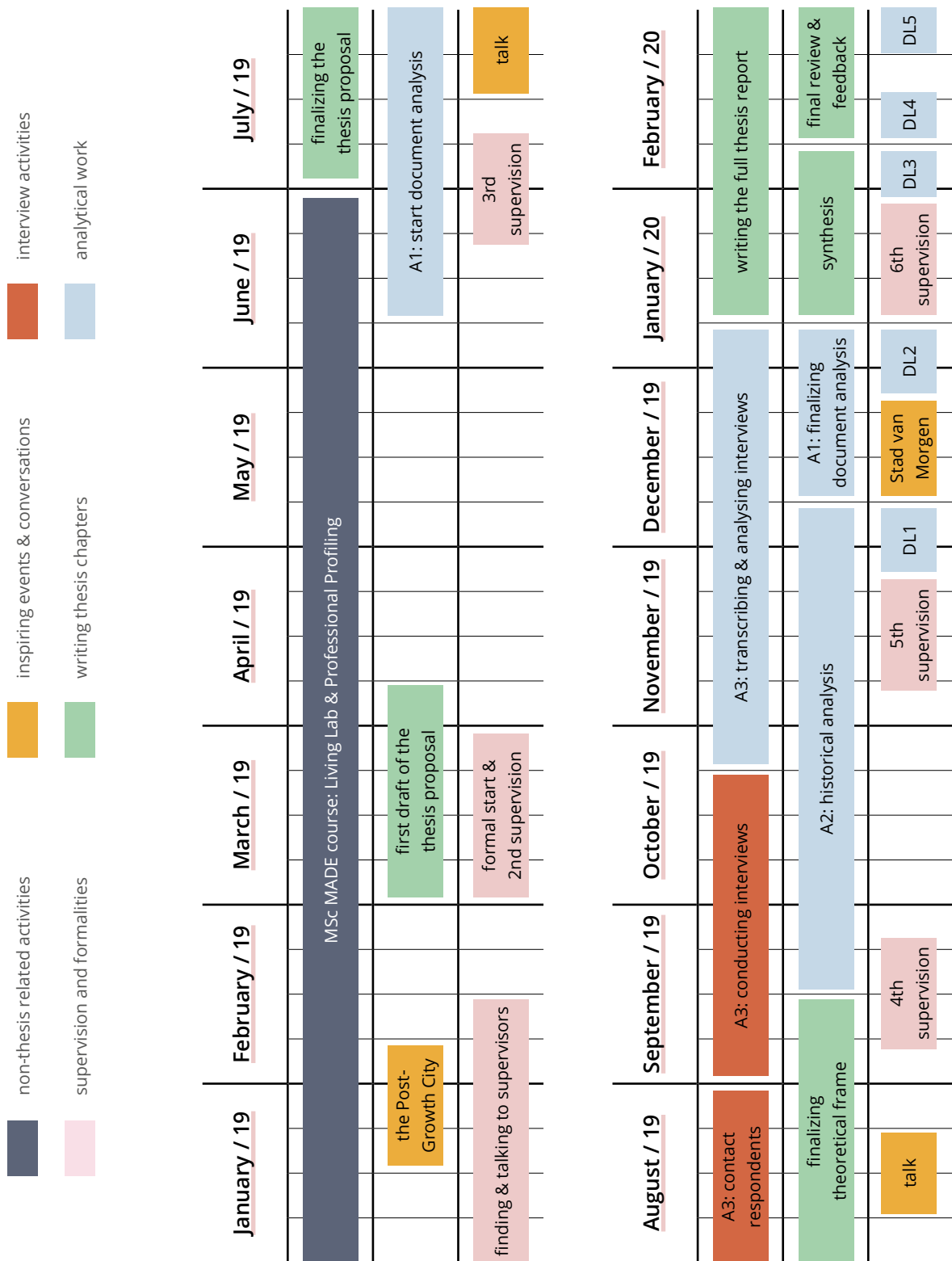


figure 1.4. research planning

2

theoretical framework

This chapter discusses the most important concepts addressed in the research questions. As this thesis analyses the value that degrowth can offer for sustainable urban planning, both concepts will be explored in this chapter. However, first an understanding and definition of conventional urban planning is required as well as an understanding of the concept of sustainability itself. Furthermore, this thesis considers the influence of the 'growth paradigm' on sustainable urban planning in Amsterdam. That begs the question how this concept originated and what it means. After a general insight into these three topics has been established, sustainable urban planning is clarified in more detail before elaborating explicitly on degrowth. Finally, these concepts are related visually in a simple conceptual framework.

figure 2.1. the former Ookmeerpolder in 1943, currently the place of the westelijke tuinsteden (adapted from: Dienst Publieke Werken, 1943)



1.

URBAN PLANNING

As pointed out by Carola Hein, professor of history of architecture and urban planning, the field of urban planning is complex discipline with multiple interpretations and applications (Hein, 2018). Institutes and scholars agree on a very broad definition that modern urban planning can be seen as a process of decision making or controlling to reach certain goals (Chadwick, 1971; Levy, 2018; McGill School of Urban Planning, n.d.). And that urban planning deals with the organization of all elements of an urban environment (Levent & Nijkamp, 2009; Wharton University of Pennsylvania, n.d.).

In the Britannica Encyclopaedia Susan Fainstein describes urban planning as: 'design and regulation of the uses of space that focus on the physical form, economic functions, and social impacts of the urban environment and on the location of different activities within it. Because urban planning draws upon engineering, architectural, and social and political concerns, it is variously a technical profession, an endeavour involving political will and public participation, and an academic discipline.' (Fainstein, 1998).

However, often urban planning is used interchangeably

with town planning, urban design or even the broader term urbanism. All these fields are concerned with urban development, adaptation and maintenance, yet there are important differences to be observed between them. For the effectiveness of this thesis research a specific interpretation of urban planning is given by contrasting it to the definitions of both urban design and urbanism.

Multiple sources describe urban design (or in Dutch 'stedenbouwkundig ontwerp') as a past subfield of urban planning (in the Dutch known as 'stedenbouwkundige planning'). Where urban planning has a focus on allocating functions and proposing policy documents, urban design has a focus on urban form, aesthetics and liveability, as expressed in drawings (Gunder, 2011; Macdonald, 2011). And then there is the academic field of planning (planologie in Dutch) which describes the scientific discourse. McDonald states urban design started to develop itself as an independent field of theory and practice around the 1960's (Macdonald, 2011). However, van Eesteren in The Netherlands considered his plan for Amsterdam (AUP, Algemeen Uitbreidingsplan Amsterdam, see chapter III. Section 2) a real urban design according to Dirk Baalman (D. Baalman, Personal communication, December 12, 2019). This already shows that countries have their own traditions, conventions and language when it comes to urban planning.

Nonetheless both urban design and urban planning are currently two distinct but related fields that have major influences on the process of shaping the urban sphere in the Netherlands and abroad. Regularly urban planning and urban design are collectively represented under the denomination 'urbanism'. While this term can refer to the typical way of life of city dwellers (Merriam-Webster, n.d.). Here it is meant as the field of study, policy action and design related to the needs of urban societies (Merriam-Webster, n.d.). In a comprehensive book on the status quo of urban planning and design Olsson and Haas explain planning and design by contrasting the two terms (Olsson & Haas, 2014).

Their illustration of this juxtaposition was adapted to show how for this thesis urban planning is interpreted as one part of the professional and academic process understood as urbanism, see figure 2.2.

Urban planning has several unique and specific characteristics as opposed to urban design:

- Urban planning is likely to have spatial consequences, but the initial starting point is a socio-economical perspective. Whereas for urban design the initial perspective is likely to be the spatial sphere (Brandes, 2006).
- Urban planning is seen as the discipline that sets the values to strive for while urban design deals with the implementation of these values in the physical environment (Gunder, 2011).
- Urban design is often seen as large scale architecture, or small scale urban planning (Gunder, 2011; Olsson & Haas, 2014) thus the scale of urban planning is often larger.
- Urban planning is more process focused, signified by policy briefs, where urban design is more product focused, as symbolized by the drawing (Olsson & Haas, 2014).

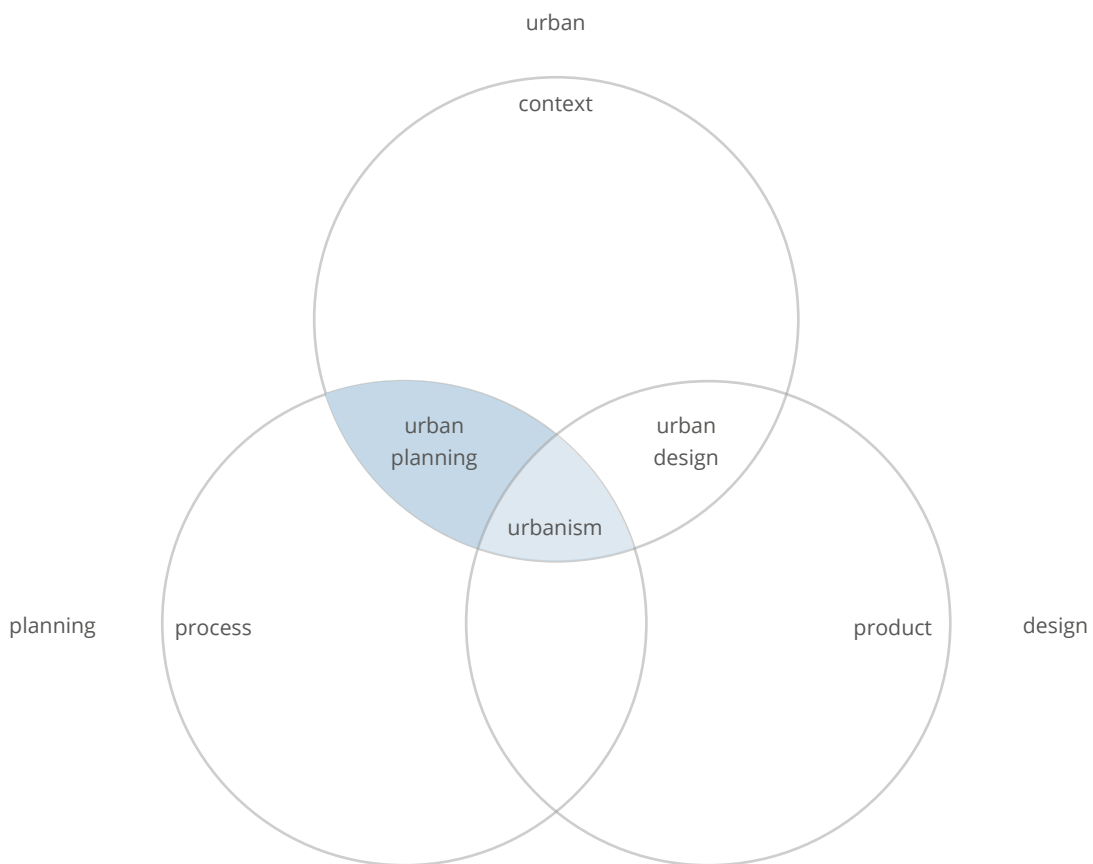


figure 2.2. Delineation of urban planning as a part of the field of urbanism together with the field of urban design. Own adaptation of an illustration by Olsson and Haas (2014, p. 2). The main focus of this thesis will be Urban planning (in blue), inevitably this may sometimes extend to what is understood with urbanism, the combination of design and planning of the urban sphere (in light blue).



figure 2.4. a more modern and smaller scale example is this zoning plan for the neighbourhood Geuzenveld in Amsterdam. This plan shows which functions can take place in which areas. Yellow shows housing, grey is traffic, brown areas have a societal function and pink are areas for shops and trade (Gemeente Amsterdam, 2010)

2.

SUSTAINABILITY

In order to go from defining urban planning towards determining what is meant with sustainable urban planning, the term sustainability itself deserves further attention. Over the last decades the meaning of sustainability has been discussed repeatedly. Some of the most well know interpretations of sustainability are given and two important concepts of sustainability are considered to finally propose a useful definition for this research project.

According to Richard Heinberg sustainability in its essence is '*that which can be maintained over time*' (2010, p. 1). Although the specific word sustainability was not used this concept has a long history. Traditional tribal beliefs regarding good stewardship and concern for future generations are a good example of this that go back thousands of years. As is the German word 'Nachhaltigkeit' that became customary in forestry hundreds of years ago, referring to harvesting only as much as the new yield offers (Kuhlman & Farrington, 2010). Yet many of today's environmental worries originate in the sixties

and seventies, when as a reaction to major pollution events environmental awareness grew rapidly. Rachel Carson, who wrote a book called *Silent Spring* in 1962 contributed greatly to this change in perspective by laying bare the harmful effects of pesticides on the environment. Furthermore, in this turbulent period the aforementioned famous report 'limits to growth' was published, making the point that unbridled development is impossible in a finite world (Meadows et al., 1972). However, what might have given most recognition to the term sustainability was the concept of sustainable development as coined by the Brundtland Commission in 1987 as development that meets the needs of the present without compromising the ability of future generations to meet their own needs (Brundtland, Khalid, & Agnelli, 1987). This describes intergenerational equity, the idea that present and future people have the same right to find opportunities for a good life (Ott, 2003).

John Elkington famously operationalized sustainable development with his concept of the triple bottom line in 1994. The triple bottom line is a framework that introduced the idea that sustainability has three dimensions; a social, environmental, and economic dimension. These are also commonly called the three P's: people, planet and profit, see figure 2.7 on page 47. In this framework the environmental dimension or planet refers to reducing environmental impact and resource demands and staying within ecological boundaries (Slaper & Hall, 2011). The social dimension is or people is concerned with inclusion, equity and health (Kuhlman & Farrington, 2010). Finally, the economic dimension or profit refers to flows of money such as GDP growth, investments or job growth (Slaper & Hall, 2011).

Although application of this model is widespread it is not without criticism. Kuhlman and Farrington mention that this idea originates from the world of management science, the problem according to them is that the goals of business vary greatly with the goals of public policy as the latter should not aim for profit

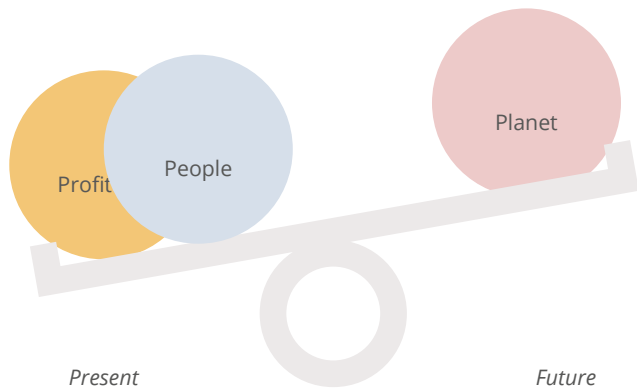


figure 2.5. the triple bottom line, an unequal balance?

(Kuhlman & Farrington, 2010). They argue that this model creates an artificial divide between financial and social aspects that disturbs the goal put forth by the Brundtland commission: *'Since socio-economic aspects are mostly about the well-being of the present generation and environmental ones are about caring for the future, this means the former become twice as important as the latter—which violates the Brundtland requirement that development should not take place at the expense of future generations.'* (Kuhlman & Farrington, 2010). This argument has been depicted in figure 2.5.

Interestingly John Elkington himself has recently 'recalled' his idea because it does not deliver what he intended: *'Indeed, none of these sustainability frameworks will be enough, as long as they lack the suitable pace and scale – the necessary radical intent – needed to stop us all overshooting our planetary boundaries'* (Elkington, 2018, sec. 3)

In order to address the limits of the triple bottom line, Kuhlman and Farrington propose to take the social and economic together and see this socio-economic as the 'wellbeing' which people strive to improve in the current moment (Kuhlman & Farrington, 2010). A term that is not to be confused with the more limited concept of 'welfare' that denotes prosperity in material terms. The ambition to improve wellbeing must then be balanced with sustainability, the ability to sustain live indefinitely into the future. The notion of sustainability that lies behind this is that of a constant availability of resources

needed for future generations (Kuhlman & Farrington, 2010).

Even when the idea is accepted, that there is no divide between economic and social sustainability and that the socio-economic aspects must be balanced with the sustainability aspects, there is still room for multiple interpretations of this balancing act. The most important one is that of 'weak' versus 'strong' sustainability. Weak sustainability is the idea that natural capital can be substituted by artificial capital and so natural capital can be degraded as long as artificial capital is created at an equal rate (Ott, 2003). Proponents of strong sustainability on the other hand are of the opinion that this substitution is only possible to a limited amount. Human life is part of a biosphere that provides essential ecosystem services that are needed for human survival, see figure 2.6 and figure 2.8. From that argument follows the idea that natural limits should constrain human actions, therefore strong sustainability is in favor of a 'constant natural-capital rule' (Ott, 2003).

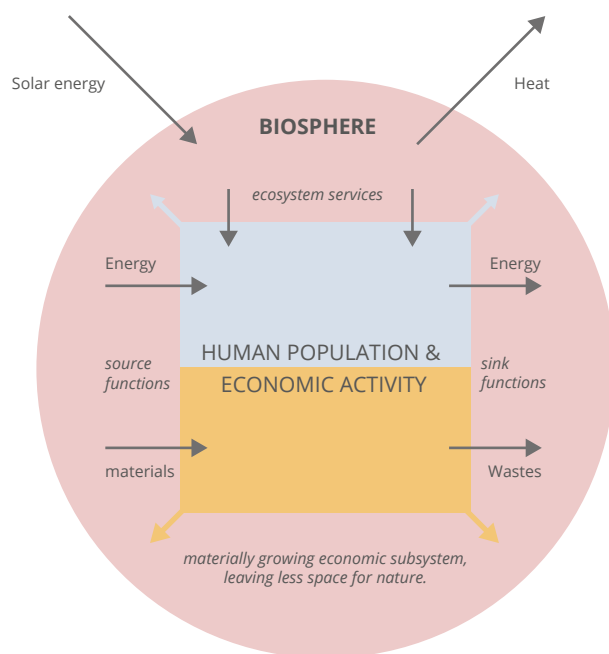


figure 2.6. A schematic depiction of the earth's biosphere as an entity that provides functions and services that cannot be substituted by human activities and are vital to human survival (based on Bell, Chaplin, & White, 2013)

Konrad Ott makes several compelling arguments why strong sustainability is, rationally speaking, the better choice. His foremost argument is that weak sustainability is speculative, it is unsure whether mankind can substitute all vital natural functions. Moreover, it is not sure whether we can even identify all vital functions of nature. Therefore, it is better to be too careful instead of too lenient (Ott, 2003). This is what Kuhlman and Farrington call the ecosystem services argument, humanity can damage this system, but at its own peril (Kuhlman & Farrington, 2010). Besides that, they mention the stewardship argument; humanity does not have the right to destroy other forms of life, either intrinsically or because we must preserve it for current and future generation's enjoyment (Kuhlman & Farrington, 2010). They also argue however that there is a place and time for weak sustainability for those resources that have proven to be genuinely substitutable and are deemed replaceable, within limits and constraints set from a strong sustainability approach (Kuhlman & Farrington, 2010).

Over the years this debate has flared up repeatedly. The Club of Rome famously warned there are certain thresholds that mankind should not cross to avoid a societal collapse. Ugo Bardi describes how over a period of decades the report was claimed to be invalid and mistaken and no serious action was taken (Bardi, 2011). Several scholars' mention how the weak sustainability has dominated environmental discussions and economic policies ever since (Ayres, Bergh, & Gowdy, 1998; Cristina & Diana, 2014; Dedeurwaerdere, 2013). However currently there is a renewed interest in arguments advocating a strong sustainability approach as can be seen with the publication of the planetary boundaries report (Rockström et al., 2009) or the doughnut economy of Kate Raworth (2012).

The viewpoint underlying this thesis is in agreement with Kuhlman and Farrington's observation that economic and social aspects should not be separated and thus have more weight than the environmental aspect; the ability to sustain life into the future (Kuhlman & Farrington, 2010). Therefore, it rejects the ideas of the triple bottom line. It

combines this view with the ethical argumentation of Konrad Ott, both hark back to the original definition of Brundtland definition; that sustainability signifies the total of natural resources, capital and quality of the environment needed for future generations to have equal opportunities for realizing a good human life (Brundtland et al., 1987; Kuhlman & Farrington, 2010; Ott, 2003). Furthermore, the necessity of a strong sustainable approach in protecting the biosphere that safeguards life on earth, human and non-human, is recognized.

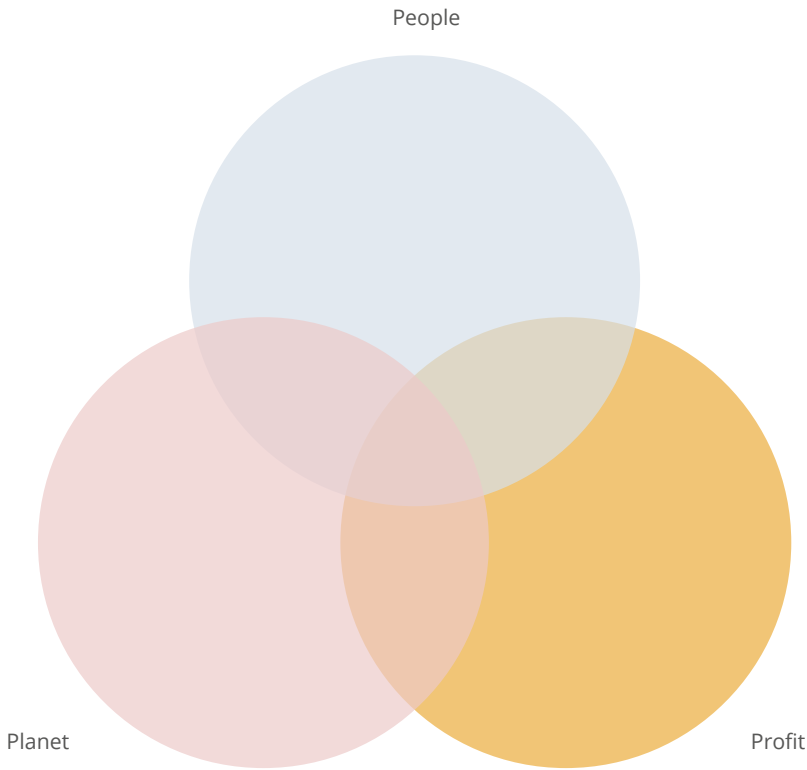


figure 2.7. from a weak sustainability viewpoint, no environmental limits are recognized.

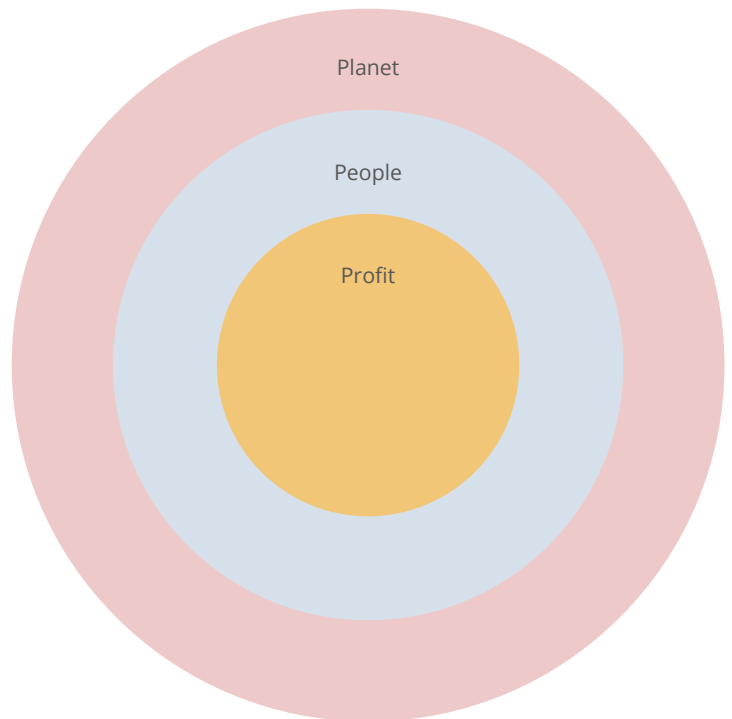
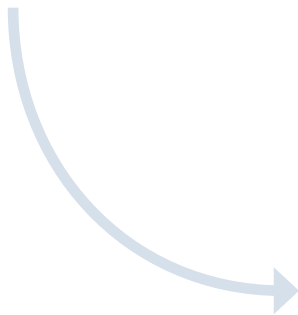


figure 2.8. from a strong sustainability viewpoint, the socio-economic system is a subsystem of the biosphere, its preservation sets boundaries.

“To say that exponential growth is incompatible with a finite world and that our capacity for consumption must not exceed our bio-sphere’s capacity for regeneration is so obvious that few would disagree. It is, on the other hand, much more difficult to accept that the inevitable effects of production and consumption have to be reduced and that the logic of systematic and dramatic growth has to be called into question, as does our way of life”.

(Serge Latouche, 2009)

3.

GROWTH PARADIGM

The growth paradigm needs to be elucidated in order to understand its influence on current urban planning. The formal definition of economic growth is the yearly increase of the value of all goods and services within a specific country, measured in monetary value, usually by means of the gross domestic product or gross national product (Chappelow, 2019). Giorgos Kallis describes GDP as the byproduct of an integrated process of growth existing of the acceleration of:

- the mobilization of work of humans and non-humans,
- the investment of surplus into machines that produce more,
- the extraction and transformation of matter or disposal of waste.

Source: (Kallis, 2018)

Although nowadays economic growth is a major policy goal all around the world and even all over the political spectrum rapid economic growth only started to develop

with the coming of the industrial revolution around 1820 (Kallis, 2019; Schmelzer, 2015). This can be seen in figure 2.9. Kallis therefore calls growth more than a material process, he describes it as a cultural, political and social process, a constructed idea that was imagined and instituted (Kallis, 2018). This is supported by the fact that widespread use of economic growth as a goal and indicator of success did not occur before the 1950's (Schmelzer, 2015).

Often scholars point out the positive relation of GDP to broader metrics of welfare such as education health and life expectancy (van Zanden & Rijpma, 2019). But the concept of GDP has also been criticized since its inception, the famous economist Simon Kuznets, one of the first economists to work on calculating national income, declared in 1934 already that *'the welfare of a nation can scarcely be inferred from a measurement of national income'* (Kuznets, 1934). The seventies saw a period of intense growth critique, stemming for a large part from the aforementioned report 'The Limits to Growth'. Presidential candidate Robert Kennedy famously said in 1968 that the gross national product includes things like air pollution, cigarette advertising, the destruction of the redwood forest, napalm and nuclear warheads (Kennedy, 1968). In the same spirit, scientist, activists and politicians today claim that the metric of economic growth, GDP or GNP, is an incomplete one as it does not include care and household work, ecological processes and does not reflect the growing inequality (Dengler & Strunk, 2017; Stiglitz, Fitoussi, & Sen, 2010). But nowadays there are more reasons why questioning and criticizing growth as a goal is experiencing a resurgence, as recently illustrated by the remark in the international IPBES report on biodiversity loss, that society needs to steer away from the current limited paradigm of economic growth (IPBES, 2019).

Schmelzer summarizes the current critique on economic growth into three main points. First of all the merits of growth are problematic, research has shown that after a certain national income extra growth does

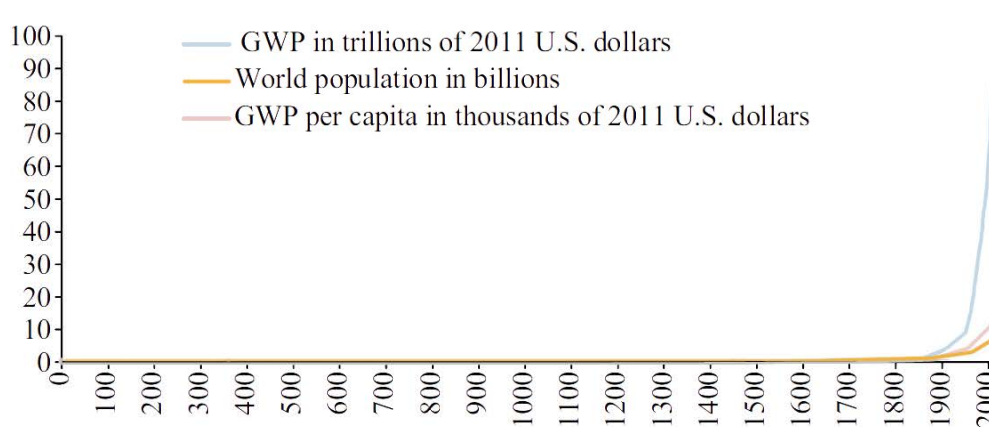


figure 2.9. reconstructed gross world product (GWP) and population over the last 2000 years (based on data from Bolt and van Zanden, 2014 in: Kallis, 2018).

not increase well-being or reduce poverty (Easterlin, 2016; Schmelzer, 2015). This threshold has already been attained for most western countries around the 1970's, see figure 2.10 and figure 2.13. The first graph in figure 2.10 shows that in the United States, even though GDP growth has seen a steady increase over the last decades, the percentage of people who report being very happy has stayed the same. The second graph, figure 2.13 on page 54 shows that the income does matter but it levels off at a certain point, there is not much difference between Costa Rica, Finland and the United States in terms of life satisfaction.

Secondly economic growth has a huge ecological and consequently social price tag. As Schmelzer states: *'The fundamental promise of growth – to raise the living standard and consumption of soon to be nine billion people to Western levels through a continuous expansion of world GDP – has been irrevocably shattered by the ecological predicament, most prominently climate change'* (Schmelzer, 2015, p. 264). This relates to the statement that growth is an integrated process of the acceleration of work, resource use and the creation of waste. This is well reflected in the graphs below of the 'great acceleration' seen in figure 2.11 and figure 2.12 on page 53.

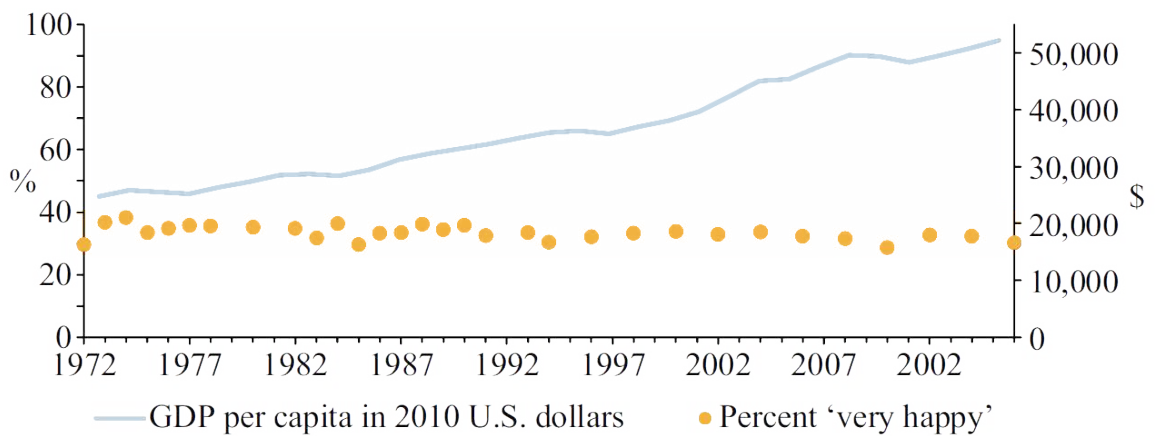


figure 2.10. average income and self-reported happiness in the United States between 1972 and 2016. (based on happiness data from Smith et al, 2017 and GDP data from the World bank, 2017 in: Kallis, 2018)

Socio-economic trends

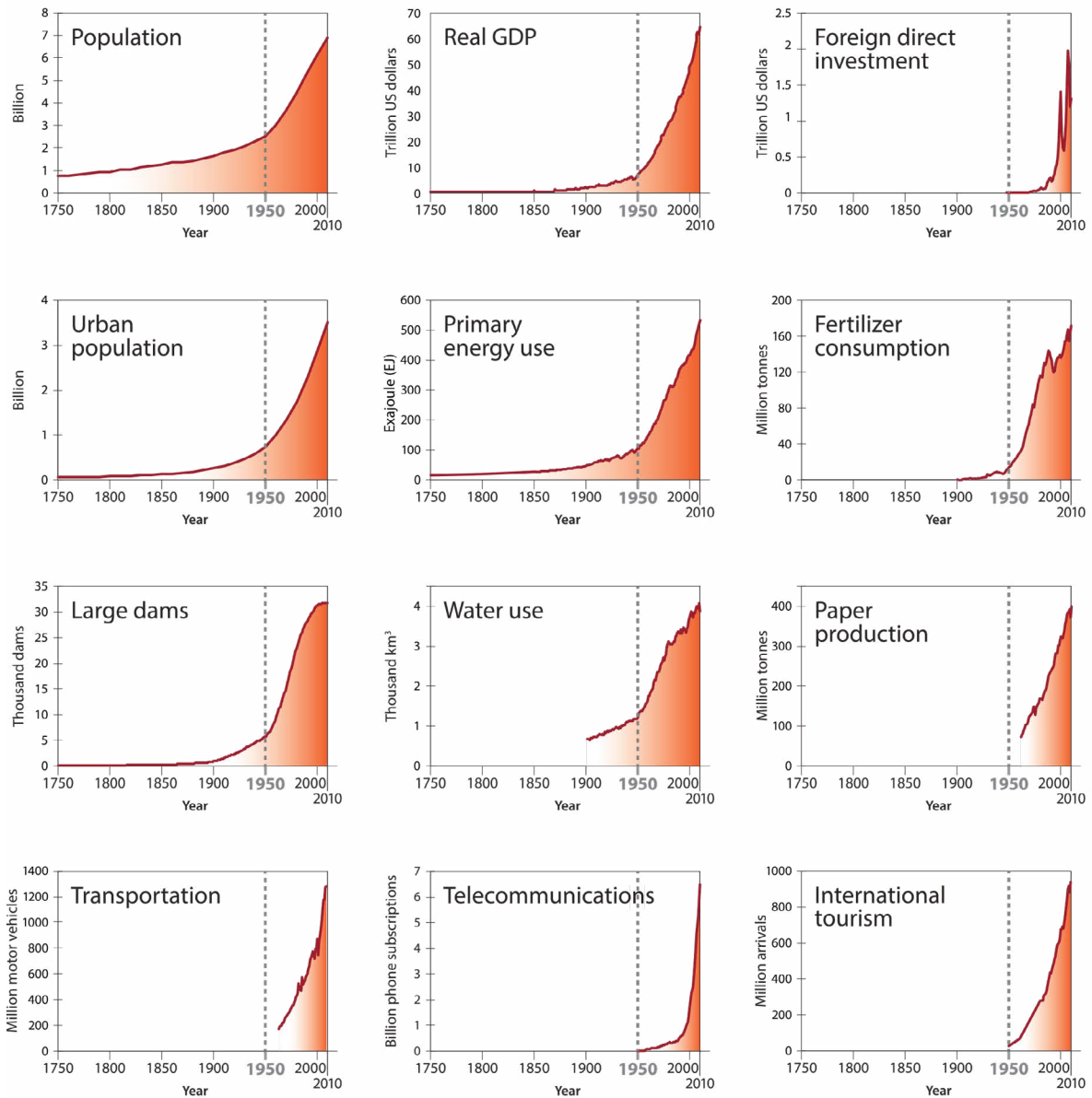


figure 2.11. Socio-economic trends of the 'great acceleration' posited by Steffen et al (Steffen, Broadgate, Deutsch, Gaffney, & Ludwig, 2015).

Earth system trends

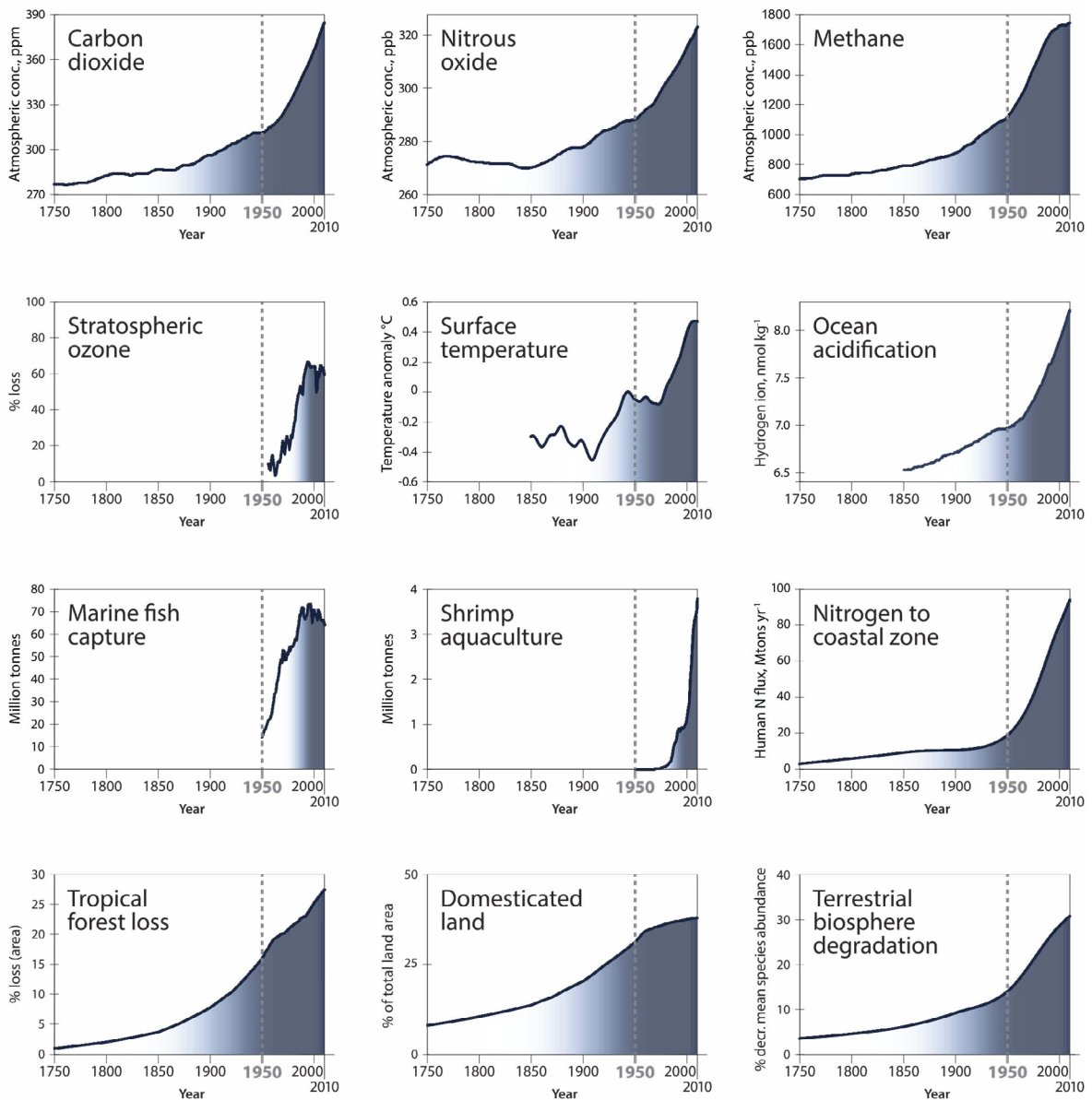


figure 2.12. Earth system trends of the 'great acceleration' posited by Steffen et al (Steffen, Broadgate, Deutsch, Gaffney, & Ludwig, 2015).

Finally, growth rates in most western countries have already been dwindling for years and a future with continuous growth seems more and more unrealistic because of trends like peak oil, over accumulation and financialization (Schmelzer, 2015). This means a period of non-growth seems likely which is urgent considering the fact that slowdown destabilizes the inner workings of the current growth based economic system itself (Latouche, 2009).

Serge Latouche describes it as follows: *'growth is now a profitable business only if the costs are born by nature, future generations, consumers' health, wage-earners' working conditions and, above all, the countries of the South.'* (Latouche, 2009, p. 31). Herman Daly speaks of uneconomic growth, because the increase in production comes at the expense of resources and well-being that is worth more than the products themselves (Daly, 2005). Tim Jackson concludes that staying within the planetary boundaries while allowing for a better quality of life in the global south requires a contraction of the economy of the global north (2009).

Despite these critiques economic growth as a goal is firmly embedded in modern states. The term 'growth paradigm', first introduced by Daly, refers to the belief that economic growth is always good, necessary and essentially limitless and that it is the driving force behind many social benefits (Dale, 2012; Schmelzer, 2015). Schmelzer explains the term paradigm as 'a specific ensemble of societal, political, and academic discourses, theories, and statistical standards' (Schmelzer, 2015, p. 264) which is in this case based on four assumptions:

- that GDP adequately measures economic activity;
- that growth is a cure-all for many (often changing) socio-economic challenges;
- that growth is practically identical to or necessary for achieving some of the most essential societal goals, for example progress, well-being, or national power; and
- that growth was unlimited, given the correct governmental policies were pursued.

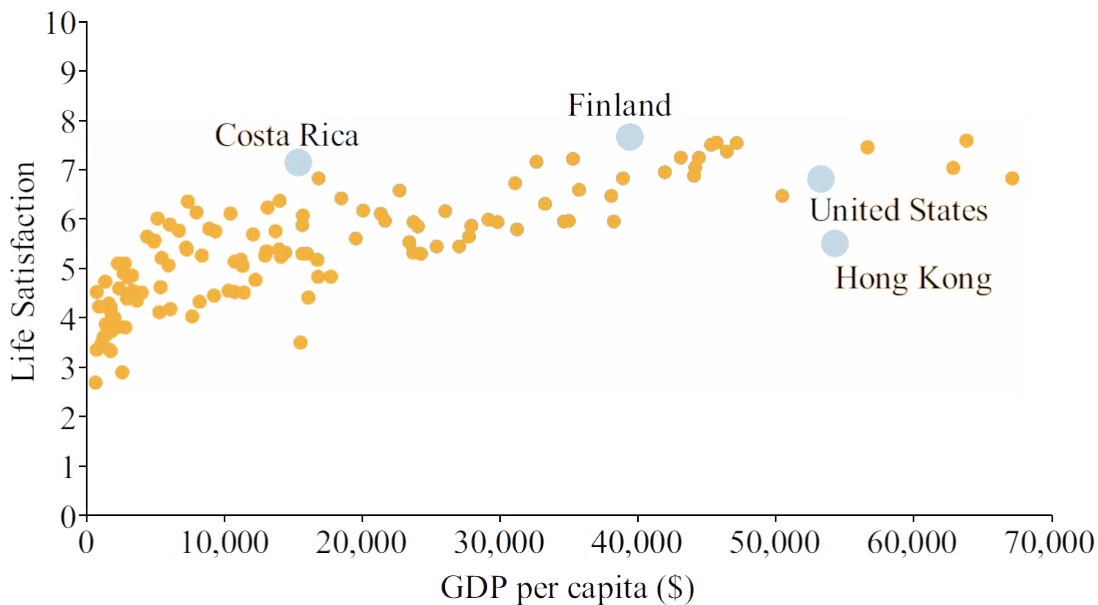


figure 2.13. average life satisfaction and income of countries in 2016 (based on life satisfaction data of Helliwel et al, 2017 and GDP data of the World Bank, 2017 in: Kallis, 2018)

This describes the growth paradigm quite clearly, which is according to Chad Frederic also present in the development, maintenance and governance of urban areas. Here as well its usefulness is limited: *'Theoretically, the economic activity being measured by GDP could consist of a single resident financially benefitting from systematically tearing down a city and turning it into an enormous parking lot'* (Frederic, 2018, para. 6). Likewise, a recent article in the NRC newspaper showed that the growth paradigm has a strong presence in Dutch politics and governmental institutions, the central planning agency has never considered alternatives to growth and the minister of economic affairs and climate sees economic growth as a prerequisite for realizing ambitions that address climate change (Kalse, 2019).

BIGGER

BETTER

FAS



TER

figure 2.14. mantra of the growth paradigm?

4.

SUSTAINABLE

URBAN

PLANNING

Now that an idea is established on the meaning of urban planning and a general understanding of sustainability is at hand, the topic of sustainable urban planning can be elaborated upon.

history

History shows that the development of a social agenda in urban planning can be identified as a movement that already started with the industrial revolution, think of the early socialists like Charles Fourier or the work of Ebenezer Howard. Furthermore, the historic perspective has shown there are also historic precedents for environmental thinking in urban planning such as the ideas of Patrick Geddes and Lewis Mumford in the 19th and early 20th century (Hall, 2014) (see chapter 3, section 2 for an overview of the western history of urban planning). Following this argumentation, it is an often heard idea that (urban) planning has long taken environmental, social and other considerations on board, the difference with the current focus on sustainability lies merely in the language and words (Dubbeling, Meijer, & Marcelis, 2012; Antonia

Layard, Davoudi, & Batty, 2001). And it is true that sustainability as a way of thinking seems like natural fit with planning as they both share a normative tendency, require a negotiation over competing claims, interests and values and share a similar long term agenda (Poças Ribeiro, 2012) .

The opposite view is that sustainability changes everything and might even be the postmodern equivalent of a grand narrative (Antonia Layard et al., 2001). Planners and scholars who agree with this view find that fundamental changes are necessary (Rees, 2003). Davoudi (2001) cited in Gunder (2006, p. 208) states : *'many commentators believe that there is a need for a new vision, one which can "reach out to society as a whole, addressing its wants, needs and insecurities" . . . a "vision to rank with those of Ebenezer Howard a century ago" . . . There is a consensus that such a vision can now emerge from what has come to be called sustainability.'*

In the Netherlands the publication of the Brundtland report was the main reason for an explicit notion of environmental sustainability in urban planning and design according to Dubbeling, Meijer and Marcelis (2012). With this publication sustainability went from a niche of progressives to a movement that was embedded in national ambitions (Dubbeling et al., 2012). Around that time the main focus of planning was on the environmental aspects of sustainability, though an explicit notion of social sustainability in urban planning followed with the Rio de Janeiro summit of 1992 (Mehan & Soflaei, 2017). From that moment on sustainable development was a major goal of urban planning.

definition

Yet like with urban planning the search for a compact and comprehensive definition of what sustainable urban planning could mean, is wishful thinking. That does not mean there are no definitions, however they vary in their exact scope and meaning. Robbert Riddel, author of a book on sustainable urban planning, himself struggles with giving a definition. Riddel

describes planning as a type of public forethought for community determined action. Sustainability to him is about realizing a socially responsive, environmentally harmonious and economically equitable development (Riddell, 2008). Dubbeling, Marcelis and Meijer, who edited a book on sustainable urban design and planning with case examples from the Netherlands, are more pronounced, they mention three core principles: (1) providing a healthy living and working environment, (2) finding ways to create future proof living environments, (3) and finding ways to make wise (or responsible) use of natural resources (2012). Yet another definition underscores the autonomous capacity of communities and defines sustainable urban planning as '*the developmental strategies and practices that ensure liveable, self-sustaining communities over the long term*' (University of Texas Arlington, 2016). To clarify sustainable urban planning further its actors, principles tools and instruments will be assessed below.

actors and principles

Urban planning involves many different actors from different societal groups, architects, city engineers, housing experts, public officials, municipal planning offices, researchers, civilians, non-profit organizations, national governments, civil society and foreign investors and many more (Friedmann, 1998). This is the same for sustainable urban planning, additionally it aims to include the stake of future generations into consideration. Besides, many scholars mention the increased importance of public participation for sustainable urban planning, adding to the complexity (Amado, Santos, Moura, & da Silva, 2010; Bednarska-Olejniczak, Olejniczak, & Svobodová, 2019). Next to the extensive set of involved actors, there many different proposed directions for sustainable urban planning. Ana Poças Ribeiro created an overview of principles for sustainable cities found in sustainable planning literature:

1. Compactness and contiguity: limiting urban sprawl and connecting to existing infrastructure in order to save on the use of land and transport emissions and facilitate social interaction.
2. Connectivity: facilitating access to and participation with the broader urban and regional environment.
3. Mixed land use: guaranteeing a diversity of functions to reduce the need for travel and enhance security and liveliness.
4. Liveability: creating space adapted to the desires of the inhabitants to stimulate community cohesion and express communal values.
5. Density: creating high density areas to reduce commuting.
6. Sustainable transport: creating good infrastructure for environmentally friendly transport and reducing private car use.
7. Diversity: stimulate a mixture of land uses, building and housing types, architectural styles and rents to avoid monotonous urban areas with bad socio-economic and cultural conditions.
8. Ecological integration: safeguarding and restoring environmental elements in the urban sphere and preserving ecosystems to maintain biodiversity, reduce pollution, moderate the extremes of the urban climate, improve the image of the urban area, increase the economic attractiveness of a city, for health benefits, educational purposes etcetera.
9. Resource efficiency and renewable energy: stimulating efficient use of resources and reducing the need for materials while meeting the energy demand with renewable energy.
10. Closed loop systems / circular metabolism: reusing and recycling of materials, reduction of pollution and waste creating closed loop systems.
11. Local food production: stimulating local food production to restore agricultural wealth in urban areas in order to tackle the waste and emissions that come from packaging and transporting food.
12. Place based economy: stimulating a local economy to enhance community liveability and the efficiency of local economic activities and to reduce ecological

impacts.

13. Equity: improve the conditions of low-income populations by stimulating equal access to social and economic resources.
14. Debate and decide: changing the decision-making process to be more democratic, inclusive and empowering and reflecting local demands and desires.

Source: (Poças Ribeiro, 2012)

Poças Ribeiro goes on to describe various urban planning and design approaches that employ different selections and forms of these principles, from compact city planning and transition towns to smart-growth and new urbanism (Poças Ribeiro, 2012). Some approaches support radical change, others are focus on incremental change. Some approaches clearly have an underlying idea of strong sustainability while others fall more into the category of weak sustainability. In several visions clear eco-modernist ideas can be recognized where advanced technological solutions are key, while others have more 'traditional' environmental ideas as an underpinning. Overall, fundamental change seems to be less addressed and urban form and land-use oriented characteristics of sustainable cities are more prevalent (Poças Ribeiro, 2012).

instruments, tools and indicators

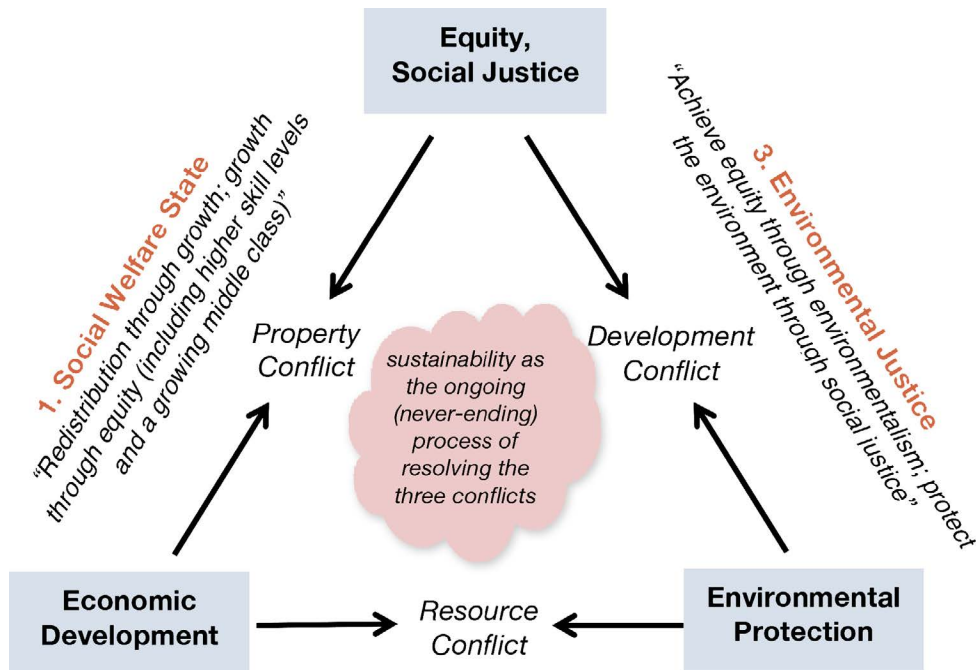
To achieve the goals of sustainable urban planning different instruments can be employed. To find out which instruments of planning are commonly used to bring about urban sustainability it can help to look at an example. The eco-quarter district in Hannover is a sustainable model neighbourhood built between 1995 and 2000 and a good example of the application of sustainable urban planning with several articles and presentations that describe the process by people who have been closely involved such as planners Reinhard Martinsen and Karin Rummig.

In the development of this eco-quarter land use or zoning plans were used to steer for a compact city form to achieve low land use, optimal natural lighting and provision of community functions and shops (Rummig, 2006).

Design competitions were used to develop innovative sustainable concepts for the landscape design, good quality of life and stimulating biodiversity (Martinsen, 2013). Next to use of the zoning plan subsidies were used to guarantee a housing mix different apartment sizes, types and costs (Martinsen, 2013; Rummig, 2006). Private contracts were used to aim for private and collective green spaces and space for biodiversity in the buildings (Martinsen, 2013). Furthermore, the contracts with developers and investors included very high standards for soil and water management and waste and energy policies which were closely monitored (Rummig, 2006). Finally, the masterplan was used to ensure sustainable transport, a maximum of 600 meters to a tram stop, furthermore the plan was used to ensure plenty of public green space (Rummig, 2006).

This shows that many standard tools of urban planning are used in sustainable urban planning such as zoning plans, contracts, competitions, master plans and subsidies complemented with monitoring of sustainability and environmental quality.

Monitoring by using different tools and indicators that go beyond what is used in conventional urban planning is central to sustainable urban planning. Where conventional indicators or urban planning might measure density, use of transport modes, economic diversity or housing types sustainability related indicators go further and measure ecological and social impact in a broader sense. This is used both to assess implemented action and for setting goals. Runhaar, Driessen and Soer describe three types of tools that facilitate sustainable urban planning (2009). The first category exists of substance-oriented tools like indicators, GIS tools and environmental impact assessments (EIA's), the second category are process-oriented tools that facilitate dialogues, building consensus and negotiation, the third category are hybrid tools that combine process and substance related aspects (Runhaar et al., 2009). The hybrid tools do not prescribe a fixed set of environmental indicators, but instead assist planners in the search for



2. Environmental Regulation/Resource Management
"Economic development through resource management and conservation; protect the environment through affluence, internalized externalities, and new technologies"

figure 2.15. The "planner's triangle," (Campbell, 2016, p. 389).

adequate ones (Runhaar et al., 2009). Huang, Wu and Yan studied different sustainability indicators for urban areas (2015). They conclude that definitions of urban sustainability can vary greatly, and this determines to a large extent the selection of indicators (Huang et al., 2015). They reviewed several commonly used indicators of urban sustainability like the 'Green City Index' or the 'Environmental Performance Index'. Additionally, they checked which indicators measure strong and which ones measure weak sustainability. Part of their conclusion is that a combination of several indicators gives the best picture, looking at different scale levels, as cities' impact can reach far and wide. They found that most indicators measured weak sustainability. However, Huan et al. conclude, in the long run this is

not truly sustainable hence they advise to at least include one strong sustainability metric such as the environmental footprint indicator (2015).

triple bottom line & critique

Another also stands out in the definitions and the principles of sustainable urban planning, is a similar combination of three aspects as seen in the paragraph on the concept of sustainability: equity and social justice, economic development and environmental protection. In the field of planning this line of thought is not only attributed to John Elkington, instead many sources refer to 'the planners triangle' as put forth by Scott Campbell in 1996 (Campbell, 2016), see figure 2.15.

Next to proposing sustainability existing of the three aspects, he states that sustainable development can only be achieved through a process of confronting and solving ever arising conflicts between the different goals of planning. These conflicts arise from the confrontation of each pair of aspects, he distinguishes between the property conflict, development conflict and resource conflict.

The property conflict, between economic growth and equity is aimed the tension between private interest and the public good (Campbell, 2016). Campbell proposes redistribution through growth as the way forward. The resource conflict, between economy and the environment regards the tension between exploitation of nature and allowing for regeneration of the resources that societies require (Campbell, 2016). As a way forward Campbell looks towards ecological modernization theory, protecting the environment through affluence. Finally, the development conflict, between social equity on the one hand and environmental preservation on the other, deals with the movement to rise out of poverty versus resource depletion and environmental degradation (Campbell, 2016). As ideas for solutions regarding this conflict Campbell names social justice movements to protect the environment.

However contemporary sustainable urban planning also has its critiques. Especially the triple bottom line based sustainable development form of planning receives disapproving commentary from various scholars. Bluntly said, planners are expected to grow the economy, distribute the growth in a fair way while in the process making sure not to degrade the biosphere. According to Barrie Needham in practice this makes the relationship between planning and sustainability problematic:

'Sustainability has come to mean that we should consider the environmental consequences, but only if they would be socially and economically acceptable in the short term. If not, then the policy is socially or economically unsustainable. This is clearly not what the Brundtland Committee meant. For the Brundtland message was: the environmental consequences

are so important that we – society – should adapt ourselves so that environmental sustainability is socially and economically acceptable' (Needham, 2016, p. 28).

This observation is shared by other planning scholars like Petter Naess (2001), Simin Davoudi (2001) and Ana Poças Ribeiro (2012). Gunder states that conflating triple or quadruple-bottom line based sustainable development with single bottom line ecological sustainability is a risk to both the environmental and social agenda in the name of creating more economic wealth for a dominant minority (Gunder, 2006).

knowledge gap in sustainable urban planning

Most approaches to sustainable urban planning, such as eco towns, smart growth or biophilic city planning, are geared towards the idea of ecological modernization, reducing ecological impact by increasing affluence, supposedly followed by better stewardship of planet earth. This idea goes directly against the predictions proposed by the Limits to Growth report which, research concludes, have become reality today (Meadows et al., 1972; Turner, 2014). This aligns with the idea that conventional planning does not sufficiently address the fundamental changes in the economic system and people's lifestyle, which are required to limit negative effects on distant and global impacts on people and the natural environment (Needham, 2016; Poças Ribeiro, 2012).

Instead sustainable urban planning follows mainstream urban planning in facilitating or enabling economic growth. Whether it is by using urban planning to attract knowledge workers to increase city competitiveness (Yigitcanlar & Carrillo, 2009), by increasing transportation infrastructure to allow for more trade or by adding or expanding cultural functions to attract more visitors and tourists (Nahavandi, 2013), there is a lack of application of ideas that support limits and the concept of 'enough' and that challenge the underlying assumption of unlimited growth (Gunder, 2006; Rees, 2003). There are only a limited

number of studies that challenge the growth paradigm in sustainable urban planning and even fewer that apply a perspective of degrowth to urban planning to reshape the economy to equitably fit within ecological boundaries (Lehtinen, 2018; Wächter, 2013).

Yvonne Rydin, professor at the planning department of the university of London. One of the few urban planning experts to address the growth paradigm head on, gives several compelling arguments for a form planning that is not growth dependent, from a social, economic and environmental point of view. Rydin defines growth-dependent planning as planning that:

- Assumes there will be demand for new development
- Seeks to get social and environmental benefits from that development
- Therefore, is dependent on market-led developments for those benefits
- As a result, actively encourages and promotes market led development

Source: (Rydin, 2014)

Her argument is that economic growth is not distributed evenly throughout time and space and therefore when there is low demand, growth based planning is ineffective, meaning some places will get less or no benefits at all from such an approach (Rydin, 2013). From a social standpoint Rydin states that market led development must aim at sectors of demand who are willing to pay. As most money is to be made in places of low current value or as Savini states, places with high rent-gaps (2019), this tends to lead to displacement and gentrification and fails to meet the needs of low-income communities (Rydin, 2014). One of the reasons for this according to Rydin is the weakness of the trickle-down effect (2014). Finally, she offers various environmental arguments, one is the large dependence of growth-based planning resource use, secondly the growth-based planning tends to focus disproportionately on new

construction instead of the whole building stock (Rydin, 2014). Finally, business as usual has only worsened carbon emissions over the last decades, which has implications for future economic activity (Rydin, 2013). Rydin concludes that future planning will need to consider how to deal with lack of growth or even de-growth and that how to do that is not clear yet (Rydin, 2013).

Considering degrowth from a sustainable urban planning perspective seems inevitable. As one of the tenets of sustainable urban planning is to decrease the use of resources to get to an ecologically sustainable level, not questioning the growth paradigm is compromising the entire agenda.

5.

DEGROWTH

In the previous section the growth paradigm has been explained. As mentioned, this way of thinking has received a fair share of critique. One of the most well-known critiques on the growth paradigm came from the limits to growth report. The report predicted how the economy would deplete and pollute the bio-physical surroundings on which it depends leading to environmental and economic collapse (Ruiz Marrero, 2013). At the time, the economic establishment dismissed the report and in the neoliberal wave of the 1980's the notion of sustainable development gained traction followed by concepts like the aforementioned triple bottom line, promising to reconcile environmental sustainability, social equality and economic development, seemingly separating economic growth from environmental impact (Lee, 2018). This provided an argument for the status quo to maintain high levels of growth, apparently without the ecological and social downsides. Yet many of the predictions of the 'Limits to Growth' report have materialized over the years (Turner, 2014) and humanity is currently in a situation of 'ecological overshoot', using the equivalent of 1.7 Earths to provide

its resources and absorb its waste (Global Footprint Network, n.d.).

Current popular sustainability concepts such as 'the circular economy' or 'green growth' explicitly maintain that humanity can unlink economic growth, as measured in GDP per capita or expressed in the growth of land use, housing and industry, from environmental pressure, which can be expressed in either environmental impact or resource use, a notion that is known as decoupling (Ellen MacArthur Foundation, 2015; Matsumoto & Daudey, 2014; Parrique et al., 2019). Literature describes two kinds of decoupling, relative decoupling and absolute decoupling. Relative decoupling means less resources are used per unit of economic activity, which is known as an increasing 'eco-efficiency'. Considering the situation of ecological overshoot, what would be needed now for real sustainability is absolute decoupling (with real sustainability meaning intergenerational equality and strong sustainability, see section 2. on sustainability). Absolute decoupling signifies an overall decrease in environmental impact even as the economy increases in size. Besides the difference between relative and absolute decoupling, it can be characterized in other ways. Decoupling can be global or local, production (territorial) or consumption (footprint) based and it can happen over a short or a long period of time (Parrique et al., 2019).

Yet a local study showed that even an apparently sustainable city such as Copenhagen cannot decouple its housing stock growth from environmental impact (Xue, 2015). In fact many scholars conclude that in general a permanent, absolute, large and fast enough decoupling of economic growth from environmental impact has not been achieved anywhere despite decades of 'sustainable development' (Fletcher & Rammelt, 2017; Jackson, 2009; Parrique et al., 2019; Ward et al., 2016). It is striking that one of the only observed large scale decreases in greenhouse gasses was due to the economic crisis of 2008 (Broder, 2011; Kallis, 2017).

Studies that do show decoupling are often based

on production related indicators of a country or city, however in the current globalized world there are irregular concentrations of places of extraction, production and consumption. For a country like the Netherlands that has a predominantly service based economy a more comprehensive approach involves the use of consumption based indicators (also known as footprint indicators), reflecting the production and end-of life phase of traded goods and services (Parrique et al., 2019). A recent report by the C40 network of cities showed that consumption-based emissions of cities sketch a grim picture: *'16 cities, mostly in Europe and North America, have consumption-based GHG emissions at least three times the size of their sector-based (production-based or territorial) GHG emissions.'* (C40, 2018, p. 9). An illustration of this can be seen in figure 2.16.

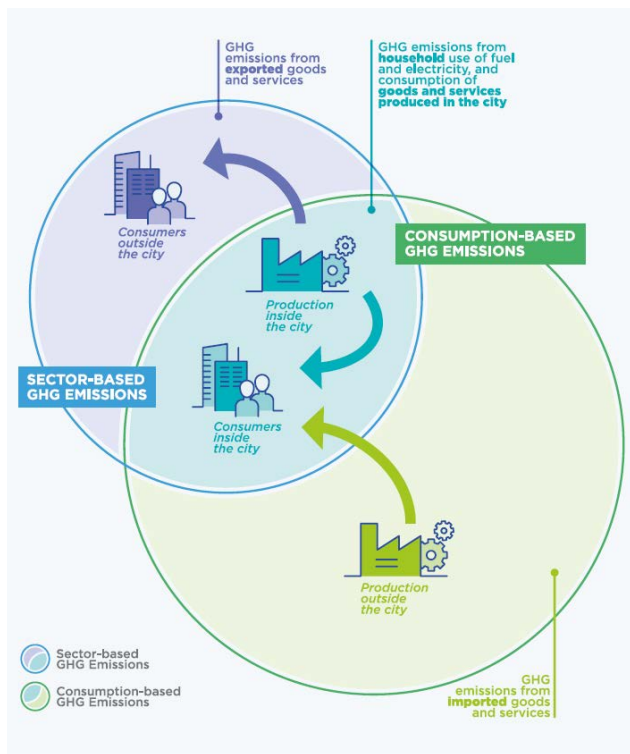


figure 2.16. Diagram showing the difference between consumption-based GHG inventories and sector based GHG inventories, also known as territorial or production based inventories (C40, 2018, p. 4).

definition

As a response to the impossibility of infinite growth as discussed above and the contradictions and shortcomings of the growth paradigm described in section 3., a research agenda is on the rise that proposes a radically alternative approach: degrowth. Degrowth is a concept that challenges the idea of eternal economic growth as the dominant societal paradigm. It has its origins in the fields of ecological economics, social ecology, economic anthropology and environmental and social activist groups (Martínez-Alier et al., 2010). Definitions of the term degrowth can vary, 'Degrowth and Research', an academic association around the topic of degrowth, gives one of the most boiled down definitions; that degrowth is: *'a downscaling of production and consumption that increases human well-being and enhances ecological conditions and equity on the planet'* (Research & Degrowth, n.d.). Furthermore, many scholars mention that an important part of degrowth is a shift in values towards care, solidarity, cooperation and sufficiency (Degrowth web portal, n.d.; Kallis, 2018; Latouche, 2009).

Degrowth scholars and activists dismiss the idea that further economic growth can happen without negative ecological impact. Degrowth states the reason for the failing of decoupling is the current growth-based system itself, in which every efficiency gain is reinvested and every increase in production is matched by an increase in consumption, which often leads to a rebound effect, this is also known as the Jevons paradox (D'Alisa, Demaria, & Kallis, 2015). Together with globally increasing incomes and spending patterns, this prevents an absolute decrease in resource use and pollution. This blocks genuine ecological progress, if left unchecked it will inevitably lead to ecological depletion, collapse and disaster according to degrowth scholars (Latouche, 2009).

Giorgos Kallis, one of the principal advocates of degrowth theory, points out that degrowth is not negative growth nor negative GDP, nor is the goal shrinking the economy. However, these will be inevitable consequences of improving the social and environmental conditions



figure 2.17. the recent container disaster of MSC Zoe layed bare the huge consumption of products imported from abroad when all its goods flushed the shores of Schiermonnikoog (Defensie, 2019)



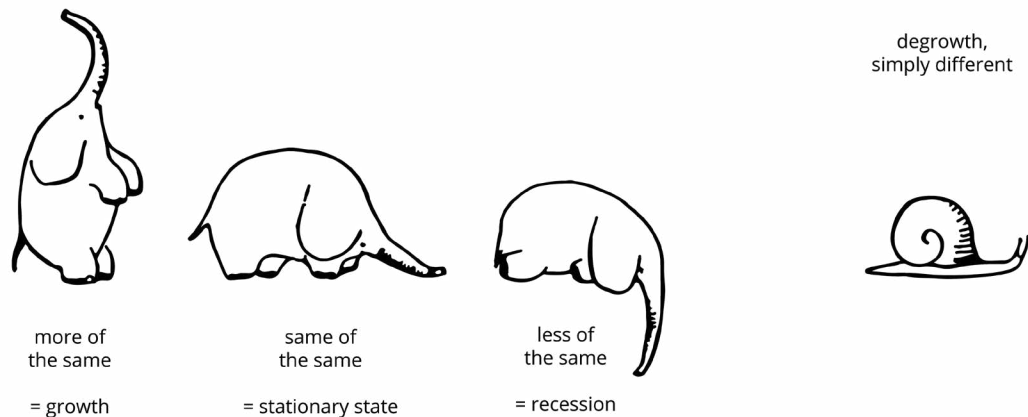


figure 2.18. The elephant and the snail by Bàrbara Castro Urío from (Chertkovskaya et al., 2016, p. 190)

under a degrowth approach because of the receding market, de commodification of labor and nature and less work in general (Kallis, 2018). Instead degrowth is a broad social transformation, 'a different set of ideas of what society is and what is should pursue' (Kallis, 2018, p. 10). Descriptions of degrowth talk about a society with a reduced complexity, a human scale, more autonomous, with diverse economic forms and different ways of reinvesting surpluses (Kallis, 2018; Latouche, 2009). In degrowth literature this is often illustrated with the image in figure 2.18, degrowth is not a growth-based society in decline, but a different create completely (Chertkovskaya, Paulsson, Kallis, Barca, & D'Alisa, 2016). The snail itself is a returning symbol of degrowth as it teaches people to move slowly (Latouche, 2009) and since it stops to grow its shell after a certain point, abandoning the logic of geometric growth in favor of quality of life (After Illich, 1983 as cited in Latouche, 2009).

Despite this broad definition, the term degrowth has been criticized for being negative and reactionary (Dreus & Antal, 2016). Degrowth proponents have defended the word as in unambiguously challenges the growth paradigm, Serge Latouche calls the word degrowth a slogan, designed to make it very clear that the goal of exponential growth must be abandoned (Latouche, 2009). Another argument is that because of its subversive character the term

degrowth cannot easily be coopted as has happened with the term 'sustainable development' (Dreus & Antal, 2016).

Within degrowth two approaches can be distinguished according to Kallis. There are scholars who to a certain extent think within current economic ideas, such as Herman Daly, Mary Mellor or Tim Jackson (Kallis, 2018). They work with economic theory to find conditions that can guarantee economic stability without economic growth. They propose labor, taxation or monetary policies to reduce the social metabolism while working on a stable but contracting economy (Kallis, 2018). This stream of thinking tends to align with economists from Europe and North America with a focus on developed capitalist economies.

Then there are researchers like Serge Latouche and Vandana Shiva for whom degrowth is a critique of economic reasoning in general (Kallis, 2018) often coming from a post-development background (Latouche, 2009). They are critical of colonial exploitative relations and dependencies and dominant western views of improvement. These views align with and are inspired by social and environmental justice movements from the global south (Kallis, 2018).

history

Ideas of degrowth go back decades. The heydays of the environmental movement lie in the seventies with the Limits to growth report, Rachel Carsons 'Silent Spring' and the development of a 'counterculture', opposed to conservative norms and the high level of materialism of the time (Parenti, 2012). Less well known is the fact that in the same year as the publication of the Club of Rome, the Austrian author André Gorz coined the term *décroissance* for the first time, which is French for degrowth. In a debate with Sicco Mansholt and Herbert Marcuse he posed the question whether capitalism is compatible with a world that requires no-growth or even degrowth (Kallis, 2018). And one year before the limits to growth report in 1971 Nicolas Georgescu-Roegen published his magnum opus, the Entropy Law and the Economic Process, in which he applied the laws of thermodynamics to economic theory. In this way he provided a physical proof for limits to growth and the impossibility of a completely circular economy (D'Alisa et al., 2015; Kallis, 2018). His student Herman Daly developed a new field of steady-state economics. When at the end of the oil crisis with the expanding neoliberalism of the 1980s and 1990s the environmental discussion subsided, the ideas of *décroissance* spread to Switzerland and France, where publications were written about degrowth and events organized by authors such as Jacques Grinevald, Serge Latouche and François Schneider (D'Alisa et al., 2015). The latter formed the academic collective Research & Degrowth together with Denis Bayon and Fabrice Flipo and initiated several conferences. With the addition of a group of researchers of the Institute of Environmental Science and Technology (ICTA) from Barcelona degrowth got spread across its French and Italian Borders, this provided a link to the field of ecological economics and movements from Latin-America regarding political ecology and environmental justice (D'Alisa et al., 2015). New conferences between 2011 and 2014 in Montreal, Venice and Leipzig brought degrowth to a more international group of people

across Europe and the Americas (D'Alisa et al., 2015). This coincides with a renewed interest in 'limits to growth' with the notion of planetary boundaries as coined by a group of researchers led by Johan Rockström and used in publications like Doughnut Economics of Kate Raworth who combines this model with social boundaries (Raworth, 2012; Rockström et al., 2009). Nowadays degrowth can be seen as a social movement but also as an academic research agenda that questions the dominant societal paradigm of growth (Leonardi, 2017).

how to get to degrowth?

Instead of the triple mantra 'reduce, reuse and recycle' frequently used in sustainability literature Latouche puts forth eight interdependent goals that need to be pursued in order to get to a degrowth society. He calls this the virtuous circle of the eight R's:

1. **Re-evaluate:** what is needed first according to Latouche is a change of values. Examples that he gives are that society should choose altruism over egotism, cooperation over competition and harmony with nature over domination of nature (Latouche, 2009).
2. **Reconceptualize:** with new values at hand important concepts need to be redefined, like wealth and poverty, scarcity and abundance (Latouche, 2009). As Eisenstein states, the current economic thinking artificially creates scarcity in order to provide private profit, as is the case with bottled water (2011).
3. **Restructure:** changing the productive apparatus and social relations to match the changed values. As an example, Latouche mentions physically changing large infrastructures that become obsolete such as large car factories (Latouche, 2009).
4. **Redistribute:** the wealth needs to be redistributed differently both in specific countries and communities as on a global level between north and south. This will reduce the power and wealth of the consumer class. And it will reduce conspicuous consumption because of a more egalitarian society. The ecological footprint

measurement can set quotas per country (Latouche, 2009).

5. **Re-localize:** producing and financing on a local basis and decentralizing authority to the local level. Movement of capital and commodities must be limited but ideas should be able to cross boundaries (Latouche, 2009).
6. **Reduce:** the physical reduction of consumption and production. Latouche mentions examples that need to be reduced like throwaway items and waste but also working hours and mass tourism (Latouche, 2009).
7. **Re-use:** to reduce waste and fight obsolescence reuse should be stimulated (Latouche, 2009).
8. **Recycle:** things that cannot be reused must be recycled (Latouche, 2009).

Giorgos Kallis envisions a dual strategy of political or institutional changes and civil action to work towards a degrowth society. In relation to the institutional change he mentions some of the most important policy proposals that different degrowth or growth critical scholars mention:

- Abolishing GDP and replacing it with other metrics for human and natural wellbeing.
- Sharing work and reducing working hours to create employment without economic growth.
- A universal basic income or a bundle of public services that allows people to get by without depending on money.
- Redistributive taxation to increase equality and a maximum income to reduce positional consumption.
- A redirection of public investments from the private to the public sector and from increasing productivity to greening the economy and reclaiming the commons.
- Environmental limits and taxes to finance low income groups.

Source: (Kallis, 2018)

In terms of civil action and concrete practices several examples of degrowth are community gardens, DIY repair and recycling shops, community currencies, not-for-profit cooperatives, self-organized networks for child rearing, healthcare and education, open software and digital commons, co-housing and eco communes (Kallis, 2018). Finally, degrowth scholars are careful to prescribe any solutions for countries in the global south as western dominance is seen as part of the problem (Latouche, 2009). It is understood that a certain level of economic growth is necessary in less affluent countries to achieve a basic quality of life, the idea of contraction and convergence is mentioned with respect to this inequality (D'Alisa et al., 2015). At the same time degrowth scholars do warn of the downsides of the one-sided growth-based path that western societies have pursued.

Degrowth has of course received its share of criticism beside the critique on its name. Other points of critique are for example the social (un)feasibility, an unrealistic vision of the social metabolism, a focus on the local and neglect of international or global levels, its (in)ability to react quickly to urgent problems (Kallis, 2018; Mocca, 2020). Several scholars also point to specific policy proposals as untrue such as the work-time reduction, stating for example that using less cheap fossil energy sources, more work is going to be required. Which might be further stimulated by a shift in consumption from energy intense to labor intensive goods and services (Sorman & Giampietro, 2013). Degrowth proponents counter that continuing along the current path is even more unrealistic and not an option. Many of these challenges need more research and experiments to find possible solutions.

knowledge gap in degrowth

Despite this last part of practices and policy proposals, in degrowth literature especially a lot has been written regarding its philosophical and epistemological foundations (D'Alisa et al., 2015; Latouche, 2009) and the theory itself and its critique on current societal

systems as shown in a recent article that studied 91 publications on degrowth between 2006 and 2015 (Weiss & Cattaneo, 2017). The latter article quantified the number of articles on degrowth by theme. The conceptual discussion, general social and political aspects of degrowth, and degrowth related to the topic of economics have received the most attention so far. For each of them more than 10 articles were identified. Themes such as public perception, housing and environmental impact were found to have been less fervently studied, with between 0 and 5 articles each (Weiss & Cattaneo, 2017). Furthermore, the authors described five research gaps: the normative foundations of degrowth (1); formal modelling (2); empirical assessments, f.e. with LCA's or MFA's (3); engineering and technological innovation (4) and the implementation of degrowth (5) (Weiss & Cattaneo, 2017).

Regarding the last research gap, the implementation of degrowth, the authors mention: *'We see important knowledge gaps in the monitoring of existing degrowth implementations and the assessment of direct and indirect sustainability impacts, which can then lead to an adaptation of practices.'*(Weiss & Cattaneo, p. 226, 2017). Furthermore, a theme that is not mentioned at all by the overview paper is urbanism and urban planning. Which is reinforced by a recent call for scientific articles related to degrowth, that mentioned the marginal role that urban related issues have had in degrowth literature so far (Orzanna, 2020).

Yet when one looks at cities from a degrowth perspective one must conclude that growth often takes place on an urban level and decisions to support economic growth are made, at least partially, in urban planning departments. One paper that does go into degrowth and urban planning rightly states that spatial planning institutes have an influential potential to stimulate a transition towards degrowth by enhancing: '(i) a sustainable use of renewable energy sources; (ii) sustainable settlement structures; and (iii) the creation of social capital by more community based

facilities' (Wächter, 2013). Another paper that addresses degrowth and city planning is based on a specific urban redevelopment case in Finland. The paper argues for more transparency in the planning process so that critical voices, such as those proposing degrowth, can be part of the planning discussion. Furthermore, it states that the compactness policy needs to be reevaluated considering the latest carbon footprint studies (Lehtinen, 2018). Cities might be efficient, but instead of devoting the gains for a decrease of ecological impact it is precisely why they are consuming so much, or as Giorgios Kallis puts it: *"Cities", we are told, "perform far better than rural economies in providing efficiently for material needs while reducing environmental impacts." Here, efficiency is confused with scale. Cities may use less re-sources per unit of product, but they produce and use more resources overall* (Kallis, 2017, p. 53). Jason Rebillot, Associate Professor at the architecture department of Woodbury University, mentions three currents in urban practice that have a link to degrowth: eco-villages, co-housing and permaculture (Rebillot, 2013). Besides these articles, several books touch explicitly or less explicitly on the topic of degrowth and urbanism, such as 'Housing for Degrowth' (A. Nelson & Schneider, 2018a), 'Degrowth in the Suburbs' (Alexander & Gleeson, 2019) and 'Unlocking Sustainable Cities' (Chatterton, 2019). Despite the recent attention, many questions remain unanswered, for example to what extent are current urban planners aware of the downsides of growth and how does this inform their decisions? What can theory from the field of planning contribute to a degrowth agenda? What ways there are to achieve degrowth in existing cities? And are there any current urban planning related projects (in or around Amsterdam) that have degrowth as an aim? One could also ask how dependent cities currently are on growth. That is where this thesis aims to contribute.

6.

CONCEPTUAL FRAMEWORK

As can be seen in figure 2.20 the growth paradigm influences both thinking in the sustainability debate or sustainable development as well as the field of urban planning. Sustainable urban planning is a subfield of these two, and it is expected that it is also influenced by the growth paradigm. Degrowth on the other hand explicitly criticizes the growth paradigm and thus falls outside of its scope. Questioning what degrowth can contribute to sustainable urban planning means pulling it out of the growth paradigm. The hatched area is the area of research where degrowth and sustainable urban planning come together outside the dominant ideology of the growth paradigm.

3. growth
paradigm

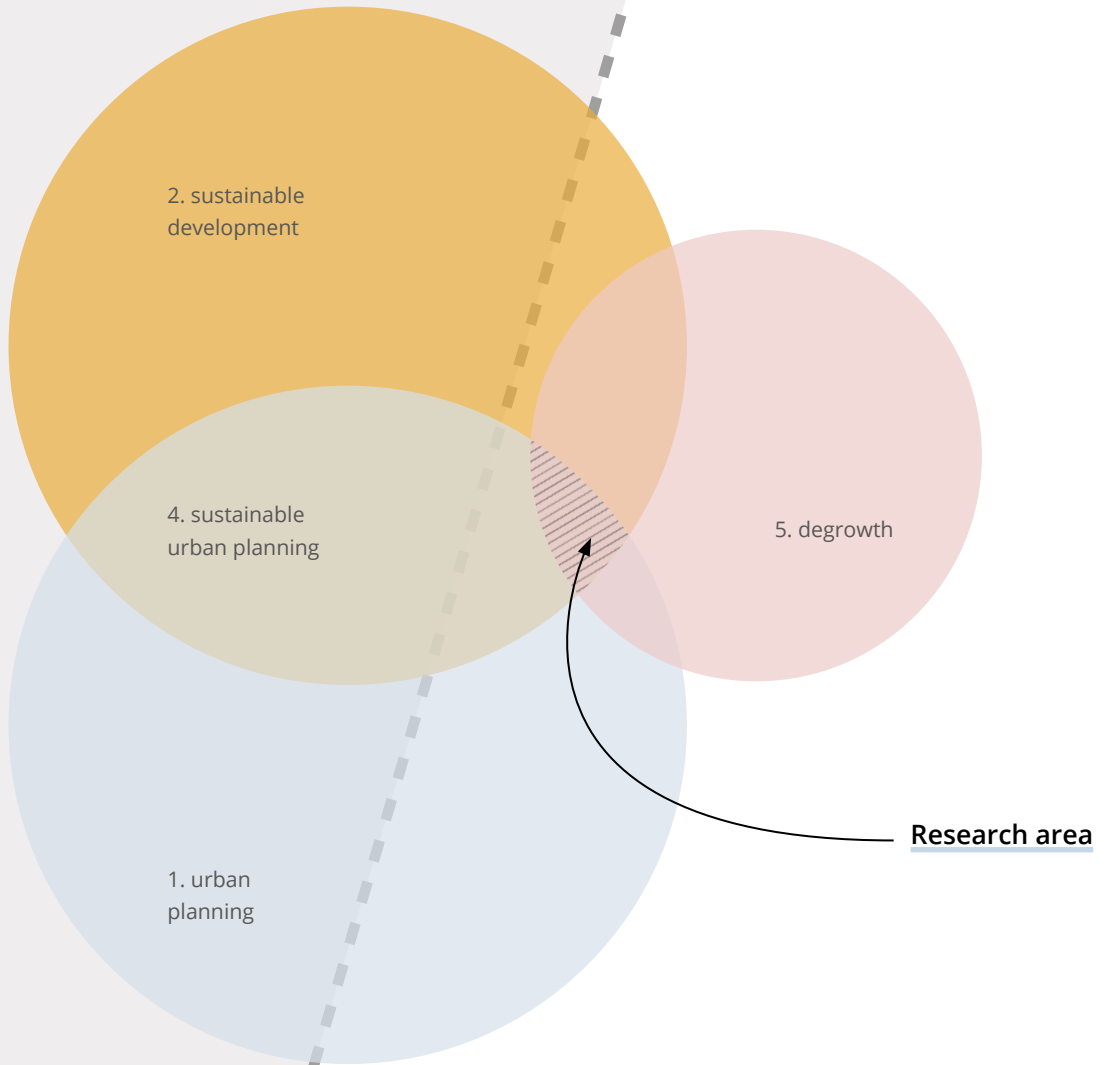


figure 2.20. conceptual frame

“And so I want to turn from those wonderful voices of so many men to the voice of a very wise woman who in the 1970s — Donella Meadows, one of the mothers of systems thinking — she said growth is one of the stupidest purposes ever invented by any culture. And when anyone calls for more growth, we must ask, growth of what, and why, and for whom, and who pays the cost, and how long can it last, and what’s the cost to the planet and how much is enough? And we have not asked that question enough until now.”

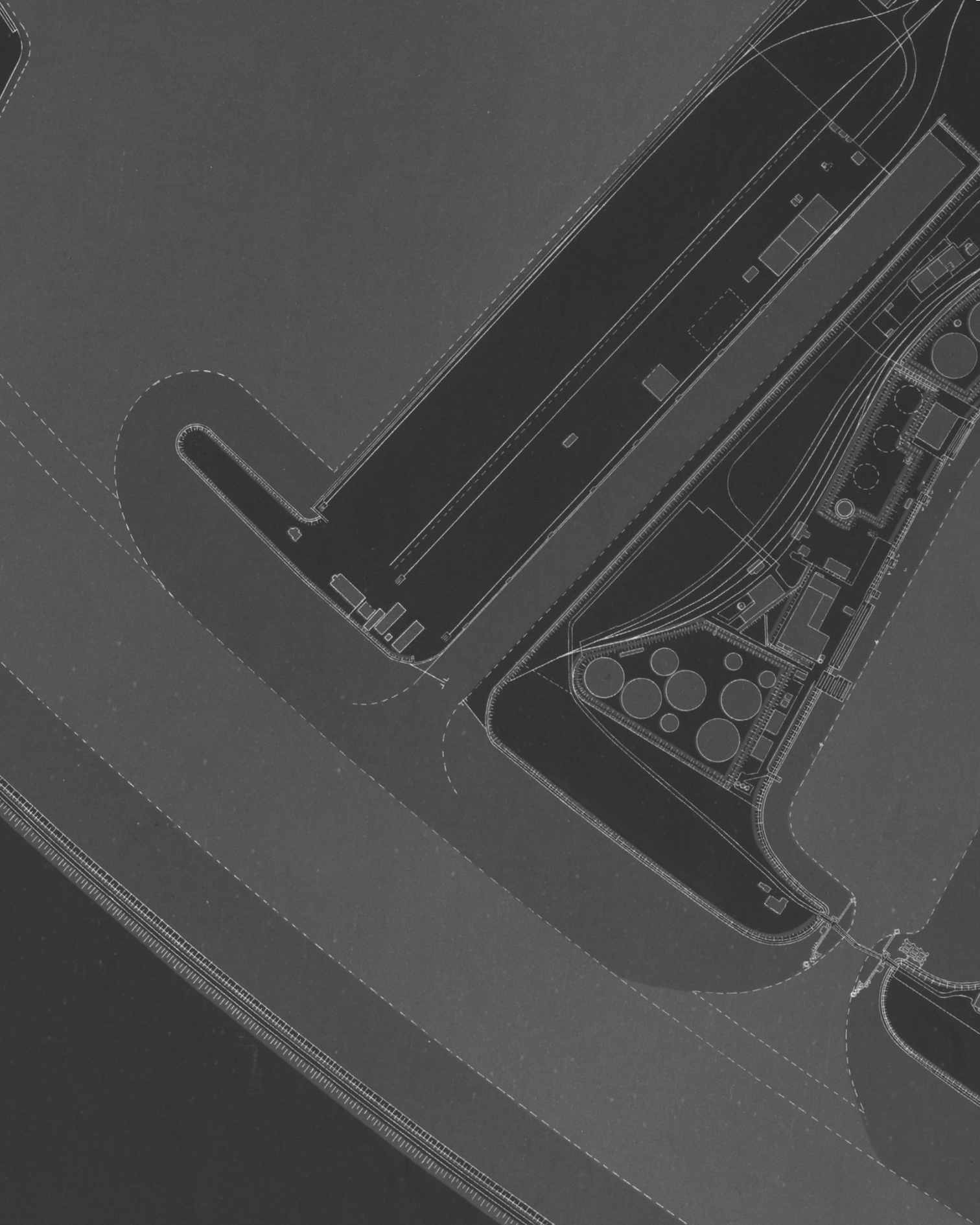
(Kate Raworth in: WKAR (AM), 2020)

3

results

This chapter discusses the results of the analyses that have been described in the methodology section. The chapter starts with the document analysis of degrowth proposals. It describes their ordering, presents a conceptual model and offers a complete list of the proposals. This is followed by the historical analysis. This analysis is organized in chapters that each cover a specific period of the history of western urban planning since the industrial revolution. It concludes with a short chapter that summarizes what might be considered as historic precedents for growth critical thinking and degrowth in urban planning. Finally, the results chapter describes the interview analysis. In this analysis the various interviews are synthesized per topic of the interview.

figure 3.1. The Coen- and Petroleumharbour. The dark area is a former site for dredging activities, currently the industrial park Cornelis Douwesterrein II (adapted from: Dienst Publieke Werken, 1943).



1.

DOCUMENT ANALYSIS

The thesis aims to contribute to the current limited amount of research into the combination of degrowth and urban planning. Of course, that does not mean there is no writing at all that discusses this combination of topics. A small number of researchers have explicitly studied the topic of degrowth related to urban planning and yet others have touched upon aspects of urban planning in literature on degrowth policy proposals. Taken together these sources can provide an idea of what researchers engaged with these topics currently envisage in terms of degrowth proposals for urban planning. To this end a document analysis was performed in which these sources were coded to find existing degrowth proposals for urban planning. The literature that was used in this analysis is mentioned the research methodology, it is repeated in table 3.1 for clarity.

A. thematic ordering

The outcome is a wide range of degrowth proposals. To understand the different aspects that are being addressed and to see the different strategies that underlie them these proposals have been grouped in two ways. Firstly, they have been ordered into thematic groups. For example, proposals relating to the urban food system are grouped together, as are proposals relating to monetary or tax reform. In total ten groups of proposals were identified relating to the following themes:

1. Urban (public) space and ownership
2. Housing and construction
3. The urban food system
4. The monetary or tax system
5. The economy at large
6. Mobility
7. The planning process
8. Consumption
9. Production
10. Paradigm shift

B. strategic ordering

Besides that, during the analysis it became apparent that these proposals differ in their approach or strategy, some proposals were policy changes on a national levels and others concern the practical provision of services. An English summary of a recent German book on degrowth employed the theory of Eric Olin Wright to discuss different types of strategies for degrowth (Schmelzer & Vetter, 2019; Stegehuis, 2019). Wright himself was a well-known Marxist sociologist who described different types of strategies in his book 'Envisioning Real Utopias' aimed at transitioning towards a radical egalitarian democracy. In his book he stresses the importance of utopian visions to expand the political space for democratic reforms and to motivate people to question and abandon the status quo (Wright, 2010). He uses theories from Marxism, anarchism

nr.	title	author	year
1	A Prosperous Way Down, Principles and Policies (chapter 14)	H.T. Odum & E.C. Odum	2001
2	Cohousing's relevance to degrowth theories	Matthieu Lietaert	2009
3	The Impacts of Spatial Planning on Degrowth	Petra Wächter	2013
4	Sustainable housing development: decoupling or degrowth? A comparative study of Copenhagen and Hangzhou	Jin Xue	2013
5	Is eco-village/urban village the future of a degrowth society? An urban planner's perspective	Jin Xue	2014
6	Can we prosper without growth? 10 policy proposals	Giorgos Kallis	2015
7	Degrowth in city planning	Ari Aukusti Lehtinen	2018
8	Housing for degrowth (conference paper)	Anitra Nelson & Francois Schneider	2018
9	Degrowth in the Suburbs (chapter 7)	Samuel Alexander & Brendan Gleeson	2019
10	The urban drivers of economic growth	Federico Savini	2019

table 3.1. Selected data for the document analysis

and socialism in a nuanced, pragmatic way and explains there are multiple ways to work towards a more social and ecologically sustainable society (Bauwens, 2016). In his book Wright distinguishes three main strategies of transformation:

1. Interstitial transformations aim to build new forms of social empowerment in niches and margins of capitalist society (Bauwens, 2016). According to Stegehuis, Schmelzer and Vetter use this category to describe the building of practical alternatives or 'nowtopias' for social practices in degrowth (2019).
2. Symbiotic transformations want to work with and use the state to construct social power within and outside of the state (Wright, 2010). In a summary and review of Wrights book Michel Bauwens

describes these kinds of transformations as 'extending and deepening the institutional forms of popular social empowerment' (Bauwens, 2016, Chapter 2.5).

3. Ruptural transformations according to Wright are those that require a rupture or sharp break with capitalism through direct confrontation and political struggles. These transformations have strong links to revolutionary socialism (Wright, 2010). In relation to degrowth, Schmelzer and Vetter use this category to describe strategies aimed at building a counterhegemony to weaken and replace the growth paradigm, they link this to existing social movements, forms of activism and also media, seminars and conferences that show the importance of a different approach (Stegehuis, 2019).

Eric Olin Wright states none of these strategies is a silver bullet and that all have their purpose, in his own words: *'None of them guarantee success. In different times and places, one or another of these modes of transformation may be the most effective, but often all of them are relevant. It often happens that activists become deeply committed to one or another of these strategic visions, seeing them as being universally valid. As a result, considerable energy is expended fighting against the rejected strategic models. A long-term political project of emancipatory transformation with any prospects for success must grapple with the messy problem of combining different elements of these strategies, even though on the ground it is often the case that they work at cross-purposes'* (Wright, 2010, p.213).

This categorization was found to offer a good structure for the degrowth proposals in urban planning. Dividing the proposals per strategy type helped to differentiate the proposals, to clarify how these proposals intervene in different ways and on different levels.

C. conceptual model of degrowth proposals for urban planning

These two categories, the thematic and strategy type, led to a model that can be seen in figure 3.2. This model has a circular shape to underscore the fact that the proposals from the analyzed documents seem to share a similar idea of a required paradigm shift. The new paradigm should include a rejection of the ideal of economic growth, create a perception of the earth as a finite place and mark the impossibility of eternal economic growth. Furthermore, it includes the idea that society needs a cultural shift and a change of values towards solidarity, cooperation and synergy between the interdependent natural and human systems.

Eric Olin Wright mainly uses the ruptural category to refer to a large scale break with the predominantly

interstitial proposals

Creating practical alternatives -----

symbiotic proposals

Working with the state -----

ruptural proposals

Paradigm change -----

capitalist system followed by the building-up of a new system (Wright, 2010), an idea that he himself calls implausible. Schmelzer and Vetter, however, seem to use this category in a slightly different way. As stated above they see the ruptural transformation as referring to the change of the societal paradigm and the process of creating awareness for the required paradigm shift by means of protests, activism, conferences and presentations (Schmelzer & Vetter, 2019). For this research project, the latter (less revolutionary but broader) definition of ruptural transformations is used which explains why the shared paradigm change converges with the category of ruptural transformations in the model. It refers to any subversive dialogue within society and institutions criticizing and moving away from the growth-based paradigm.

Finally, the arrow in the model indicates that transformation towards a degrowth approach in urban planning can start with any of the three types of transformations. It also signifies that they influence each other. For example, a new practice might influence policy on a state level or changing policies could reinforce a paradigmatic shift.

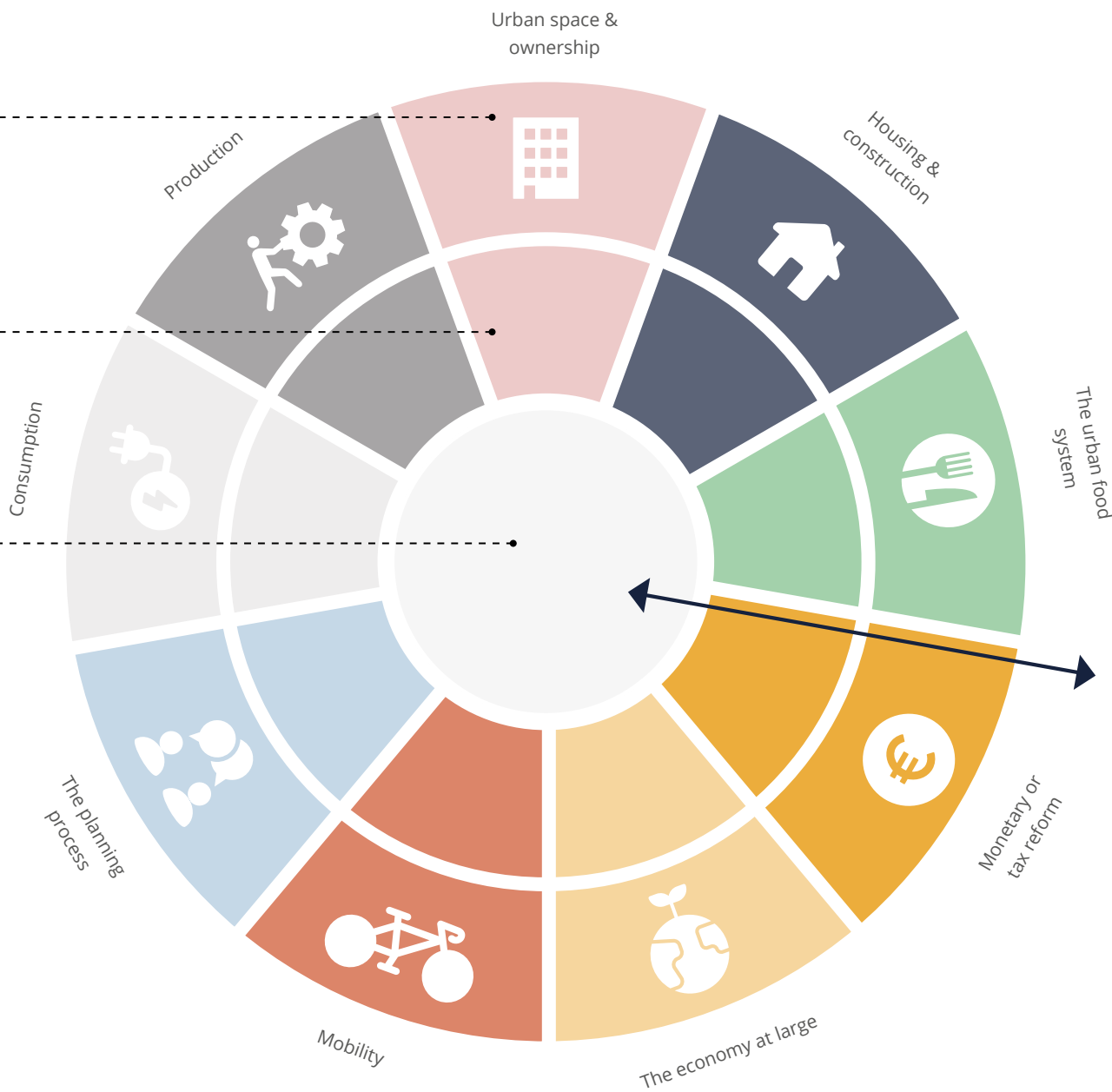


figure 3.2. a model of the thematic and strategic categorization of degrowth proposals for (sustainable) urban planning

D. list of proposals per theme

The model in the previous paragraph showed all the themes, the possible strategy types and how they relate to one another. Another result of the document analysis is a list of all proposals per theme, which also shows to which type of transformation strategy a certain proposal belongs. The list can be found below as well as short summaries of the most important proposals per topic. An important note is that some measures were mentioned in articles but criticized; these measures were still included in the list. This means that the related author does not necessarily recommend the proposal. Besides it deserves to be noted that some (parts of) proposals might not be exclusive to degrowth, they can also already be present of an approach within current sustainable urban planning. Finally, darker colours indicate a proposal that spans multiple strategic levels.



urban (public) space and land ownership

Regarding urban public space and land ownership, degrowth proposals advocate for limiting the total amount of built-up land and stabilizing the size of cities. Furthermore, communal ownership of was a proposal that came by as was the development of the urban space to a compact self-sufficient area that does not cause unnecessary commuting and embraces local small-scale shops, production and amenities. The latter proposal should also stimulate non-commodified relations and activities.

nr.	interstitial transformations	sybiotic transformations	ruptural transformations	Sources
1		Placing a limit on the amount of built-up land.		(Odum & Odum, 2001; Wächter, 2013)
2	Setting up and stimulating communal land trusts / communal land ownership.			(Savini, 2019; Wächter, 2013)
3		Reclaiming and repurposing space currently used for private transport		(Alexander & Gleeson, 2019)
4		Reconsidering regulations and taxes that stimulate urban sprawl.		(Wächter, 2013)
5	Stimulating compact polycentric urban areas with mixed and self-sufficient neighbourhoods			(Alexander & Gleeson, 2019; A. Nelson & Schneider, 2018b; Odum & Odum, 2001; Savini, 2019; Wächter, 2013; Xue, 2014)

table 3.2. degrowth proposals for urban planning regarding urban public space and land ownership



housing and construction

This category contains proposals that on the one hand aim for a decentralized, flexible and sustainable way to repurpose existing buildings instead of building new developments. On the other hand, measures are discussed that aim to stimulate another type of housing. Affordable rental housing should become the norm again instead of private owner-occupied property. Furthermore, a shift to collaborative housing was proposed by several authors.

table 3.3. degrowth proposals for urban planning regarding housing and construction

nr.	interstitial transformations	sybiotic transformations	ruptural transformations	Sources
1	Decentralizing building production.			(Savini, 2019; Xue, 2014)
2		Setting a maximum space per capita for housing.		(A. Nelson & Schneider, 2018b; Xue, 2014)
3	Sustainable, circular repurposing of existing buildings instead of new construction.			(Kallis, 2015; Lehtinen, 2018; A. Nelson & Schneider, 2018b; Odum & Odum, 2001)
4		Incentivize the use of empty buildings	Squat for housing or communal functions	(Alexander & Gleeson, 2019; Kallis, 2015; A. Nelson & Schneider, 2018b; Wächter, 2013)
5	Setting up and stimulating collaborative (self-built) housing			(Lietaert, 2010; A. Nelson & Schneider, 2018b; Savini, 2019; Wächter, 2013; Xue, 2014)
6	Building for long term quality and flexibility.			(Odum & Odum, 2001)
7		Limiting land and housing speculation		(Alexander & Gleeson, 2019; Lehtinen, 2018; Lietaert, 2010; A. Nelson & Schneider, 2018b; Odum & Odum, 2001; Xue, 2015)
8	Decommodify housing by stimulating non-profit, affordable housing and buyback from private parties.			(A. Nelson & Schneider, 2018b; Xue, 2014, 2015)
9		Aim for non-growth / degrowth of housing stock		(Kallis, 2015; Xue, 2015)



urban green & the food system

Regarding the urban food system, the key word is re-localization. On the other hand, there is the proposal to increase space for nature which can partially be used to support urban human life and culture using ecosystem services.

nr.	interstitial transformations	sybiotic transformations	ruptural transformations	Sources
1	Local food production and consumption			(Alexander & Gleeson, 2019; Lehtinen, 2018; A. Nelson & Schneider, 2018b; Savini, 2019; Xue, 2014)
2	Fortify and use ecosystem services and urban green			(Lehtinen, 2018; A. Nelson & Schneider, 2018b; Odum & Odum, 2001; Xue, 2014)
3	Conserve, increase and regenerate existing nature and resources			(Alexander & Gleeson, 2019; Lehtinen, 2018; A. Nelson & Schneider, 2018b; Xue, 2014)

table 3.4. degrowth proposals for urban planning regarding the urban food system and urban green structures



the monetary or tax system

The greening of the tax system is an often-heard proposal from degrowth perspective that can have a big impact on urban planning as well. It can shape developments from housing to consumption and labour. Besides that, many scholars name the current monetary system with private banks 'creating' money, stimulating the expansion of the economy through loans and interests and the power of investments as a big cause of unwanted economic and urban growth that needs to be challenged in order to get to a sustainable society.

nr.	interstitial transformations	sybiotic transformations	ruptural transformations	Sources
1		Tax (virgin) resource use and lower labour taxes		(Kallis, 2015; Odum & Odum, 2001)
2		Reduce (the need for) debt and reduce and regulate interest on loans		(Alexander & Gleeson, 2019; Kallis, 2015; A. Nelson & Schneider, 2018b)
3	Developing local currencies and credit systems			(Alexander & Gleeson, 2019; A. Nelson & Schneider, 2018b; Xue, 2014)

table 3.5. degrowth proposals for urban planning regarding the monetary or tax system



the economy at large

Some proposals mainly address required policy changes for international, national or municipal governments that could have a big impact on unsustainable processes of economic growth such as the extraction of fossil fuels, large infrastructures such as airports and a focus on GDP over wellbeing. These proposals call for changes, limits and investments in other large-scale aspects such as provision of sustainable work and the local economy and culture. Some proposals affect urban planning directly where others have a more indirect effect on the field.

nr.	interstitial transformations	sybiotic transformations	ruptural transformations	Sources
1		Reduce investments in large infrastructure projects		(Kallis, 2015; Xue, 2014)
2		Use broad welfare measures and reject GDP		(Alexander & Gleeson, 2019; Kallis, 2015; Odum & Odum, 2001; Wächter, 2013)
3		Divest from fossil fuels		(Alexander & Gleeson, 2019)
4		Centrally set and manage ecological boundaries		(Kallis, 2015; Lehtinen, 2018; A. Nelson & Schneider, 2018b; Wächter, 2013; Xue, 2014)
5		Re-localize the economy, culture and politics		(Alexander & Gleeson, 2019; Savini, 2019; Xue, 2014)
6		Set up a public works program		(Odum & Odum, 2001)
7	Reduction of commodified work, stimulating non commodified work			(Alexander & Gleeson, 2019; Kallis, 2015; Savini, 2019)

table 3.6. degrowth proposals for urban planning regarding the economy at large



mobility

Mobility is another field that is influenced by urban planning and for which degrowth scholars propose alternatives. Main points of critique are the large share of private mobility such as private car use and the expansion of aviation, this needs to be discouraged. Instead investments should go to active and collective modes of transport, a reduction of commuting and digital means of communication.

nr.	interstitial transformations	sybiotic transformations	ruptural transformations	Sources
1		Stop investing in private transport infrastructure		(Kallis, 2015; Xue, 2014)
2	Stimulate shared car ownership and usage			(Lehtinen, 2018)
3		Set limits and taxes on private vehicles and aviation		(Lehtinen, 2018; Odum & Odum, 2001; Xue, 2014)
4	Stimulate active transport modes and public transport			(Alexander & Gleeson, 2019; Kallis, 2015; March, 2004; Odum & Odum, 2001; Xue, 2014)
5		Support digital communication and reduce commuting		(Odum & Odum, 2001; Xue, 2014)

table 3.7. degrowth proposals for urban planning regarding mobility

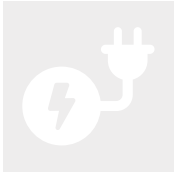


the planning process

The internal approach of the field of planning is also a recurring point of discussion amongst degrowth scholars. The main point here is that the planning process should be much more participative and inclusive. There should be much more transparency of all stakes and finances and no backroom agreements. Furthermore, the process should start from a bioregional approach to which end cities should be reintegrated with their hinterland politically and financially, this can help to take better care of the local natural environment and stimulate a local economy. Planners should be more adept in their knowledge of social and ecological impact and interdependencies and thus be stimulated to function as degrowth activists.

nr.	interstitial transformations	sybiotic transformations	ruptural transformations	Sources
1		Base permits on ecological impact		(A. Nelson & Schneider, 2018b)
2	Improve participation and transparency of the planning process			(Alexander & Gleeson, 2019; Lehtinen, 2018; Wächter, 2013; Xue, 2014)
3		Adopt a bioregional approach and reintegrate region and cities politically and financially		(Alexander & Gleeson, 2019; Savini, 2019; Xue, 2014)
4		Train planners in social and ecological impact		(Xue, 2014)
5		Stimulate the exemplary role of leaders		(A. Nelson & Schneider, 2018b)
6			Let planners work as degrowth activists and practitioners	(Xue, 2014)

table 3.8. degrowth proposals for urban planning regarding the planning process



consumption

Regarding consumption an important point is that the urban area should not stimulate unnecessary consumption by means of advertisements or too much consumption space. Urban functions that do not increase material consumption deserve more investment such as libraries and other common, shared amenities. Besides that, the consumption waste system needs to be completely restructured, such that certain polluting materials should be banned, and source separation and recycling should be the norm and supported by laws.

nr.	interstitial transformations	sybiotic transformations	ruptural transformations	Sources
1		Reduce wasteful energy use		(Odum & Odum, 2001; Xue, 2014)
2		Reduce consumption inducing advertisements		(Kallis, 2015; A. Nelson & Schneider, 2018b; Odum & Odum, 2001; Wächter, 2013)
3	Stimulate non-material satisfaction (depensé) or low impact leisure time			(Alexander & Gleeson, 2019; Xue, 2014)
4		Make public space without consumption triggers		(Lietaert, 2010)
5	Create sharing systems for goods and social services, invest in commons			(Kallis, 2015; Lietaert, 2010; A. Nelson & Schneider, 2018b; Wächter, 2013)
6	Source separation of waste material			(Odum & Odum, 2001)
7	Forbid throwaway plastic and landfills			(Odum & Odum, 2001)

table 3.9. degrowth proposals for urban planning regarding consumption



production

Besides consumption, production should also be undertaken differently. Circularity is important but it needs a different, local urban economy to be successful. Furthermore, not all technological innovation is seen as good, certain technologies should be refused because of unwanted side effects and convivial technology should be supported, meaning technology that is easily accessible and repairable to avoid commodification.

nr.	interstitial transformations	sybiotic transformations	ruptural transformations	Sources
1	Local production like regional renewable energy and food cooperatives			(Alexander & Gleeson, 2019; Kallis, 2015; Savini, 2019; Wächter, 2013)
2		Diminishing resource caps to direct efficiency gains to reduction of resources		(Alexander & Gleeson, 2019; Kallis, 2015)
3		Stimulate local circular production		(Alexander & Gleeson, 2019; A. Nelson & Schneider, 2018b; Odum & Odum, 2001)
4	Refuse certain technologies, support convivial technology			(Alexander & Gleeson, 2019; A. Nelson & Schneider, 2018b)

table 3.10. degrowth proposals for urban planning regarding production



paradigm shift

The last and extra category discusses the proposed paradigm shift. As stated before, the ideal of economic growth should be cast aside, and negative consequences of and limits to growth need to be recognized in urban planning. A perception of the world as a finite place and of humanity as being intertwined with and dependent on nature is required. Finally, there is the idea that society needs a cultural shift and a change of values towards solidarity, cooperation and synergy.

nr.	interstitial transformations	symbiotic transformations	ruptural transformations	Sources
1			Adopt an idea of re-localisation of the economy	(Alexander & Gleeson, 2019; Savini, 2019; Xue, 2014)
2			Reject the ideal of economic growth	(Alexander & Gleeson, 2019; Kallis, 2015; Odum & Odum, 2001; Savini, 2019; Xue, 2014)
3			Shift values away from competition towards solidarity, cooperation and synergy	(Alexander & Gleeson, 2019; A. Nelson & Schneider, 2018b; Savini, 2019; Wächter, 2013)
4			Cultural shift towards simplicity and sufficiency	(Alexander & Gleeson, 2019; A. Nelson & Schneider, 2018b; Savini, 2019; Xue, 2014)

table 3.11. degrowth proposals for urban planning regarding the paradigm shift

E. selection and explanation of promising proposals

Finally, below a list of promising proposals is offered ordered per theme for both the interstitial as well as the symbiotic strategies. Remember the proposals for a ruptural strategy were taken together as all (subversive) activities leading to the required mental paradigm change. To offer more context to these proposals are briefly explained based on the sources used in the document analysis, combined with the interviews and the theoretical frame.

urban (public) space and ownership

- *Symbiotic: stimulate mixed, self-sufficient neighbourhoods* → this stimulates a local sustainable economy in urban areas, socially diverse and not dominated by private motorized transport (Alexander & Gleeson, 2019; Savini, 2019).
- *Interstitial: set up community land trusts to decommodify land ownership* → this can help to ensure housing affordability in cities and thus allows building for diverse groups of people, it also reduces speculation with houses (Mayerfeld Bell & Carolan, 2009; Wächter, 2013).

housing and construction

- *Symbiotic: making not for profit and affordable rental housing the norm again* → this can help to ensure affordability of urban housing for a broad target group and reduces the need for mortgages and loans (C. Huisman, personal communication, September 25, 2019), which helps to reduce the growth impulse of society at large and can make the economy more stable in situations of no-growth (J.F. Gerber, personal communication, September 23, 2019).
- *Interstitial: setting up forms of collaborative housing* → collaborative housing can mean more people can live in the same urban area and it allows

people to share time, skills and goods outside of the commodified economy which can have positive social and environmental benefits (Lietaert, 2010; C. Huisman, personal communication, September 25, 2019)

the urban food system

- *Symbiotic: utilize local food policies and procurement* → this can reduce the ecological footprint of the urban food sector while giving meaningful work to people in a local economy (A. Nelson & Schneider, 2018a; Odum & Odum, 2001). It can also stimulate ecological regeneration with sustainable ways of farming (M. Kegels, personal communication, September 17, 2019).
- *Interstitial: engage in community supported agriculture* → the effects are the same as the symbiotic strategy: reducing the ecological footprint of the urban food sector while giving meaningful work to people in a local economy and stimulating ecological regeneration with sustainable ways of farming. It also increases awareness of the participants regarding food production.

the monetary or tax system

- *Symbiotic: implement a green tax reform (tax for motorized transport, property taxes, tax on capital and resources instead of labour etc.)* → taxes can help to limit urban sprawl and private motorized mobility, limit speculation with housing, determine who benefits of urban development, influence where companies settle and what their activities are and reduce vacant real estate (Alpkokin, Kuriyama, & Hayashi, 2004; Kallis, 2015; Mcfarlane, 1999)
- *Interstitial: create local currencies and introduce local credit systems* → currently investment decisions are often very undemocratic as many investors are private parties such as private banks or rich individuals. Local currencies and local credit systems can help to democratize this system (Gerber, 2015).

the economy at large

- *Symbiotic: employ a policy of regional economic redistribution* → regional economic redistribution can help to counter agglomeration thinking that is growth inducing and lead to more distribution of wealth, it might also help to reduce shrinkage and urban concentration, and thus unnecessary demolition and reconstruction (C. Huisman, personal communication, September 25, 2019).
- *Interstitial: reduce commodified work (supported by a basic income)* → this can help to stimulate a local neighbourhood economy where people share skills and resources. This reduces the dependence on economic growth for welfare (Alexander & Gleeson, 2019; Kallis, 2015)

mobility

- *Symbiotic: set limits and taxes on private vehicles and aviation* → this reduces the ecological footprint of urban dwellers and creates more space for public and active modes of transport (Lehtinen, 2018). It can also create space for other local neighbourhood economic activities such as urban farming (M. Kegels, personal communication, September 17, 2019).
- *Interstitial: use and support shared, public and active transport modes* → this helps to reduce the carbon footprint of transport in urban areas (Lehtinen, 2018).

the planning process

- *Symbiotic: improve participation and transparency of the planning process* → this stimulates the development of urban policy in the service of the common good instead of the growth of capital for private investors and corporations (Alexander & Gleeson, 2019; anonymous respondent, personal communication, October 21, 2019).
- *Interstitial: engage in participation processes and set up local interest groups* → just like the symbiotic strategy this stimulates the development of urban policy in the service of the common good (Alexander & Gleeson, 2019). Additionally, it increases the

awareness of local needs and opportunities of the participants

consumption

- *Symbiotic: reduce consumption inducing advertisements and consumption inducing public space* → Reducing advertisements in urban areas can reduce consumption, relax positional competition and reduce the sense of frustration that comes with lack of growth (Kallis, 2015; A. Poças Ribeiro personal communication, September 2, 2019)
- *Interstitial: developing cheap and low-impact leisure activities* → functions that offer leisure activities in urban areas that are affordable and do not have a big negative impact can increase wellbeing while decreasing the environmental impact. Examples are engaging in making or repair activities; setting up second hand shops; or gardening (Alexander & Gleeson, 2019).

production

- *Symbiotic: stimulate local and circular production of goods* → the necessity of circular production is clear, many resources are scarce and energy intensive this can be reduced with circular production of urban goods and buildings (A. Nelson & Schneider, 2018a; Odum & Odum, 2001). A real circular economy needs to abandon the growth paradigm (J.F. Gerber, personal communication, September 23, 2019) and is highly dependent on a local economy for low-energy repair and re-use (anonymous respondent, personal communication, October 21, 2019)
- *Interstitial: set up regional cooperatives for food or energy* → regional cooperatives can help to make cities more autonomous (Savini, 2019) while providing a workplace with a democratic structure aimed more broadly at the common good instead of just profit and economic growth (Alexander & Gleeson, 2019; Kallis, 2015; Wächter, 2013)

“It is clear that tomorrow’s society cannot be concentrated on growth, at least not as far as material goods are concerned.

To begin with we should stop directing our economic system to the search for maximum growth and to constant increase in the gross national product. A suggestion would be to replace the GNP by gross national utility. (It remains to be seen whether this utility can be quantified.) In this connection Tinbergen’s concept of “gross national happiness” is relevant. We would do well to examine how we could help in establishing an economic system which is no longer based on maximum growth per inhabitant. To this end we will have to deal with problems of planning, tax policy, the distribution of raw materials and perhaps of certain essential manufactured products too”.

(Sicco Mansholt in a Letter to Franco Maria Malfatti, 1972)

2.

HISTORICAL ANALYSIS

The historic development of urban planning sheds light on its origin and necessity, changing planning paradigms throughout the ages and helps understand its current status. After briefly giving some examples of pre-industrial urban planning this historical overview has its main focus on planning from the industrial revolution onwards, in western societies. More specifically, mainly England the United States and France are at the center of attention as frontrunners in the field of urban planning over the last centuries. The final part of this historical overview focusses specifically on urban planning in The Netherlands in the last century to grasp the specifics of the Dutch planning culture.

A. pre-industrial urban planning (prehistory – 1800)

The design and planning of urban form dates back thousands of years. There is evidence of a tradition of urban planning in ancient China, India, Egypt, Asia minor the Mediterranean world, south and central America (Fainstein, 1998). also pre-colonial Africa has

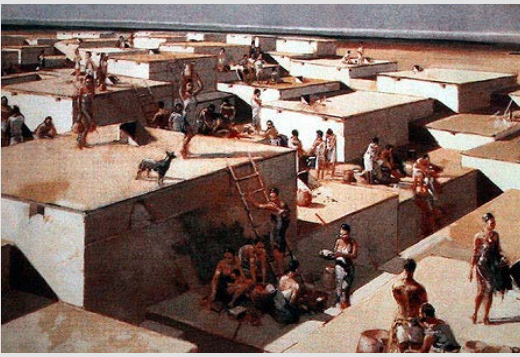
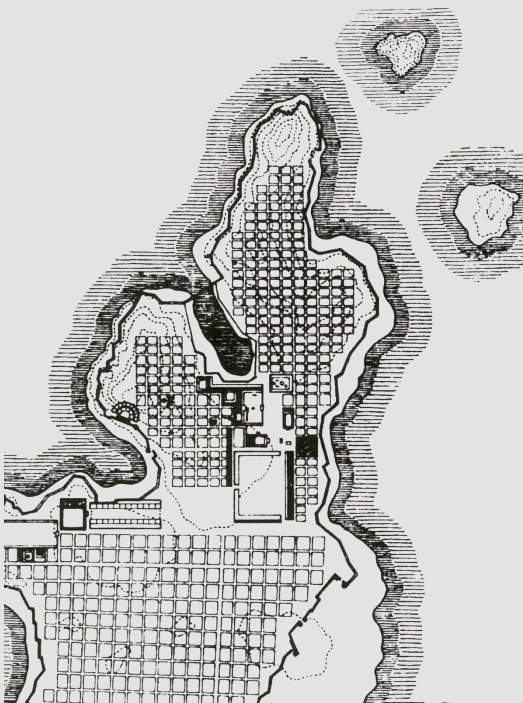


figure 3.3. the rooftop city of Çatalhöyük 7500 BC in what is now Turkey is an example of an early city. Was it planned or not? (TSLR, 2007)

plenty of examples of urban planning that might have not received the attention that they deserve (Parnell, 2017). The city planning phenomena found in these early civilizations include orderly street systems, specialized functional quarters, central sites for palaces, temples and civic buildings and systems of fortification, water supply and drainage (Fainstein, 1998). Still many scholars refer to ancient (pre-industrial) cities as unplanned. But reality is much more nuanced. Archeologist Michael Smith mentions in a research paper: ‘*The dichotomy between planned and unplanned (sometimes termed organic) is nearly ubiquitous in the literature on ancient cities*’ (Smith, 2007, p. 5). He goes on to present an alternative approach in which cities are planned to a certain degree on an ordinal scale.

In China, already in the Shang Dynasty (c. 1600 – 1000 BC) a theory of urban planning was developed to ensure social order and political control (C. M. Nelson, 1988). In the development of urban theory in China, cosmological principles lay at the foundation of city planning principles. The shape, location but also elements such as walls, gates and palaces were placed along the polar meridian and the cardinal directions since the ‘qi’, or heavenly breath that animated the world, was distributed along these points (C. M. Nelson, 1988).

figure 3.4. the grid structure of Miletus is said to be one of the first of its kind (Hippodamos, n.d., public domain).



Where the location of deliberately placed elements within a city has been interpreted as a sign of city planning, the identification of a completely new city in a pre-planned grid layout is often quoted as the pinnacle of early urban planning. Many of these newly constructed grid-based cities emerged in Greece around 400-300 before Christ, such as the cities of Piraeus and Miletus. According to Aristotle himself, this type of urban structuring was the invention of Hippodamus of Miletus (Pounds, 2005). Current scholars are aware of the fact that he was not first to employ a grid system; there are many other earlier examples in Egypt, Babylon and China (Kostof, 1991). But what made this Greek effort unique was the combination of a grid layout with a social theory of urbanism, while taking future expansion into account (Kostof, 1991). The social ordering entailed making separate areas for three classes of the population: craftsmen, farmers and soldiers. According to Pounds, this urban development into a grid signals a combination of absolute authority and the presence of a large, growing population (2005).

Of course, the Roman times are well known for extensive city building and architecture. The most famous civil engineer from roman times is Marcus Vitruvius Pollio (c. 75 BC – after c. 15 BC).



figure 3.5. the Arles amphitheatre turned into a fortified village after the fall of the Western Roman Empire. J.B. Guibert, postcard of old engraving, scanned by Robert Schediwy (public domain).

His well known book series *De Architectura Libri Decem* (Ten Books on Architecture) deals with all aspects of city planning and design. Vitruvius' famous triad consisting of *firmitas*, *utilitas* and *venustas* (i.e., structural stability, appropriate spatial accommodation, and attractive appearance) guides architects and urban planners until this day. A big part of his work on city planning concerns new ideal cities (Mundigo & Crouch, 1977). However, cities have not only grown throughout the ages, after the fall of the Roman Empire, early medieval times in Europe saw a decline in urban areas, cities decreased in size, urban functions were lost or cities disappeared altogether (Rottier, 2004). As the peace that was ensured by the might of the Roman Empire was no longer safeguarded, many remaining cities fortified themselves as a means of protection (Pounds, 2005; Rottier, 2004) see figure 3.5. Some cities could barely be defined as cities anymore, public functions, such as bridges, water works or bathhouses, that required a communal effort for their upkeep and maintenance vanished, buildings crumpled and even farming took place within the city walls (Rottier, 2004). Despite the urban degradation cities did not vanish completely, some remained as their walls offered protection, others mainly along the Mediterranean coast had prosperous overseas trade routes that ensured their survival (Pounds, 2005). Although in historiography these have not always gotten equal attention, different examples of pre-industrial urbanism illustrate that many different meanings can lie behind urban planning decisions, cosmological, political or practical.

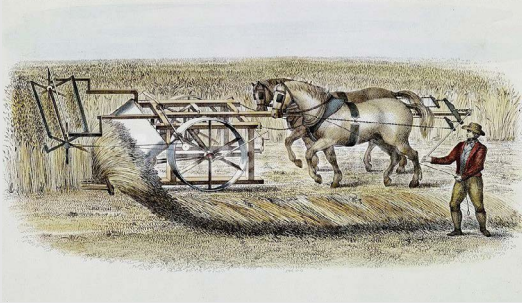


figure 3.6. the agricultural revolution was one of the causes of the urbanization of the 18th century. Innovations like crop rotation, a bigger diversity of crops and technical innovations like this reaping machine increase the productivity of the land. This meant more food and less labour (Swanston, 1851, in the public domain).

B. contemporary urban planning and the industrial revolution (1800 – 1950)

The modern origins of urban planning lie in the time of the industrialization of cities in Europe and the US (Fainstein, 1998). This caused a major change to take place in western cities in the 18th and 19th century. The combination of an agricultural revolution and the first industrial revolution pushed and pulled people to the cities. They were pushed because of efficiency gains and changing legislation in agriculture meant less people were needed per unit of land, and pulled because railway networks and ports made cities hubs of resources and production facilities thus providing



figure 3.7. Pictures like this one of Jacob Riis in the US increased public awareness of the bad living conditions of workers (Riis, 1889, in the public domain).



figure 3.8. Another picture of Jacob Riis showing children sleeping on the street (Riis, 1890, in the public domain).

work (Rottier, 2004). Technological advances followed each other in a rapid pace, such as semi-automated textile production, mass production of iron and the development of steam power with far-reaching consequences for the economies of cities (Rottier, 2004).

growth of industrial cities: a juxtaposition of rich and poor.

The period of industrialization happened in a political atmosphere of liberalism and laissez-faire (Rottier, 2004), LeBaron calls the lack of town planning in the 18th and 19th century a manifestation of these 'Adam Smith like' doctrines (1969). This approach was quite different from the strict rules set by guilds that governed markets in the preceding times. Instead the ideas of liberalism in the 18th century stated that every political action should build upon the beneficial combination of free enterprise and an open market for labour and goods (Rottier, 2004).

Despite harsh working environments in these industrial towns better nutrition, a higher income and absence of war increased fertility rates leading to a fast population growth, mainly in the urban areas (Fainstein, 1998; Rottier, 2004). This rapid and unplanned growth of urban centers created unsafe and unhealthy neighborhoods. Supported by revealing journalism and photography by the likes of Jacob Riis or Charles Booth (see figure 3.7 and figure 3.8) a growing social awareness led people to disagree with the uneasy juxtaposition of wealthy and poor within the confines of the city (Fainstein, 1998). The deplorable conditions of the working class were no longer acceptable, the threat of disease and revolution stimulated socio-economic reforms in which urban planning would take central role (Hall, 2014), with a focus on public reforms for better hygiene, housing and transportation (Hein, 2018).

Rottier describes how two main directions originated in urban thinking in this period. There were those who proposed to build new cities, far away from the old cities with hygienic, social and esthetical ideals. Conversely there were proposals to fix the existing cities with drastic interventions (2004).

new and ideal cities: Fourier & Owen

On the one hand pioneering (utopian) socialist thinkers developed ideas of new ideal cities. Examples are Robert Owen (1771-1858) in England and Charles Fourier (1772-1837) in France. Both developed new ideal cities and communities worked out in extensive detail (Rottier, 2004). They proposed a kind of communitarian



figure 3.9. Slums in a polluted London during the industrial revolution by Gustave Doré (Doré, 1872, in the public domain)

socialism and they were critical of capitalism and private property. In their visions, land would be collectively owned by all inhabitants of the commune and they would share the income equally (Kostof, 1991). Their search for perfect models of society became known as utopian socialism. As it was a critique that was found its origin in the appalling state of industrial cities the answer also included spatial solutions of urban and architectural scale (Słodczyk, 2016). Fourier emphasized the importance of the connection between the rural landscape and the city and proposed cooperative agricultural communities, where the people of all classes, ages, sexes and races would be housed together in so called ‘phalansteries’ of 2000 people each (Kostof, 1991). Owen proposed a square community diagram with houses on four sides and various collective functions such as common kitchen, refectory and school in the middle (see figure 3.10). Outside this square there was space for workshops, farms and an occasional industrial establishment (Kostof, 1991).

Although there were some success stories (such as Jean-Baptiste André Godin with his ‘familistère’); practical experiments of these



figure 3.10. A bird's eye view of a community in New Harmony, Indiana, United States, as proposed by Robert Owen (Bate, 1838, in the public domain)

ideas mostly failed as was the case for many Fourierist projects whether in Brasil, the United States or Algeria or Robert Owen's New Harmony commune visualized in figure 3.10 (Spanu, 2020). Kostof notes several reasons for the lack of success of these communes; their often remote sites became endurance tests for frontier living; the communal life was too far removed from the sanctity of family life; and finally, the absence of authority doomed planning and organized development (1991). According to Spanu the opposite could also happen, some communes developed a 'panopticon spirit' in their exercise of paternalistic control (Spanu, 2020). This does not mean that they have not left a mark. The legacy of the early socialist thinkers such as Owen and Fourier can be found in later policies such as those regulating and shortening working hours, improving worker conditions and limiting child labor. Moreover their physical plans left their mark on the later garden city housing schemes (Rottier, 2004).



figure 3.11. Avenue de l'Opéra painted by Camille Pissaro, this the same place as depicted in figure 3.12 (Pissaro, 1898, in the public domain)



figure 3.12. Demolition of Butte des Moulins for Avenue de l'Opéra (Marville, 1870, in the public domain)

inner-city restructuring: Haussmann

The other side of the story are the large interventions in existing cities of which by far the most famous example is the restructuring of Paris by Georges Eugène Haussmann (1808- 1873). Paris dealt with similar issues as most other industrialized cities at the time - issues of urban hygiene, disease, congestion, waste disposal and water provision. Added to that was a recent history of social unrest and revolution and a growing middle class that demanded commercial, industrial and scientific modernization (Rottier, 2004). Haussmann acquired extensive powers as a public planner and started a program that mainly consisted of carving out long and wide boulevards throughout the city (see figure 3.11), improving transportation possibilities, connecting major public and private buildings and railway stations while at the same time adding a high capacity sewage system. Parks, squares aqueducts and many houses and monumental buildings were built, of course in a neoclassical fashion (Kostof, 1991). It should be mentioned that all these interventions were mainly aimed at improving the national and international status of Paris and improving life for the upper class. It came at the cost of displacing a huge swath of the working class (see figure 3.12), who were pushed to the outskirts of Paris (Hall, 2014).

Although not explicitly admitted as such, the transformations were also a means to increase the power of the military over a politically aware worker class. In the end, the transformation of Paris inspired many other cities in Europe and the United States (the City Beautiful movement). Cities such as Brussel, Vienna, Berlin followed in its footsteps, which illustrates how urban planning became more and more directed by national governments (Rottier, 2004).

sanitary reform; the start of environmental planning

Another important step towards a new form of planning in existing cities came with public health reforms, as had already informed Haussmann's sewage system. Increased scientific knowledge of diseases and the urge to improve social conditions led to what is known today as sanitary reform (Peterson, 1979). Peterson describes how starting in 1840 in the US, this progress created insights into the environmental site arrangements and structure of cities that could prevent ill-health. In turn 'environmental planning' emerged as a specialized art (Peterson, 1979). Concrete consequences of this were amongst others proposals for better ventilation in buildings and rooms, provision of a safe public water



figure 3.13. Monster soup, commonly called Thames water, this humoristic drawing shows illustrates the advancing knowledge of bacteria and the spread of diseases in London (Health, 1828)

figure 3.14. due to a lack of central planning, suburbanization in England led to a long sprawl of monotonous similar houses, remote from amenities such as shops, schools and stations (findmypast, n.d.)



supply, the introduction of public sewage and closing of privies, the development of parks, repaving of streets and a building code with prescriptions to raise ground building levels above street level (Peterson, 1979). Despite the solutions mentioned above at the end of the 19th century most cities were still riddled with problems. This led to an anti-urban sentiment which manifested itself in romantic longings for live in the countryside. Think of Emerson or Thoreau in America or Frederik van Eeden in the Netherlands. But more importantly it led to two parallel movements of which Peter Hall has stated that it is impossible to logically defer the beginning, in his words: *'it is never clear which came first, the suburbanizing chicken or the philosophical egg'* (2014, p. 50).

suburbanization 1875 - 1940

With the suburbanizing chicken, Hall refers to the start of the urban sphere spreading outwards into the countryside. At that time in England, still a large part of the workers lived in cramped spaces in the city center. However, changes in transport meant that a larger proportion of the people could for the first time live at some distance from their work. Most suburbs of the first half of the 20th century were therefore based on tubes or above ground railways (Historic England, 2007). The first suburban developments were of high quality by public architects, but in small numbers. Later more freedom was given to private parties to speed up housing, leading to speculation, a decrease in quality but an increase of the number of houses being built (Hall, 2014). Still nowhere near the numbers of houses were produced that would be necessary to solve the shortage. Which became painfully obvious after the first world war, when soldiers returning from fighting for their country could not find a home. This forced the English government to take action and start a housing program of subsidies, loans and direct building by local authorities that would result in the doubling of the built-up area of London in the interwar period and millions of homes being built throughout England (Georgiou, 2014; Hall, 2014). This was supported by a growing white-collar workforce, growing real incomes, cheap mortgages and large construction companies. At the same time there was a genuine preference or even a national dream for suburban living with its more healthy, less crowded and green surroundings (Georgiou, 2014). As Peter Hall states: *'it was the vision of suburban life that took pride of place as a populist utopia'* (2014, p. 79).

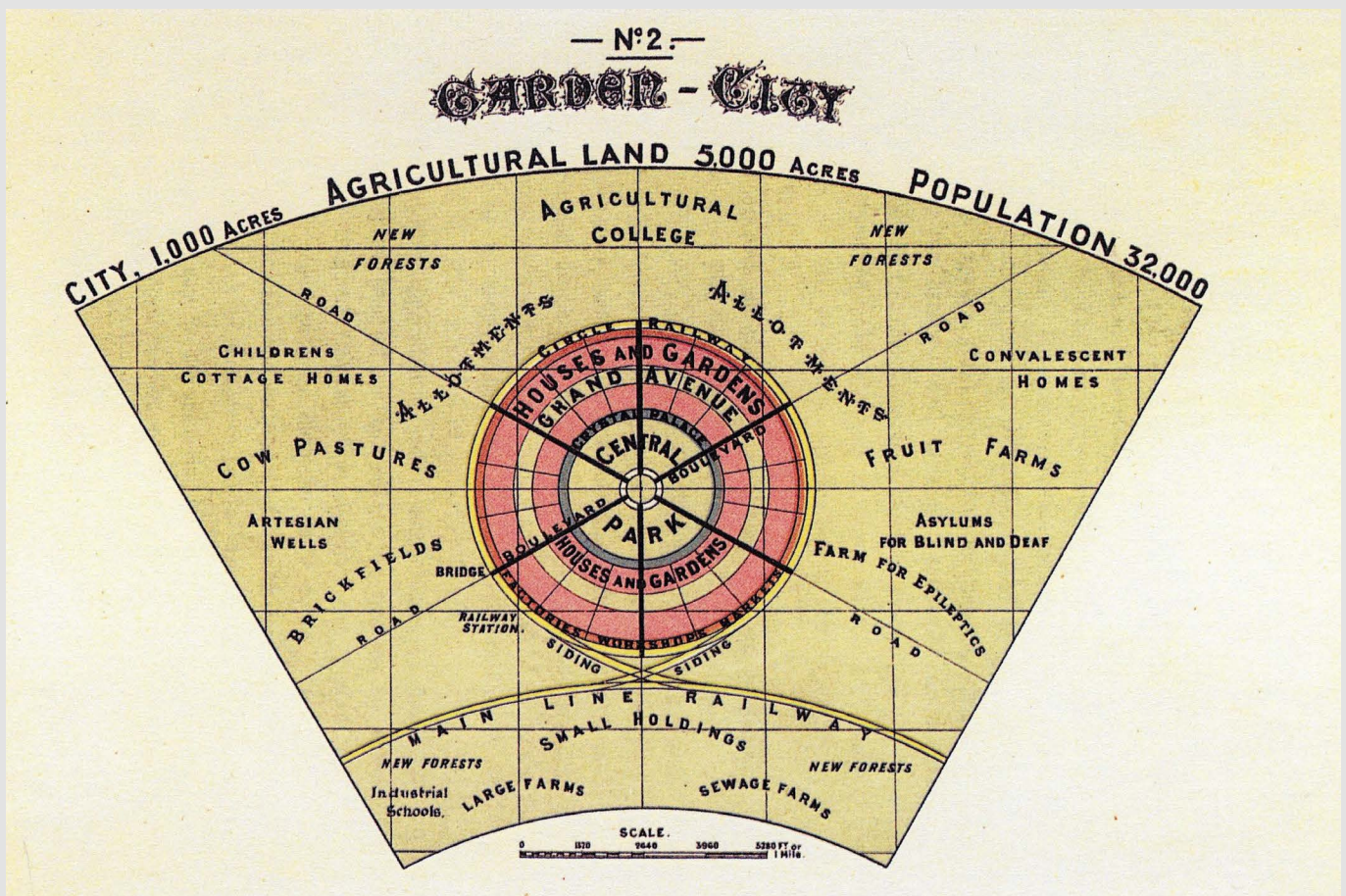


figure 3.15. Howards publication was full of diagrams as opposed to designs. Here depicted Diagram No.2 (Howard, 1922)

To sell, houses had to be romantic, conservative, cheap, yet give a sense of status. The scarcity of regulations and the speed at which houses were built (at its peak a staggering 288.000 houses in a year) did not allow for much planning. This led to unique land features being removed from the sites to be replaced with a long sprawl of monotonous similar houses, remote from amenities such as shops, schools and stations (Hall, 2014)

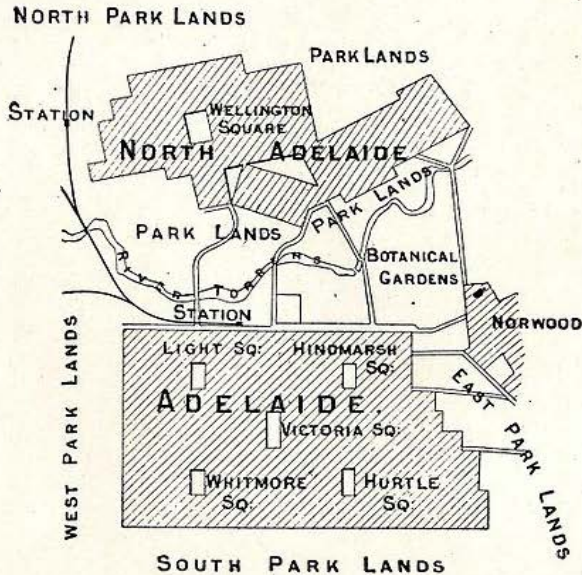
garden cities 1875 - 1940

The aforementioned 'philosophical egg' mentioned by Hall referred to the Garden Cities of Ebenezer Howard. Though this idea eventually helped spur the suburban dream it was in fact a vision that originally aspired to something completely different. In 1902 the publication of the book 'Garden Cities of Tomorrow' Howard proposed to guide the growth of the city to independent, new satellite towns that combined the qualities of the country with those of the town (Rottier, 2004). The idea was to move companies and citizens to these new towns with a clear limit to their size in terms

N^o 4.

ADELAIDE

SHOWING PARK LANDS ALL ROUND
CITY, AND ITS MODE OF GROWTH.



N^o 5.

DIAGRAM

ILLUSTRATING CORRECT PRINCIPLE
OF A CITY'S GROWTH— OPEN COUNTRY
EVER NEAR AT HAND, AND RAPID
COMMUNICATION BETWEEN OFF-SHOOTS.

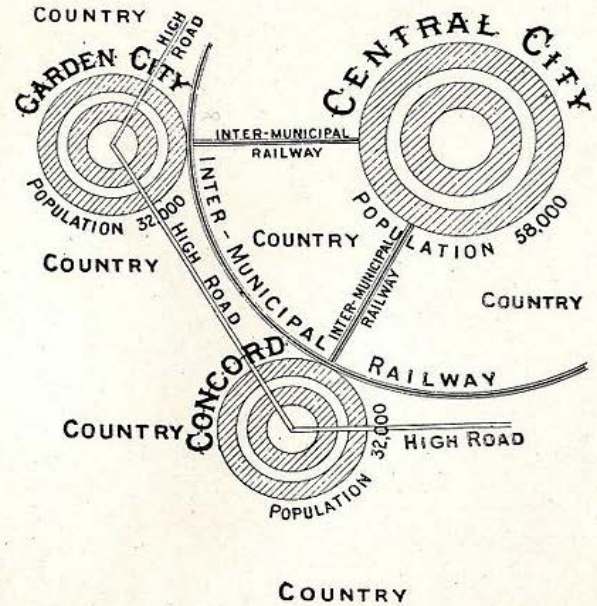


figure 3.16. Howard did not want cities to grow by expanding their borders, instead new cities should be formed when a certain urban settlement reached a maximum of inhabitants. Here depicted Diagram No. 4 and No. 5. (Howard, 1922)

of population and area. This would allow for a new balance of nature and city, food production around the new town and guarantee proximity to work, housing, education, shops and amenities and the open landscape (Rottier, 2004). When the central city had reached its boundaries a new satellite city was to be created with all the same social and economic service, this polycentric vision was called the Social City by Howard (Hall, 2014).

Hall describes how Howard was misinterpreted by many. It has been said that he advocated low density housing, where he actually proposed densities close to the center of London. It has also been said he proposed the creation of small towns, where in fact he aimed for urban areas of hundreds of thousands, perhaps millions of people. And the biggest mistake is, according to Hall, that he was mistaken for a physical planner instead of a social visionary (Hall, 2014). This last point is underlined by his lack of a physical design in his publications and the presence of many diagrams explaining the workings of his proposed system (see figure 3.15 and figure 3.16).

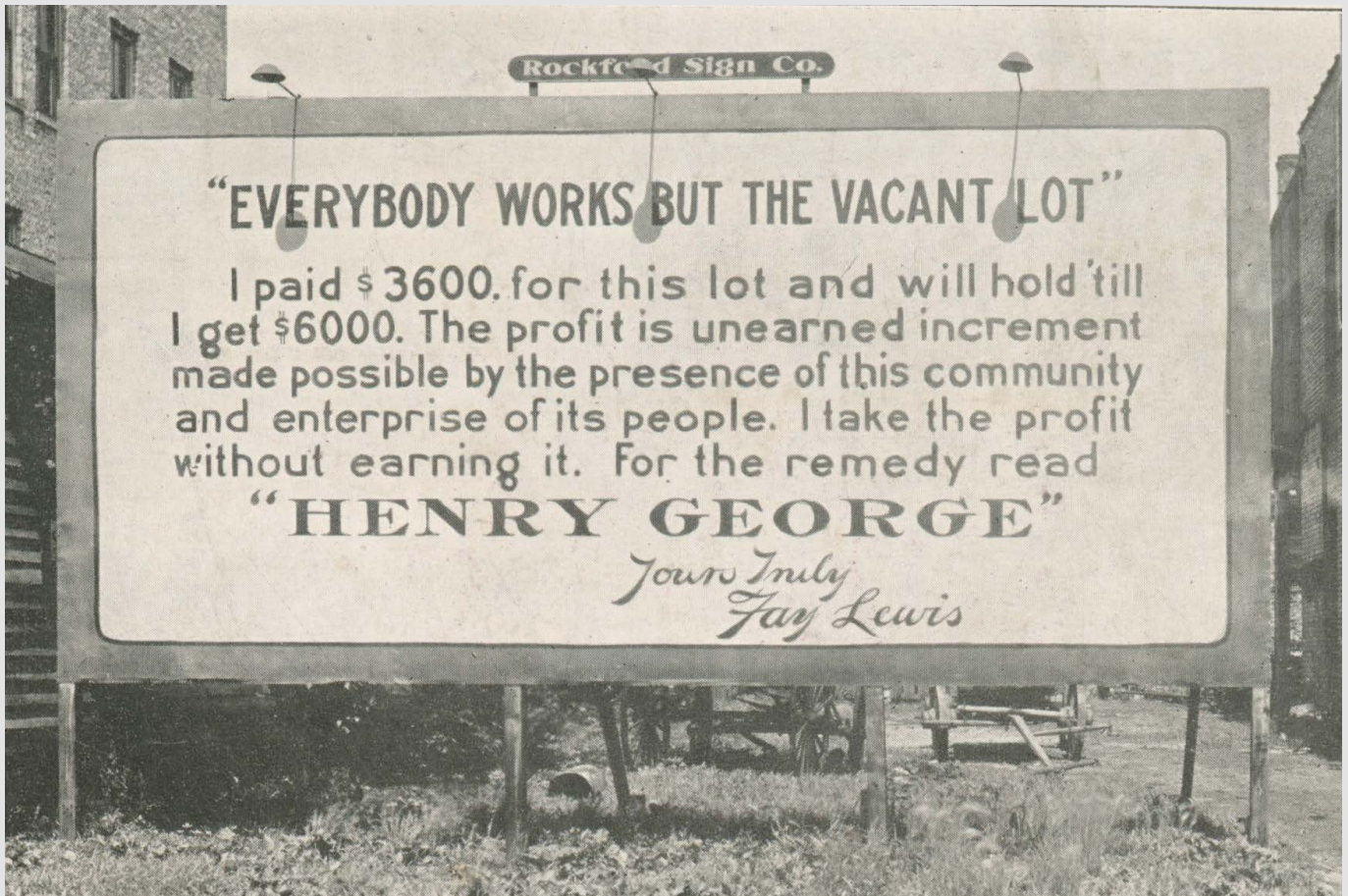


figure 3.17. Howard was inspired by and combined the ideas of many others, from anarchist thinkers to transcendentalist writers. One of the ideas that inspired him was the Land value tax of Henry George (Science, Industry and Business Library: General Collection, n.d.)

Howard was indeed not a physical planner or designer but trained as a stenographer. Indispensable in understanding Howard is realizing that he was influenced to a high degree by ideas of his predecessors such as the aforementioned early socialists Owen and Fourier (Rottier, 2004), but also by transcendentalist writers like Whitman and Emerson and many others, from the famous architect Ledoux to well-known anarchists. Anarchist ideas about self-governed communes linked by a principle of federation, with strong regional economies originated with Proudhon and Bakunin and influenced geographers like Kropotkin and Élisée Reclus who in turn influenced Howard (Hall, 2014; Tsekeris & Tsekeris, 2010). Another influence on Howard was the 'Back to the Land' movement popular with certain idealists between 1880 and 1914 and supported by writings of John Ruskin and William Morris, key figures in the arts and crafts movement of the same period.

Inspired by Henry George's idea of capturing increasing value of land for the public good, Howard wanted the land to be owned communally indefinitely. He dreamed of voluntary self-governing



figure 3.18. Letchworth Garden City today, seen with satellite image (Google, n.d.)

communities (Hall, 2014, p. 91). He developed an extensive scheme to build a trust fund to pay off the mortgage for the land sale, and consequently to finance a welfare state with pensions for the elderly. Thus, as Hall states: *'his garden cities were merely the vehicles for a progressive reconstruction of capitalist society into an infinity of cooperative commonwealths'* (Hall, 2014, p. 91).

The ideas of Howards gathered a lot of public support, thus he set out to realize them. Since he was not a designer himself, Howard collaborated with architects Raymond Unwin and Barry Parker (Hall, 2014). This led to the development of several garden cities of which the most well-known are 'Letchworth garden city' and 'Welwyn garden city' (see figure 3.18). Both were created as genuine independent garden cities built in the countryside, although the ideas of Howards were watered down considerably, especially his financial and organizational concept such as communal ownership and cooperative structure (Hall, 2014). The projects also encountered many problems during their realization from financial difficulties to a lack of businesses moving there and a slow increase of inhabitants (Hall, 2014).



figure 3.19. Despite an extensive financial plan to pay for the radical social agenda of Howards Garden Cities, his ideals of communal land ownership and cooperative governance where never realized (Howard, 1922).

Under the supervision of Unwin and Parker the design took on a medieval inspired look and shape (Rottier, 2004). Both garden cities were spacious in terms of layout with lots of public green space and big gardens. However, besides these examples not many real garden cities, meaning independent new cities, were built in the first half of the 20th century. Much more prevalent was a 'garden city style' used for new neighborhoods, so called garden suburbs which were realized all throughout Europe (Rottier, 2004). These new developments go directly against the ideas of Howard, because his plan was to stop existing cities from extending endlessly (Tizot, 2018). Moreover, Howard's socialist ideals were also quickly abandoned (Fainstein, 1998). An important reason for the failing of his socialist ideals according to Tizot was that his plans were easily taken over by the same private investors that where required for the plan:

'In the story of Letchworth and Welwyn, the first two Garden Cities that came into being at the beginning of the 20th century, it was clearly the capitalistic venture that ruled over the 'co-operative commonwealth', not least because the directors of the latter were also the board of the former..... What is essential here is that at the core of the Garden City's social and economic system lies a form of corporate governance, and not of 'local government' according to the law of the land.' (Tizot, 2018, p. 16)

Whereas more radical sources of inspiration for Howard (such as those from anarcho-communist circles) wanted to dispossess landlords to start new self-governing communities, Howard planned to set up a garden city company that would buy land cheaply from a benevolent landlord. The necessary mortgage for this would be paid off with land rent collected by a fund managed by honorable and honest trustees (Tizot, 2018). In that sense he does not consider public (state) ownership of the land for its citizens but a particular kind of private property (Tizot, 2018). March further clarifies how Howards belief in market mechanisms damaged his social aspirations:

'The practical realization of Howard's vision in Letchworth and Welwyn is also instructive. The nature of liberal democracy itself required that significant 'practical' concessions be made to certain of his ideals, most patently equity, rights, inclusion and local autonomy.

Thus, while the development of the Garden City brought significant gains in living conditions, its realization through largely liberal-based market mechanisms brought erosion of its social ideals (March, 2004, p. 429)

Despite the shortcomings of the realized garden cities, the line of thought that culminated in the vision for garden cities as set forth by Howard would go on to inspire other developments in urban planning, such as regional planning and modernist functionalistic planning.

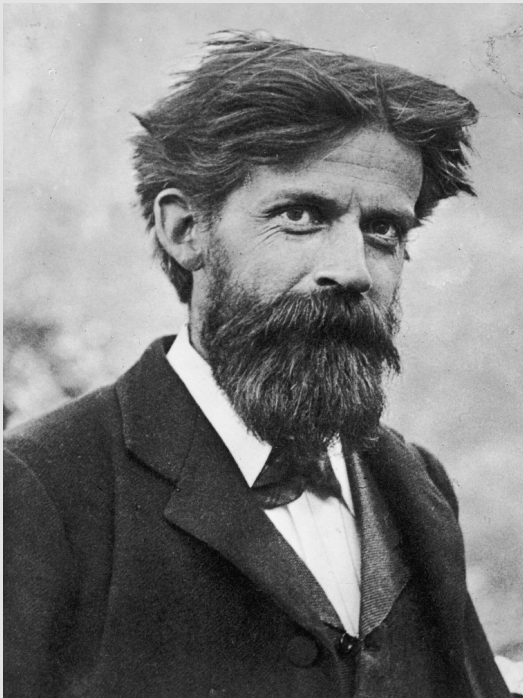


figure 3.20. Patrick Geddes developed different outlook on cities and urban planning inspired partly by his background in evolutionary biology (Patrick Geddes Centre, n.d.)

survey before plan: regional planning 1875 – 1929

Patrick Geddes, an evolutionarily biologist, geographer urban thinker (1854 – 1932) analyzed the relationship between organisms and their environment (Hall, 2014). His way of thinking is well illustrated by an image he produced, the so called ‘valley section’ (see figure 3.21 on page 113). This image shows several valleys, a river coast and what trades and crafts ‘naturally’ fit best in which location. The City in the background is the culmination of all trades and crafts. With this image Geddes showed the interdependence between a city and its hinterland (Welter, 2001). Known for his famous quote ‘survey before plan’ he pointed out that planning has to be based on proper research into a regions characteristics, from flora and fauna, geology and climate to social and economic strengths and weaknesses (Wahl, 2017) . Geddes saw cities as living beings, organisms that developed or evolved in relation to their environment (Batty & Marshall, 2009). He also introduced the idea of the city as a built environment whose design could influence the organisms that it harbored, namely humans (Batty & Marshall, 2009).

One of his most famous pupils was the urban scholar Lewis Mumford (1895 – 1990) who has stated that Geddes provided him with the frame for his thinking (Hall, 2014), he saw him as a father figure and omniscient (Luccarelli, 1997). Where Geddes had difficulties in sharing his thoughts as a coherent story Mumford acted as an eloquent ‘author for his gospel’ (Hall, 2014, p. 164). Like Ebenezer Howard, both Geddes and Mumford were strongly influenced by the aforementioned anarchists thinkers and geographers Kropotkin and Reclus in their ideas about autonomous regions, federations and industrial decentralization (Hodge, Hall, & Robinson, 2013; Tsekeris & Tsekeris, 2010)

Mumford continued the thinking of his teacher Geddes with the Regional Planning Agency of America, or in short the RPAA which was formed in 1923, together with a diverse group of people such as architect Clarence Stein, Economist Stuart Chase, planner and conservationist Benton MacKaye, public housing advocate Catherine Bauer and several others (Hall, 2014). The RPAA combined the ideas of Geddes with Howards Garden City concept explicitly under the banner of regional planning, their ideas are also known as regionalism. Regionalism as set forth by the RPAA entailed thinking and planning on a regional or metropolitan scale and proposed the idea of an ecological partnership between and social beings and their natural environment (Luccarelli, 1997). The regional planners took the concept of 'Neotechics' from Geddes, by which they referred to new technologies that would enable a decentralization such as the telephone, telegraph, electric power, parcel post and automobiles (Hall, 2014). Kristin Larsen defines the vision of the RPAA as a form of 'communitarian regionalism', advocating for garden cities and villages that mix housing and supportive facilities as part of comprehensive regional plans that included ecological, economical and industrial aspects (Larsen, 2008). The members of the regional planning agency wanted to establish a symbiotic, rather than a parasitic relationship between the city and its surrounding countryside (Maddox, 1966).

Moving beyond the flow of technological advances and the creation of healthy garden cities that would disperse the overcrowded old city centers, region planning should fix systemic urban issues. With a national plan that defined regions based on their natural geographic characteristics (Hall, 2014) a re-localization of the economy could be achieved that would stimulate local production and minimize exchange with other regions to only those items that cannot be produced in the home region (Hall, 2014). As Stuart Chase, the economist of the RPAA mentions, regional planning would: *'encourage local orchards, develop local forest areas and check the haulage of western timber to eastern mills'* (Chase, 1925, p. 146). Chase was inspired by the lean economy during the wartime that diminished waste, managed to increase the standard of living by allocating goods and materials from public bodies. This led him to argue for economic planning: *'He believed that planning regions as economic units would lower resource consumption, and that prices would decrease, improving the standard of living for everyone. Economic planning could also be used for building active and balanced regions, with*

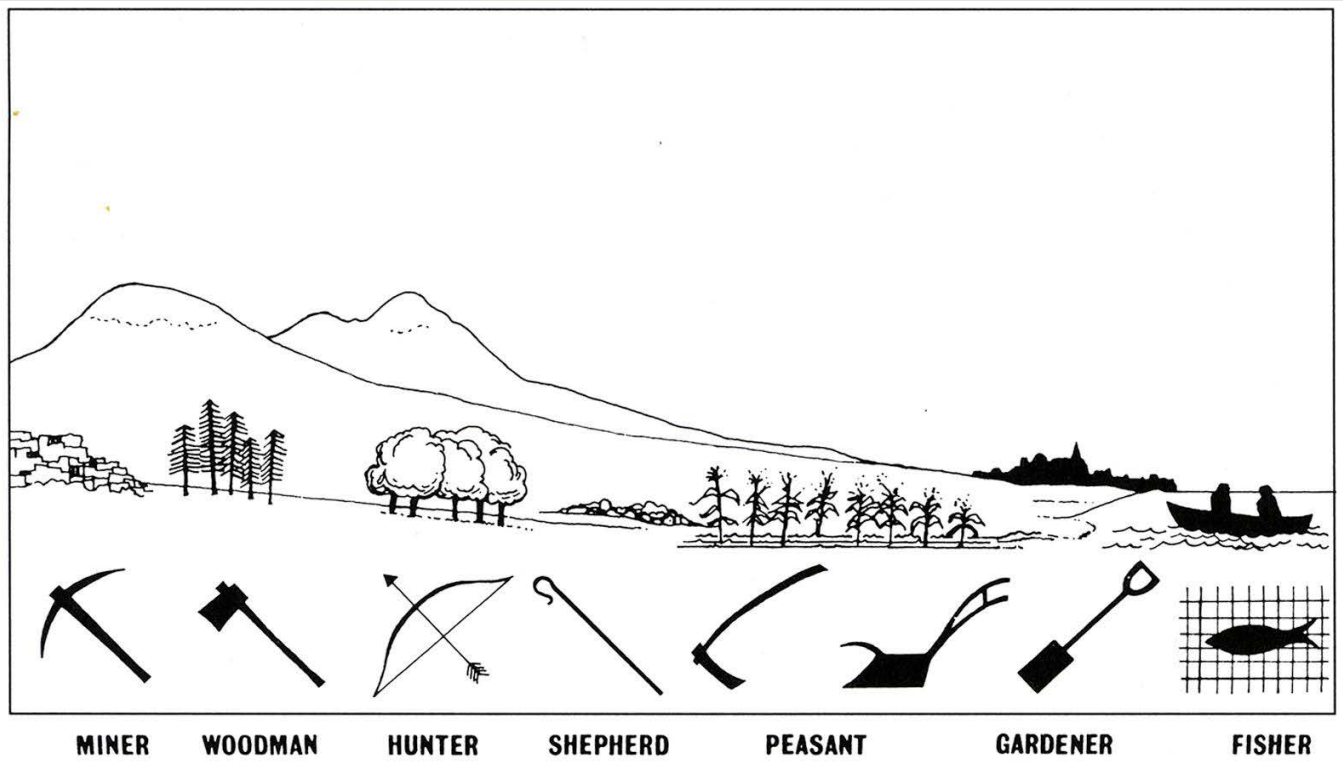


figure 3.21. the famous 'Valley Section' drawing of Geddes showing the interdependence between a city and its hinterland (Geddes, 1909, in the public domain).

factories being directed to locations where they were needed rather than the laissez faire system of industrial location' (Maddox, 1966, p. 35)

Mumford saw in regional planning a new form of conservation, combining permanent human settlements in natural surroundings dedicated to the pursuit of happiness with good stewardship of natural resources. The latter meaning permanent forms of agriculture and permanent forms of forestry instead of pillaging the landscape (Hall, 2014). Chase mentions the RPAA members had a socialist tendency and were willing to abandon large parts of free market thinking in favor of a planned economy (Hall, 2014). However, it was not to be. The few practical experiments the members of the RPAA were granted, such as the garden city of Radburn or a regional plan for the Tennessee Valley, were never fully completed (Hall, 2007). It would be England and the city of London that would continue their legacy. In his later books Mumford would be even more critical of the direction of his society and cities, criticizing the linear idea of progress without goal or limit in his book *Technics and Civilization* (1934) and calling the idea that monetary system knows no limits an 'aberration of the mind' in the first part of *The Myth of the Machine* (1967).

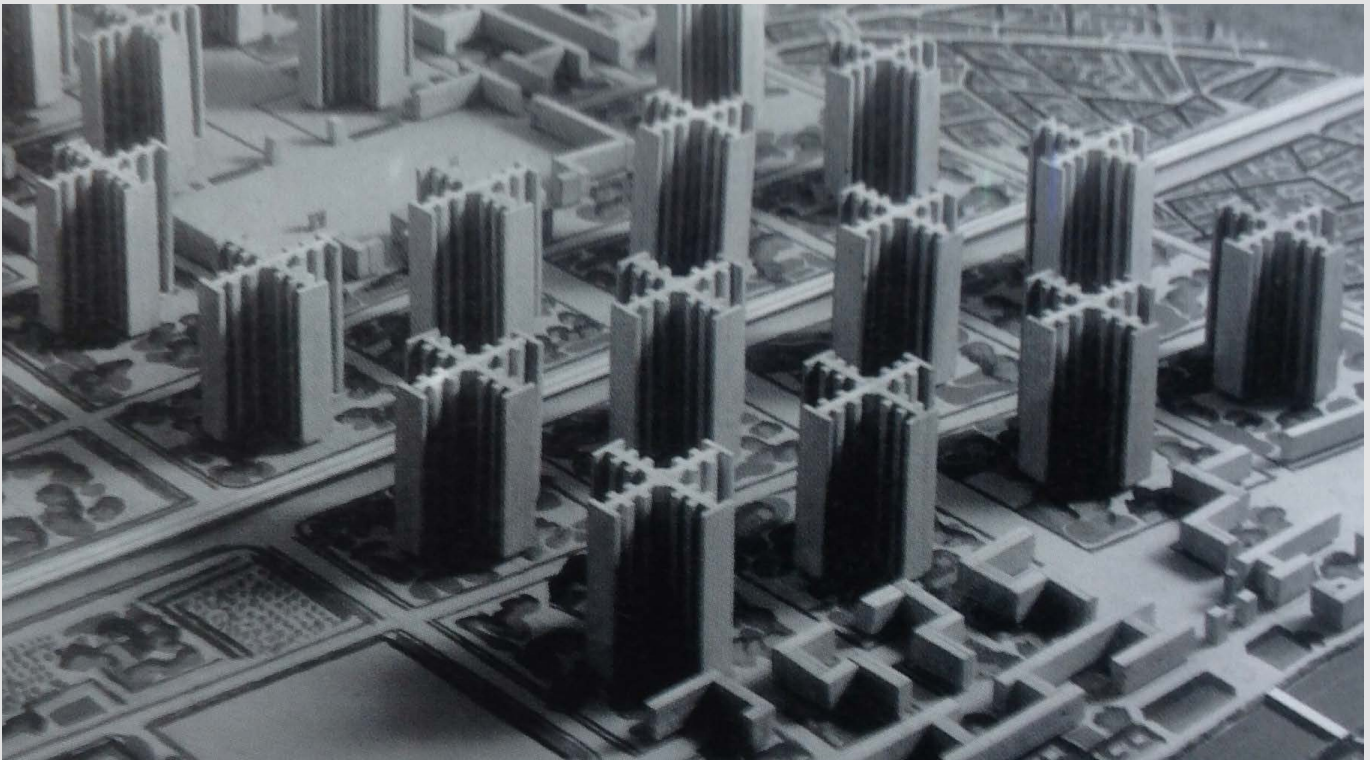


figure 3.22. Model of the Plan Voisin for Paris by Le Corbusier displayed at the Nouveau Esprit Pavilion (Fondation Le Corbusier, 1925)

According to Bianco, based on Geddes ideas, Mumford saw cities as passing through six stages towards their final destruction: 'Mumford's resulting scheme has the city passing through the eopolis, or the village community; the polis, a protoindustrial city; metropolis, the more mature industrializing city; megalopolis, the 'beginning of decline', with the ethos of capitalism and bureaucracy dominant; tyrannopolis, with an ethos of predatory consumptive parasitism dominating; and, finally, necropolis, the fully decayed and collapsed city.' (Bianco, 2001, p. 104)

1920-1945 - emergence of modernism: a functionalist approach to planning

Around the time of the RPAA in the United States, modernism in urban planning was taking off in Europe. The starting point of modern functionalist planning for many urban scholars is Le Corbusier (Hall, 2014; Massey, 2019). He is well known for his architecture but also renowned for his radical urban proposals such as the design for the 'Plan Voisin' and his visions set forth in the publication 'La Cite Radieuse' (see figure 3.22). Under his leadership, as Mumford states 'the cubists ceased to concern themselves alone with the isolated architectural product : they passed on to the urban environment as a whole, and sought to place the entire process of building and re-building on a fresh foundation' (L. Mumford, 1938). The origin

of functional modern ideas in urban planning can be seen as a confluence of several streams of thought. The arts and crafts movement that emerged as a critical reaction to the negative effects of the industrial transformations in society, paved the way for a new way of thinking. The critique of John Ruskin on division of labor and political economy as a field of science are well known. And though on the one hand arts and crafts can be interpreted as a nostalgic longing to the past, another of its main pioneers, William Morris, also focused the attention to the usefulness, the utility of objects (Denzer, n.d.). Together with contemporaries he inspired a generation to rethink the forms, materials and techniques they employed in art architecture and eventually urban planning. Arts & crafts was followed by L'Art Nouveau that in turn gave way to Art Deco, which explored more affordable ways of production and was itself inspired by cubism. Cubism aimed to dramatize the forms of modern construction and production instead of camouflaging them (L. Mumford, 1938). At the same time, according to David Harvey, there is a strong relation between Haussmann's reshaping of Paris, the Garden City proposal of Ebenezer Howard to Le Corbusier's modernist plan Voisin and later projects such as Frank Lloyd Wright's Broadacre City and the functionalist urban renewal efforts of the 1950s and 1960s (Harvey, 1989).

In this period urban thinkers were inspired by quickly advancing technologies, new materials such as steel, glass and reinforced concrete and modern machines. Going so far as to aim for houses and cities that function as machines themselves, a fact well-illustrated by Le Corbusier's famous quote that 'A house is a machine to live in' and similarly by the inspiration many modernists got from modern boats and airplanes. Clearly modernism was characterized by a rational approach to planning and design, de Klerk and Kreukels aptly describe the spirit of the times as '*ingenieursocialisme*' or engineer-socialism, by which they refer to the thought that by means of modern technologies the issues of mass housing, mass recreation and mass transport could be solved (2015, p. 12). The International Congresses of Modern Architecture

(CIAM) in which Le Corbusier played a central role had an important stake in developing a theory of modernist planning (E. Mumford, 1992). It was founded as a forum to share and develop architectural solutions to problems related to housing, circulation and health in modern cities. Its members shared the vision that current cities were overly dense, unhygienic and congested, but at the same time they rejected the notion to abandon city centers and the development of suburban sprawl (E. Mumford, 1992). The famous Dutch urban planner Cornelis van Eesteren organized the fourth CIAM congress with the topic of the functional city. This congress led to the famous CIAM position paper known as the 'Athens Charter' (1933), published (and revised) by Le Corbusier. This document described their main points. Some of the most important aspects were the following:

- For analysis purposes the CIAM approach divided urban agglomerations into four 'functional categories': dwelling, working, recreation, and circulation' (E. Mumford, 1992)
- High rise was seen as an important way to 'free more ground area for recreation' (E. Mumford, 1992)
- The charter proposed to abolish private property (E. Mumford, 1992)
- The charter advocated for 'an urban fabric of tall, widely-spaced apartment buildings set in parks' (E. Mumford, 1992, p. 394)
- Better living conditions should be the responsibility of a powerful elite of architect-planners, like CIAM. They, according to Le Corbusier, would be above politics (E. Mumford, 1992)
- The document advocated 'preserving the density and monumentality of the metropolis, while doing away with its overcrowding, lack of daylight, and corridor streets' (E. Mumford, 1992, p. 395)
- The measure and design of traffic flows was seen as a primary determinant of city form (Kostof, 1991).

planning institutionalized

Whether because of the urban renewal of Haussmann in France, the proposal of garden cities in England or the development of the regional approach in planning in the US, one of the general consequences of the responses to the problems of growing cities was an increased influence of planning

For example, the aforementioned rapid suburbanization or 'unplanned' growth of London, leading to extensive, monotonous neighborhoods led to a host of criticism. The fear was that the entire land would become a dispersed suburb, where rural land and nature would disappear. Consequently, limits were proposed, the housing challenge had to be solved within a contained border of the city to preserve natural and rural landscape surrounding the urban area. One of the most vocal critics, Frank Pick, even compared the unplanned suburban developments with a cancerous growth (Hall, 2014). This growing critical sound was adopted by the political realm and led to the Greater London Plan of Abercrombie, a student and follower of Patrick Geddes, which amongst others introduced the famous Green Belt around London and provided a system of open spaces and parks in the city (see figure 3.23). Together with the need for reconstruction after the war, it also led to the town and country planning act of 1947. This act 'finally' provided Britain with an effective land use planning system (Hall, 2014).

Because of this planning act all developments had to apply for permits, thus the legal power to develop came solely in the hands of the government. Furthermore, the new regime made sure that local authorities would develop development plans to give direction to future change and expansion (Ainsley, 2018). Finally, the law included a provision that added a 100% tax on 'betterment' or in other words, profits that were made because of rising land values would flow back to the state or municipality (Corkindale, 2004). However, this last rule was abolished by a conservative government in 1953. As this example shows, more decision power went to public agencies occupied with planning. This can also be seen from the creation of various planning laws and planning departments whether in England, the United States or continental Europe (Fainstein, 1998; Hall, 2014; Rottier, 2004). Urban planning became institutionalized.

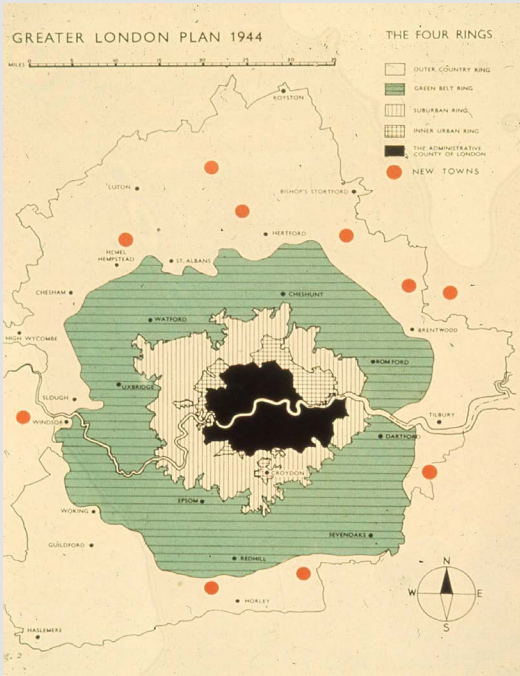


figure 3.23. The Greater London Plan of Abercrombie introduced four rings, an inner city ring, a suburban ring, a green belt and an outer country ring around the city (Abercrombie, 1944)



figure 3.24. Amsterdam like other cities had many slums and big differences in income between lower class and more wealthy inhabitants. Shown here is a picture of the backside of the Palmstraat in the Jordaan in 1920 (stadsarchief Amsterdam, 1920)

C. a century of urban planning in the Netherlands (1900 – today)

A similar development as described above took place in the Netherlands. In the beginning of the 20th century, in 1901, two laws had been introduced in the Netherlands; 'de Woningwet' (the Dutch housing act) and 'de Gezondheidswet' (the Dutch health act) which together would end the crowded unhealthy slums of the 19th century (Roegholt, 2001) which also plagued Amsterdam as can be seen in figure 3.24 up to figure 3.27. This is often seen as the beginning of spatial planning practices in the Netherlands (van Schijndel, 2016). The new laws had several consequences according to Van Schijndel (2016):

- It set minimum demands for light, ventilation and space for all houses and obligated municipalities to inspect house owners and builders.
- It facilitated the creation of housing associations with the goal to advance social housing.
- The law made setting up extension plans a mandatory task of fast-growing cities, these cities had to plan streets, squares and canals before construction started.

This final point was expanded with another law in 1921 that meant also land in between the roads and canals had to be given a specific function such as housing, public buildings, parks or industry. This also made it possible to refuse permits based on the extension plan. This is the precursor of the modern day land use- or zoning plan (van Schijndel, 2016). Physically, the first quarter of the 20th century saw the development of different types of workingclass neighborhoods such as the social housing complex de Dageraad in the 'Plan Zuid' (southern extension plan) of Amsterdam or garden suburbs such as Tuindorp vreewijk in Rotterdam or Tuindorp Buiksloot in Amsterdam (see figure 3.29 and figure 3.30). These were either private initiatives of newly found housing associations supported by the Woningwet or project built by the municipal housing service.

However, because of the ongoing urban growth that pushed the boundaries of existing municipalities there was a need to look at urban development on a higher level of scale (van Schijndel, 2016). Schram and Doevendans describe how at the International Town



figure 3.25. the Slums of Amsterdam were cramped and unhealthy places to live. Shown here is the Foeliestraat 28 (Schmidt / Stadsarchief Amsterdam, 1899)



figure 3.26. top image: with the Woningwet the municipality also got powers to declare houses uninhabitable and houses could be cleared (Stadsarchief Amsterdam, 1930).

figure 3.27. bottom image: some streets were entirely declared uninhabitable and demolished to make space for better houses (Swaager / Stadsarchief Amsterdam, 1929).



figure 3.28. Willemsstraat 75-77 (Schmidt / Stadsarchief
Amsterdam, 1899)





figure 3.29. social housing complex de Dageraad part of the 'Plan Zuid', these kinds of blocks were meant to provide affordable and subsidized housing for working class families in Amsterdam (Stadsarchief Amsterdam, 1932)

Planning Conference of 1924 in Amsterdam the great minds of that time in urban planning came together (2018). Foreign experts included Geddes, Howard, Unwin and Abercrombie from the United Kingdom, well-known Dutch experts were Granpré Molière, de Casseres and van Lohuizen, who later collaborated with van Eesteren on the AUP (Schram & Doevendans, 2018). During the conference important aspects were ideas on regional planning such as plans that spanned municipal and provincial borders and concepts that called for an interdisciplinary approach (Schram & Doevendans, 2018). This was a reaction to the destructive nature of cities due to their disorderly growth. The study of Schram and Doevendans shows that several Dutch planners questioned the English idea of satellite towns as this would quickly fill the limited surface area of the Netherlands (Schram & Doevendans, 2018). Furthermore, Joel de Casseres, who would later be the first to introduce 'planologie' (planning) as a concept in the Netherlands, pleaded for public ownership of all land (Schram & Doevendans, 2018). The conference was mainly a fertile soil for exchanging ideas and plans about



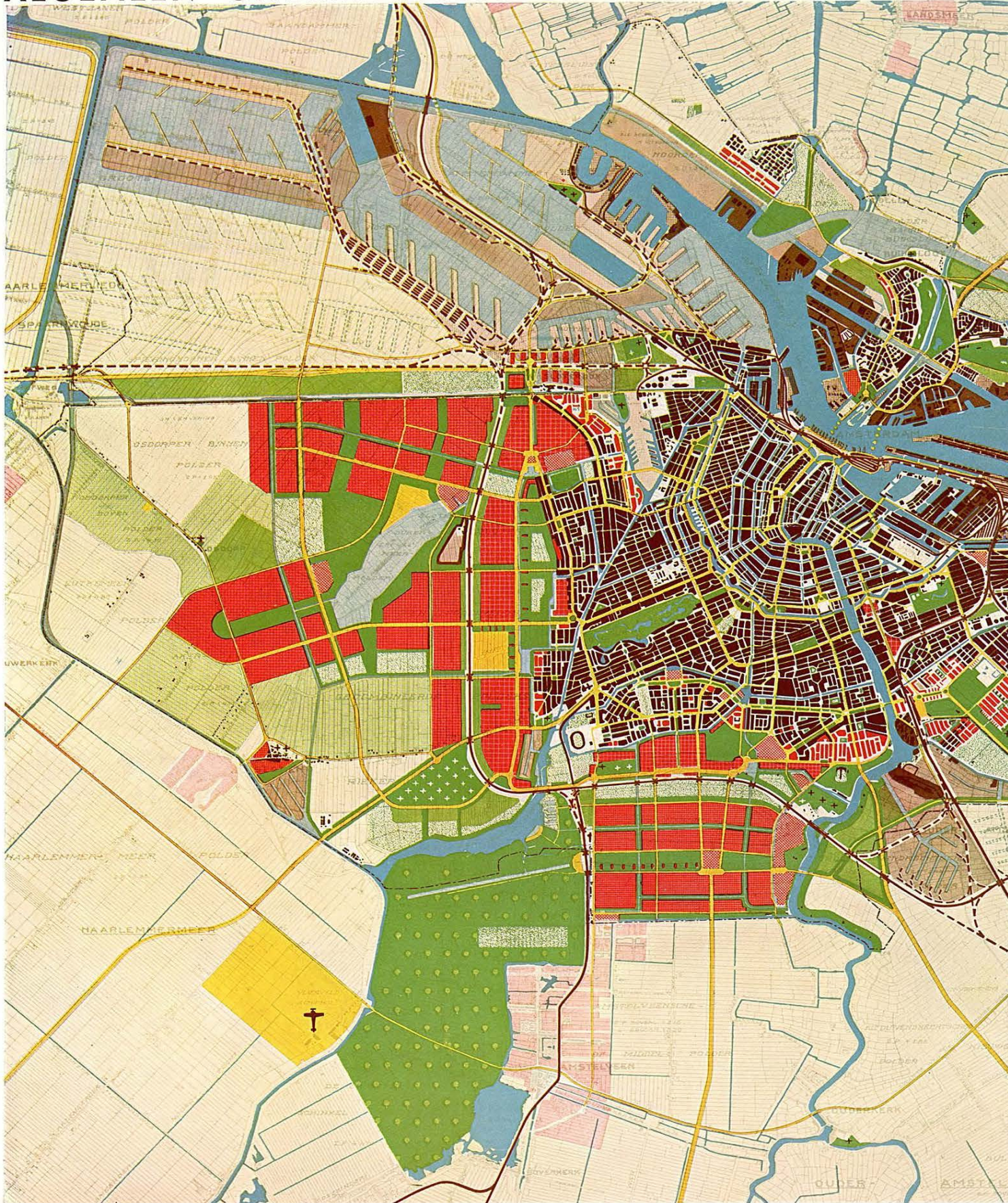
figure 3.30. Vlielandstraat in Tuindorp Buiksloot in Amsterdam Noord (Mulder / Stadsarchief Amsterdam, 1933)

figure 3.31. On the next page, the Algemeen Uitbreidingsplan van Amsterdam (AUP) with its typical lobe structure (van Eesteren / Stadsarchief Amsterdam ,1935).

planning practices between visitors from the Netherlands, Germany, the United Kingdom, Belgium, France, and the United States.

These ideas about regional planning, together with the new laws and the developing modernist, rational approach in urbanism were the starting point for an extensive municipal plan for the extension of Amsterdam (see figure 3.31). This plan had a clear functionalistic approach and is known as the Algemeen Uitbreidingsplan or AUP in short (de Klerk & Kreukels, 2015). The development of this plan was led by Cornelis van Eesteren, who at the time was the head of the urban development department of the public works of the municipality of Amsterdam (de afdeling Stadsontwikkeling in Dutch). Van Eesteren was also the president of the CIAM congresses between 1930 and 1947, meaning he was well informed on modernist architecture and urbanism. The AUP was ratified in 1939 and was based on thorough empirical research, calculations and cartographic analysis (Schalker, 2018). Underlying this plan was a general tendency towards more governmental initiative and decision power in Dutch spatial planning (Schalker, 2018).

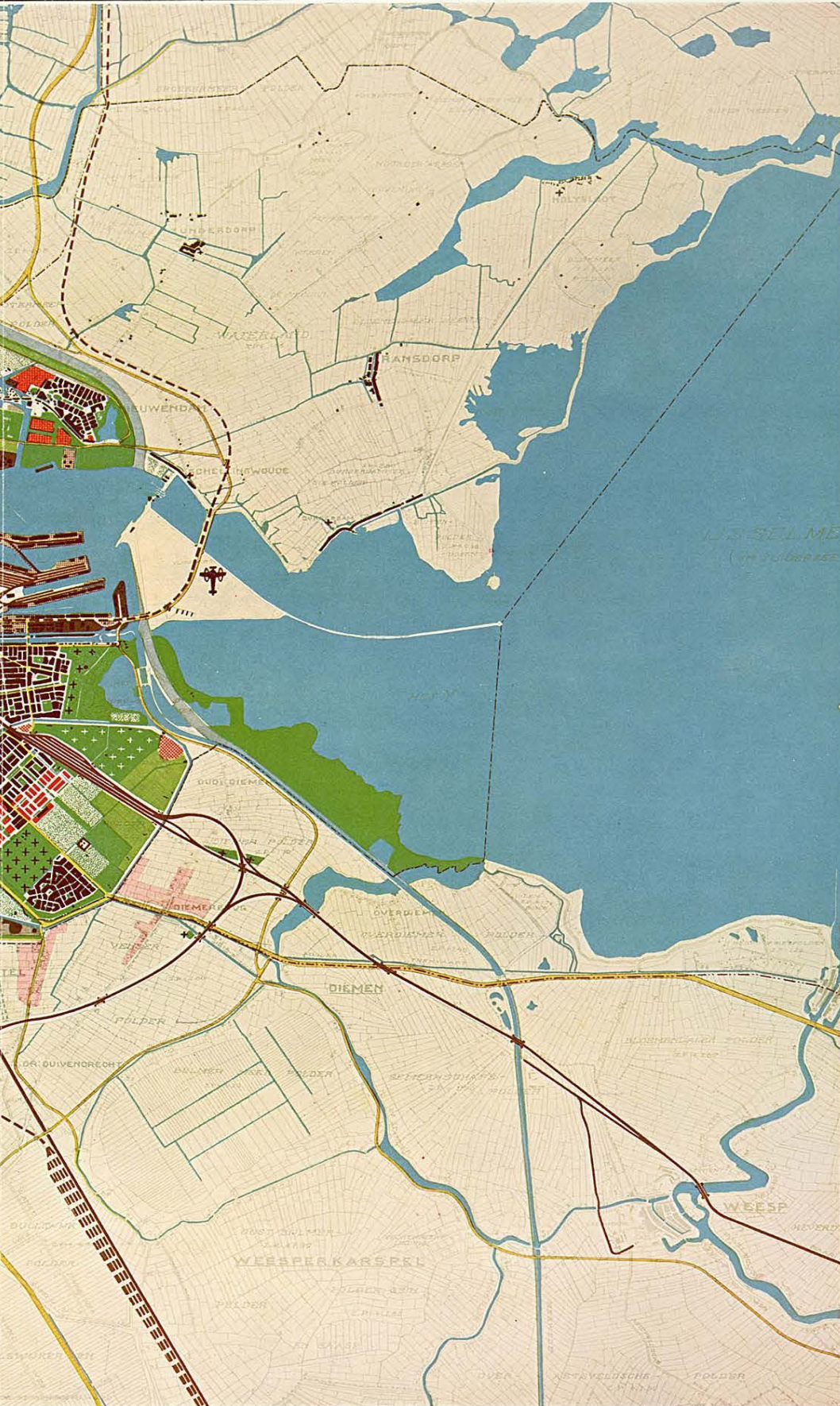
ALGEMEEN UITBREIDINGSPLAN VAN AMSTERDAM.



5 KM PLAN IN HOOFDZAAK.

ZOOLANG

LINKER KOLOM : BESTAAND
RECHTER KOLOM : BESTEMMING.



- BEBOUWING.**
- WOONWIJKEN, GEMIDDELD 110 WONINGEN PER H.A.
 - WOONWIJKEN, GEMIDDELD 85 WONINGEN PER H.A.
 - WOONWIJKEN, GEMIDDELD 70 WONINGEN PER H.A.
 - WOONWIJKEN, GEMIDDELD 55 WONINGEN PER H.A.
 - GEMENGDE WIJK.
 - BEBOUWING MET BIJZONDERE BESTEMMING.
 - PLANNEN OMLIGGENDE GEMEENTEN.
- WATER.**
- WATER.
 - HAVEN-EN OPSLAGTERREINEN
 - INDUSTRIETERREINEN.
 - RIOOLWATERZUIVERINGS-
INRICHTINGEN.
 - PARKEN, PLANTSOENEN, ENZ.
 - BOSCH.
 - BEGRAAFPLAATSEN.
 - SPORTTEREINEN.
 - VOLKSTUINEN EN
SCHOOLWERKTUINEN.
 - TERREINEN MET BIJZONDERE
BESTEMMING.
 - TUINBOUW EN VOOR DE UIT-
OEFENING DAARVAN VER-
EISCHTE GEBOUWEN.
 - VEENDERIJ.
 - LANDBOUW EN VEETEELT EN
VOOR DE UITOEFENING DAAR-
VAN VEREISCHTE GEBOUWEN.
 - IDEM, DOCH BESTEMD VOOR
TOEKOMSTIGE UITBREIDING
VAN HAVENS EN INDUSTRIE-
TERREINEN.
 - HOOFDVERKEERSWEGEN.
 - SPOORWEGEN EN SPOOR-
WEG-INRICHTINGEN.
 - INTERCOMMUNALE
TRAMWEGEN.
 - BRUGGEN, VIADUCTEN.
 - VERKEERSTUNNEL.
 - SPOORWEGTUNNEL.
 - PONTEN.
 - SLUIZEN.
 - LUCHTHAVEN LAND-
VLIEGTUIGEN (SCHIPHOL).
 - LUCHTHAVEN WATER-
VLIEGTUIGEN (SCHELLING-
WOUDE).
 - GEMEENTEGRENS, TEVENS
GRENS VAN HET UITBREI-
DINGSPLAN.

ZOOLANG EN VOOR ZOOVER VOOR DE MET NEVENSTAANDE, KEUREN AANGEGUIDE GRONDEN, GEEN PLAN VAN UITBREIDING IN ONDERBEELDEN IS VASTGESTELD, GELDT DAARVOOR TEVENS DE BESTEMMING: LANDBOUW EN VEETEELT EN VOOR DE UITOEFENING IN DAARVAN VEREISCHTE GEBOUWEN.

The plan was meant to guide the urban development of Amsterdam for the coming decades. Its intention was to offer a large measure of self-sufficiency to the neighborhoods with local amenities such as shops, schools, parks and churches (van Eesteren Museum, n.d.). An important concept of the plan is its lobe-structure. This created 'green wedges' that to this day allow the surrounding landscape to penetrate into the city. Moreover, the plan can be seen as the first 'structural plan' of Amsterdam, meaning it did not yet establish a definitive parceling and needs further refinement on a neighborhood level regarding the concrete implementation of housing, roads and specific buildings (van Eesteren Museum, n.d.).

The second world war meant a pause in the urban development of the Netherlands combined with a large destruction of urban areas, most notably Rotterdam. However the German occupation of the Netherlands also meant the forced introduction of a centralistic planning system that demanded provincial spatial visions and municipal plans that were in line with these provincial ideas (van Schijndel, 2016). Furthermore, this central planning system included the ambition to construct a national spatial plan.

1945 – 1970 continuation of rational approach and planning in laws and legislation

Since it had also been the plan before the war to introduce a central planning approach, the public initiative in urban planning continued after the war (van Schijndel, 2016). A number of large scale urban projects were undertaken from reconstruction and city expansion to the development of national policy (de Klerk & Kreukels, 2015). In the years directly after the war reconstruction plans took hold such as the functionalist plan of Rotterdam known as 'het Basisplan voor de Wederopbouw van Rotterdam'. Furthermore, Large parts of the AUP were realized between 1950 and 1962 in Amsterdam. Not just the urban areas underwent a rapid transformation and expansion, for the sake of efficiency the entire countryside was remodeled in a huge operation known as the 'Ruilverkaveling' (the re-parceling operation of the farmland).

These spatial interventions together with the discovery of the natural gas field in Groningen, the drainage of the Flevopolder and the introduction of the National Assistance Act (Nationale Bijstandswet) help spread the conviction that the future could be engineered, what is known in Dutch as 'De Maakbare Samenleving' (Pflug, 2015). This led to a governmental approach of direct



figure 3.32. With the development of the Westelijke Tuinsteden new types of houses were introduced such as this one in Geuzenveld (de Gemeentelijke Dienst Volkshuisvesting / Stadsarchief Amsterdam, 1958).

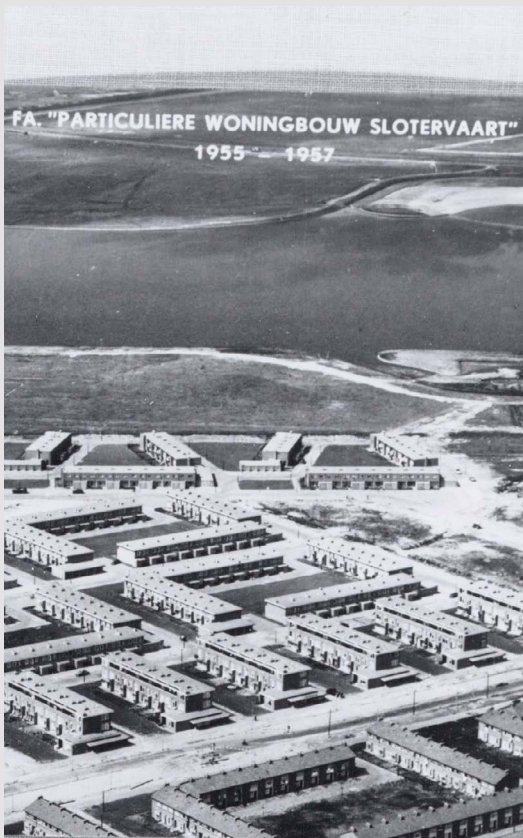


figure 3.33. In new housing plans also provided different, spacious urban layouts with open blocks of houses such as here in Sloterveer (Stadsontwikkeling Dienst Publieke Werken; Afdeling stadsontwikkeling / Stadsarchief Amsterdam, 1957).

interventions in the urban fabric (Koomen & Bruinsma, 2018).

New steps in urban planning theory and policy were taken as a result of ongoing population growth, increased welfare and urbanization. Based on the Neighborhood Unit of Clarence Perry the concept of the 'wijkgedachte' took shape in planning theory. This meant the provision of community gardens, neighborhood meetings spaces and churches were important measures to improve social cohesion (Mens, 2016). This idea was implemented in a functionalist way according to spatial principles of the 'gelede stad' with the functions clustered together in the right proportion according to the amount of residents (Rijksdienst voor de Monumentenzorg, 2004). Examples can be found in certain neighborhoods of the AUP or new towns such as Hoogvliet. Besides that, the concept of 'stadsgewest' (urban region) was introduced as the new foundation for regional and national plans.

Regarding policy a national spatial plan as once foreseen was not realized but in 1960 a national 'nota' (national policy document) on spatial planning was introduced, known as the 'Nota Inzakelijke de Ruimtelijke Ordening'. At this time of fast economic growth, the document dealt with the fear that the cities of the Randstad would grow at the expense of other areas in the Netherlands. The goal was to spread the welfare, prevent the forming of metropolises and conserve open green areas such as the well-known 'Groene Hart' by means such as subsidies for locating companies outside the randstad (van Schijndel, 2016). This period also marked the beginning of planning as an academic field with chairs in Amsterdam in 1962 and Nijmegen in 1963 (de Klerk & Kreukels, 2015). This was followed in 1965 by the introduction of the 'Wet op Ruimtelijke ordening' (the Spatial Planning Act). This act made municipalities solely responsible for and legally able to set up binding zoning plans, it required national planning policy documents to be ratified by the parliament and introduced a regional plan (streekplan) that would be the link between municipal plans and the national policy (van Schijndel, 2016). Moreover it made participation procedures mandatory and it decentralized decision making processes (van Schijndel, 2016). The second policy document on spatial planning of 1966 coined the term 'gebundelde deconcentratie' (bundled deconcentration) which referred to the strategy of concentrating housing construction in a number of smaller towns at a relatively short distance from larger cities. These towns received the status of 'groei kern' (growth or overspill town), examples are Purmerend, Spijkenise, Zoetermeer



figure 3.34. Map of the Second National Policy Document on Spatial Planning showing the concept of bundled deconcentration and overspill towns (van Schijndel, 2016).

and Almere (see figure 3.34). Building on the first Nota this policy was pursued to avoid the formation of metropolises and spread the increased welfare. The other side of the coin was that this policy should prevent unwanted urban sprawl (Baalman, 2018).

One of the most notorious projects in the Netherlands of the sixties was the Bijlmer (see figure 3.35). It was the most extensive example of functionalistic urbanism with high-rise housing in a green park, separate elevated roads and parking, and a repetitive urban form on a very large scale (Koomen & Bruinsma, 2018). Built between 1966 and 1968 The plan was deemed a failure only years later when new renters could not be found, a more underprivileged population of mostly immigrants moved in and high rates of violent crime and drug abuse plagued the development (Koomen & Bruinsma, 2018). Together with the growing demand for suburban houses with a garden (Koomen & Bruinsma, 2018) it signaled the end of the optimistic and rational thinking of engineering the perfect society



figure 3.35. Luchtfoto Bijlmer Oost 1971
(Dienst Ruimtelijke Ordening & Stadsarchief
Amsterdam, 1973)

1970 – 1985 protest, democratization start of the modern environmental movement

The seventies and eighties were a different time altogether. Two oil crises and related economic crises, drastically lower birthrates and a growing awareness of environmental limits had a big societal impact (de Klerk & Kreukels, 2015). At the same time the amount of jobs in industrial sectors decreased as did the need for new houses (Mensink, 2015). Already in the sixties the destruction of old city centers and construction of anonymous high-rise neighborhoods had led to criticism on the rational modernist approach (Koomen & Bruinsma, 2018; van Teeseling, 2005). Internationally Jane Jacobs represented the critical sound, she argued that good cities develop organically and she proposed an urbanism that mixed functions, guarantees safety through social control ('eyes on the street') and reused its heritage (Steyaert, 2011).

This was part of a broader socio-economic system critique and a protest movement in the sixties and seventies. It demanded emancipation, sexual freedom and more democracy and participation



figure 3.36. the seventies saw a period of protest around all sorts of topics, including the demolishing of the old city centre of Amsterdam (ANEFO / Stadsarchief Amsterdam, 1974)

figure 3.37. ‘Bloemkoolwijken’ or cauliflower shaped neighborhoods in Almere Haven (Google, n.d.-a)



(van den Biggelaar, 2015). At the same the Netherlands was at very industrious, the peak of the housing production was in the seventies (Vollaard, 2004). Many of these houses were built by housing associations, in total the amount of houses considered as social rent increased from 10% well above 40% between 1950 and 1990 (Hoekstra, 2017).

The reaction of urban planning was to return to cities with a human scale, it started a period of experimenting with new forms that facilitated contact and cooperation between inhabitants. Forms that abandoned the uniformity and massiveness of the sixties (van Zandbergen, 2005). A famous development of the times was the ‘woonerf’, literally interpreted it means a living yard, a pedestrian friendly, shared courtyard between houses. Besides that, there were the pedestrian friendly ‘bloemkoolwijken’ or literally ‘cauliflower neighborhoods’, known for their repeating cul-de-sac structures (see figure 3.37). Urban planning from this time was characterized by input from sociology and anthropology and a tendency towards mixing functions in urbanism and architecture symbolized by architecture such as ‘t Karregat by Frank van Klingeren (van Zandbergen, 2005). Furthermore a practice of extensive participation took shape which limited the role of urban designers and architects (Vollaard, 2004). There was also less focus on the automobile in favor of cycling lanes and public transport and protest against ‘cityvorming’ (development of city centers as economic centers at the expense of housing), most poignantly illustrated by the ‘krakersbeweging’ (squatters movement) and the protests surrounding the redevelopment of the Nieuwmarkt area (Vollaard, 2004). People rediscovered the value of old city centers with their functional mix and unique layout with narrow streets.

Policy and theory followed these developments. The unexpected economic and demographic changes in society pushed planning to be more about flexibility. The demand for more democracy required a focus on the process of decision making (de Klerk & Kreukels, 2015). In academic circles a theory of planning as a complex systems developed, which had limited use in local practice (de Klerk & Kreukels, 2015; van Schijndel, 2016). In terms of policy the Third National Policy Document on Spatial Planning (Derde Nota over de Ruimtelijke Ordening) is the most important proposal of this period in time. In total this was a very extensive document, it was published in various parts over a period of more than 10 years. Van Schijndel characterizes it as a prime example of the spirit of the times: ‘. a plan



figure 3.38. the seventies was a period of a growing environmental awareness in part due to the oil crisis at the time, that also meant the introduction of car free Sundays (Mieremet & ANEFO, 1973)

in which the ideal process design and comprehensiveness in the end lead to an unwieldy product..' (2016, p. 40). On the one hand the third note followed and fortified the previous nota's with policy of spreading population, jobs and services throughout the country. It set up a solid financial framework for the 'groeikernen' (Koomen & Bruinsma, 2018). On the other hand, the nota added a focus on public transport and reducing car use and especially the last part of the third nota (Structuurschets voor Stedelijke Gebieden) put the focus back on the old city centers. The goal shifted towards developing compact cities (van Schijndel, 2016) which would be fortified in the fourth nota.

1970 also saw the emergence of environmental awareness due to oil crisis and cases of large-scale environmental pollution (Dubbeling et al., 2012). This was promoted by publications such as the 'limits to growth report' by the club of Rome (Meadows et al., 1972) and *Silent Spring* by Rachel Carson. In the seventies and eighties, environmental care also became an explicit part of Dutch planning policy. In 1971 environmental protection tasks became a part of the health ministry (VoMil) and in 1982 part of the spatial planning ministry (VROM) (Baalman, 2018). This shift signified an ambition to work to prevent environmental damage through planning (Baalman, 2018).

1985 - 2015 liberalization and development planning

In the seventies under prime minister Den Uyl (1973-1977), the Netherlands had a very progressive and leftist government. In fact, the fall of the cabinet gives a good example of the progressive (planning) policies they tried to advance. To keep housing and collective amenities affordable the proposal was to give municipalities a pre-emptive right to buy land, and to allow them to buy the land for the current usage value instead of future development value (known as 'de grondpolitiek'). A cabinet crisis ensued, and politics took a big turn in the eighties with van Agt (1977-1982) and more drastically with Lubbers (1982 - 1994). One of the reasons for the crisis was the disagreement of the Cristian democratic parties who just decided to merge (to become the later CDA), their constituency was formed for a large part by Farmers who thought they could profit from the sale of land (Vollaard, 2005). The combination of CDA and VVD gave the Netherlands a rightwing government and politics underwent a transformation towards liberalization, a growing belief in capabilities



figure 3.39. 'Vinex' neighborhoods in Leiderdorp bordering the rural landscape (Norbruis, 2015)

of market actors, higher profits and investments leading to higher employment rates (de Klerk & Kreukels, 2015; Griensven, 2009). With the economic stagnation and inflation (a combination known as stagflation) and the high unemployment of the time, there was a demand for governmental action. As Oudenampsen describes, two streams of thought arose; the political economic solution was either a (Keynesian) fiscal stimulation or a more neoliberal cut back on government spending (Oudenampsen, 2018). Or as Pieter Leroy puts it from an more sociological perspective *'one group in society wanted more participation and a strong input from the environmental movement while the other group wanted more freedom (of choice),*

autonomy and less interference of the government' (Leroy, 2019).

The latter took the lead under Lubbers. This can be seen as part of a global trend towards a neoliberal approach in which internationally Thatcher (1979 - 1990) and Reagan (1981-1989) were important figures. The spirit of the times was well captured in the famous article of Francis Fukuyama 'the End of History?' in 1989. In it he makes the point that with the collapse of the soviet union the last ideological alternative to liberalism had been eliminated (Fukuyama, 1989). This is a quick and surprising twist of events after the seventies spirit guided by the environmental movement and counterculture. Thomas Wensing underlines this: *'They too could not envisage that the call for more individual freedom, participation and equal rights would lead to the reactionary counter-revolution of neo-liberalism and the almost complete dismantling of the welfare state'* (Wensing, 2014, para. 7)

The neoliberalist turn had various effects on the field of planning. Initially in European countries in the 1980s neoliberal policies led to a 'disbelief in planning' and seeing planning as 'restricting economic growth and competitiveness' according to Olesen (2012, p. 4). Planning tasks were increasingly left to private actors or collaborations between public and private actors. Besides, planning became more project oriented with a focus on large infrastructure and urban development (Olesen, 2012). Later, as planning tried to regain some of its former influence, Olesen describes how under the banner of strategic spatial planning the field attempted to transform itself to the political neoliberal climate by employing strategic planning to position cities and city regions in competitive European or global markets (2012).

These tendencies can be recognized in the next big step in terms of national planning policy in the Netherlands with the introduction of 'de Vierde Nota over de Ruimtelijke Ordening' of 1988 (the Fourth National Planning Document on Spatial Planning). Besides, the government had learned from previous times that society could not be engineered to the extent they had previously thought (Koomen & Bruinsma, 2018; van Schijndel, 2016).

Therefore this note was much more specific in what the government would do and would not do (van Schijndel, 2016).

As reaction to the launching of the European Single Market in 1992 and ongoing globalization the national government explicitly took responsibility for the Dutch economic competitiveness. Which manifested itself in the ambition to offer a good business climate. The concept of the Netherlands as a distribution economy was introduced with certain 'mainports'. Examples are the harbor of Rotterdam and the airport Schiphol, economic motors of the Netherlands that should be strengthened according to the memo (Koomen & Bruinsma, 2018). Focus shifted from regional redistribution to concentration and competition (Ministerie van Infrastructuur en Milieu, 2013) another point of responsibility was in guaranteeing a high quality living environment, preservation of natural and cultural landscapes. This is related to a growing awareness of environmental issues and sustainability. In the eighties a realization of human induced global warming started to take hold. The same period saw the publication of the famous Brundtland report in 1987 and in 1992 the Rio Earth Summit. At the same time urbanism, urban planning and design adopted the concept of sustainable development as a major goal (Dubbeling et al., 2012; Schott, 2017).

However, the cabinet fell before the note could be ratified. What followed was an extended edition of the policy document known as 'de Vierde Nota voor de Ruimtelijke Ordening Extra' (VINEX) of 1991 that changed the plans slightly (van Schijndel, 2016). In the introduction of this note the tension between economic growth and ecology is mentioned. This was a reason to think how spatial planning could relieve environmental pressure. Therefore the note puts emphasis on functional mix and compact city form to reduce transport needs (Ministerie van Infrastructuur en Milieu, 2013). One of the most well-known consequences of the VINEX policy are the urban expansion projects known as VINEX-wijken

(neighborhoods), such as can be found next to Utrecht, in the Neighborhood Leidsche Rijn, and The Hague, in the Neighborhood Ypenburg (see figure 3.39 on page 132).

Around the same time, the amount of social housing in new governmental plans reduced greatly and as the housing shortage was reduced, less land was designated for development in an absolute sense. These developments, combined with a naïve step of the national government to publish development directions in public maps, made sure that municipalities were progressively displaced from the land market by commercial property developers (Needham, 2016). Up to then municipalities had been the largest suppliers of building land. The new balance raised the prices of land considerably and consequently the prices of all types of housing, including social housing (Needham, 2016).

Other important policy steps in this period where the liberalization of the housing associations, the Nota Ruimte and an update for the Spatial Planning Act (WRO). In the so called 'grossing and balancing operation' (de bruteringsoperatie) of 1995 the housing associations got complete financial independence of the national government. After several scandals followed in the early 2000's as a result of irresponsible speculation they have come back under tighter governmental control again (Hoekstra, 2017). Furthermore, the government came up with a concept for a fifth national policy document on spatial planning, which included hard contours around urban areas where urban developments would be prohibited (Koomen & Bruinsma, 2018). However, this proposal was dismissed, in its stead came the Nota Ruimte. In this policy document of 2004 (National Spatial Strategy) the cabinet took further steps in decentralizing planning to lower levels of government. Furthermore, the accent shifts from setting spatial limits in a kind of 'permitting planning' to stimulating desired developments which is often described as 'development planning' (Koomen & Bruinsma, 2018). Finally, the review of the 1965 Spatial Planning Act (WRO) in 2008 broke the monopoly of municipalities to create zoning plans, henceforth the national government got this authority. Furthermore it obligated provinces and municipalities to come up with strategic structural plans for their future development (van Schijndel, 2016).

In terms of planning theory, a shift can be noted towards research on the relations between the different sectors. De Klerk and Kreukels mention several expressions that underline this such as '*collaborative planning, stakeholders, shareholders, agency,*



figure 3.40. climate change has become an important topic in planning, it is also very much alive in the City of Amsterdam, as can be seen from this picture of Extinction Rebellion protesters (Extinction Rebellion NL, 2019).

governance and framing' (2015, p. 14). While in the nineties, management and governance theories for public private partnerships took a central position, this changed to cultures, norms and values of stakeholders as well as their planning processes (de Klerk & Kreukels, 2015). Interestingly de Klerk and Kreukels end their piece on the history of planning theory with the following observation: *'the unique character of planning seems to focus more and more on connecting related disciplines around physical-spatial questions rather than formulating its own theories about the (mis)functioning of spatial planning. As a consequence, a traditional hallmark of planning, its future-oriented and prescriptive side, seems to diminish.'* (de Klerk & Kreukels, 2015, p. 15)

2015 – current day: growth, limits and new planning instruments.

Today proactive planning approaches such as development planning are used a lot especially for areas such as the big urban centers that experience rapid change (Needham, 2016). This is informed by current developments such demographic trends, global and local environmental issues, new policy proposals and ambitions. Describing all recent developments and trends is to elaborate for this thesis but several key trends are discussed below.

In Dutch cities, as in many cities worldwide, there is an ongoing urbanization and continuation of the reduction of household size. According to the CBS the four largest cities of the Netherlands will have 15% to 20% more inhabitants in 2035 compared to 2019 (CBS, 2019b). A city like Amsterdam sees many international labor migrants coming in and families leaving, leading to a negative net domestic migration (CBS, 2017). The big cities seem eager to embrace this development. In its latest structural vision the municipality of Amsterdam stated that it wants to contribute to the Dutch economy by facilitating its growth both for companies as for the people who work there (Gemeente Amsterdam, 2011).

Besides that, medium sized cities are also expected to grow quickly in terms of population size. Important factors that are named for this trend are young people moving to

the cities for the social and cultural environment and jobs, higher fertility in urban areas due to a younger population and demographic ageing in the rural zones (CBS, 2019b). Yet it is expected that although cities will remain faster in terms of growth, the growth rates in general will decline over the coming decades (NIDI, 2018). On the other hand, the CBS also predicts the Netherlands will have half a million more single person households. This is a trend that goes back to the period right after the war between 1947 and 2017 the percentage of single person households has grown from 5 to 22 percent. Reasons are increased welfare, economic independence of women and expansion of the welfare state, besides cultural changes in relationships (CBS, 2018).

More households and more people put pressure on urban areas which currently translates to high prices for housing and a big demand for new houses. The Dutch minister of the Interior, Kasja Ollongren, has the ambition to build 75.000 houses per year until 2025 and reach a total of a million extra houses in 2030 (BNR, 2018). On the other hand many (non-urban) municipalities in the Netherlands have to do with shrinkage and this is expected to increase, again main reasons are young people leaving for urban areas and demographic ageing (NIDI, 2018). In 2018 about 20% of the Dutch municipalities had a shrinking population (CBS, 2019a).

Another very important development is the global policy on countering climate change. With the signing of the Paris Climate Agreement the Dutch government officially agreed to limit global warming to a maximum of two degrees and strive towards 1,5 degrees (Ministerie van Economische Zaken en Klimaat, 2019). Measures to reach this goal have only very recently been put forth in the Dutch Climate Agreement. Of which the main goal is to reduce greenhouse gas emissions with 49% by 2030 as compared to 1990 levels (Ministerie van Economische Zaken en Klimaat, 2019). The climate agreement has all sorts of consequences for planning with programs to produce more renewable energy,



figure 3.41. the current Nitrogen Crisis is blocking infrastructure and building permits and illustrates the competing claims for the limited 'space' for development in the dense country that is The Netherlands (Torn, 2019).

to disconnect buildings from natural gas or to give tax incentives to increase the sustainability of urban areas (Ministerie van Economische Zaken en Klimaat, 2019).

Both the creation of renewable energy landscapes for climate mitigation and measures for climate adaptation add to the list of things which already compete for scarce space in the Netherlands such as housing, recreation, agriculture, transport, nature, water and flood protection. A good illustration of the tension between different land uses is the case of the current Nitrogen Crisis in the Netherlands. Excess nitrogen is detrimental to biodiversity, currently emission of nitrogen in the Netherlands is above levels allowed in EU legislation (van Exter, 2019). A recent court ruling prevents new permits and blocks existing permits for construction and infrastructure projects (Schaart, 2019) blocking as many as 18000 projects (van Exter, 2019). Most nitrogen comes from agriculture and transport; the current crisis shows how different sectors compete for the limited 'space' available for development. Making space for climate adaptation and the energy transition is one of the goals of the Nationale Omgevingsvisie (National Environmental vision, or NOVI in short). The NOVI is a new national policy document on spatial planning that is currently available in concept form (Ministerie van Binnenlandse Zaken en Koninkrijksrelaties, n.d.). The NOVI has four main goals:

- Space for climate adaptation and energy transition
- Sustainable economic growth
- Strong and healthy cities and regions
- Future proof development of the countryside

At the same time the national government is working on an update of the spatial planning laws, integrating dozens of current spatial planning bills into one new bill under the name Omgevingswet (environmental bill). An important goal of the bill is again to decentralize and give citizens more control over their environment.

D. historic precedents for degrowth proposals

As described in the methodology, the goal of this historic analysis was twofold, getting a better understanding of urban planning and its development towards sustainable urban planning was the first goal. Besides that, the analysis was a way of looking for precedents in planning history that either challenge the growth paradigm or have parallels with present-day degrowth proposals for urban planning. Below some findings regarding the latter goal are presented.



figure 3.42. Ecovillage in Germany, today there are many of these villages again, also in the Netherlands (Würfel, 2012)

eco-communes, back to the landers and anti-urban sentiment

History showed that the early socialist like Fourier and Owen planned and built socialist communities in the countryside like New Harmony in the beginning of the 19th century. For different reasons most of these would not last for very long (Kostof, 1991). Halfway through the same century well known writers such as Emerson and Thoreau in the United States described romantic longings for life in the countryside, with an anti-urban sentiment that depicted cities as artificial and full of turmoil and cynicism (National Research Council, 1971). Several decades later Frederik van Eeden, inspired by Thoreau, started a commune in the Netherlands that would not last a decade.

Throughout the years these ideas and concepts have reappeared. A movement of so called 'Back to the Landers' appeared in the 1930s as a result of the crisis and again on a larger scale in the seventies, driven by environmentalism. Today it is again regaining popularity in the countryside and as a topic of debate in degrowth literature (D'Alisa et al., 2015). Furthermore current degrowth proposals often describe eco-villages or urban-villages as alternatives to current dense cities (Xue, 2014), try to find solutions in sub-urbs (Alexander & Gleeson, 2019) or talk about de-urbanization (A. Nelson & Schneider, 2018b). There are parallels here with the anti-urban sentiment of earlier times.

Cities have proven more resilient than some would have expected or liked to see. This is the stubborn reality and it seems degrowth must deal with cities some way.

garden cities and Howard's social agenda

True garden cities are still tomorrow's dream, based on the historical perspective. The strong social agenda of Howard was the first to go in the realization of his ideas. Yet the original proposal has many parallels with current day degrowth proposals. Ebenezer Howard was a proponent of communal land ownership, self-governing communities, companies in the form of cooperatives and a clear limit to the size of cities (Hall, 2014). The first part has direct relation to degrowth proposals regarding community land trusts (Wächter, 2013) and 'commonizing' land (Savini, 2019). Self-governing relates to calls for more regional autonomy (Savini, 2019) and increased participation (Alexander & Gleeson, 2019; Lehtinen, 2018). Degrowth proponents talk often about all sorts of cooperatives like those for sustainable energy, food or local products (Alexander & Gleeson, 2019; Kallis, 2015). And though Howard saw the limit to a city's size as an excuse to build another one, it reminds of new calls for a limit to built-up land (Odum & Odum, 2001; Wächter, 2013) and deurbanization (A. Nelson & Schneider, 2018b) as these ideas share similar goals as Howard's limits; to allow for a good balance of nature and city, food production around the new town and guarantee proximity to work, housing, education, shops and amenities and the open landscape (Rottier, 2004).

An important reason for the failing of his socialist ideals according to Tizot was that his plans were easily taken over by the same private investors that were required for the plan. Howard's dream of a collaboration with a 'benevolent' landlord and 'honorable and honest trustees' seemed to be naïve and led to a corporate governance instead of local autonomy (Tizot, 2018). Maybe the more radical thinkers that inspired Howard were right after all and a different type of possession needs to come before such a plan has chance of success. March mentions several 'practical' concessions due to the dominant liberal democracy that had to be made to certain of Howard's ideals such as equity, rights, inclusion and local autonomy (2004).

Geddes, Mumford and the regionalists: ecological economist avant la lettre

Patrick Geddes and most notably his student Lewis Mumford and the Regional Planning Agency of America had an outlook that has parallels with the idea of strong sustainability. Patrick Geddes' training in biology, his famous valley section drawing

and his ideas about humans being shaped by their (urban) environments all show he perceived of an interdependency between the natural and the man-made world. With these ideas as a basis, as the historical analysis shows, Mumford and the RPAA go several steps further, ending up with a view that has a strong overlap with the re-localisation of the economy that is a point of focus for current degrowth thinking. Stuart Chase, the economist of the RPAA proposed a planned economy that would make sense in a regional way (Chase, 1925; Maddox, 1966). Lewis Mumford himself is known for his criticism of technology, the limitless pursuit of linear progression and the growth paradigm (Maddox, 1966). Despite several opportunities, no large-scale implementation of their ideas took place during the existence of the RPAA, though the city of Portland has rediscovered Mumford's ideas for the city and is attempting to implement his ideas (Bianco, 2001). This analysis was too short for an in-depth exploration of what can be learned from the ideas, plans and approach of Geddes, Mumford and the RPAA (members), nevertheless this might prove informative for degrowth in urban planning.

lessons from the Dutch history of urban planning

There are several policies or policy proposals that have a link to degrowth in the described history of Dutch urban planning. The first one is the policy of economic redistribution that is a clear difference from the current focus on agglomerations and 'mainports' to boost economic growth. This manifested itself for example in subsidies for locating companies outside the Randstad (van Schijndel, 2016). Another policy which never succeeded beyond the proposal level was the issue of de 'grondpolitiek'. This refers to the idea that to keep housing and collective amenities affordable the proposal was to give municipalities a pre-emptive right to buy land, and to allow them to buy the land for the current usage value instead of future development value. This would allow for more affordable public housing and less speculation on the land market. However mainly due to

the opposition of the Christian democratic party that strongly aligned with the interests of the farmers this did not follow through. Although Vollaard mentions the big winners of this deal were commercial developers and not the farmers (Vollaard, 2005). If such policy is again proposed perhaps it can be wise to consider farmers in this story to find other ways of making it politically feasible. When years later the government made certain policy choices to limit the land for new developments and at the same time published the areas that would be developed for the Vinex, developers made huge profits by buying the land and reselling it, driving up the prices for housing. This echoes the naïve attitude of Ebenezer Howard to commercial investors and developers and is a reminder that land is not a typical market good that is fairly distributed by market mechanisms.

The historic perspective also showed that the friction between economic growth and nature has for decades been a topic in Dutch urban planning, as shown by the different policies of concentration, growth cores and compact cities. However, the underlying idea has always been to facilitate or enable the growth, while minimizing negative impacts. This approach has helped to tackle local environmental issues of pollution or cases of natural preservation. But the recent nitrogen crisis and the issue of climate change due to greenhouse gases have shown that this has not prevented issues of national or international scales.

“Unless we realize that the present market society, structured around the brutally competitive imperative of “grow or die,” is a thoroughly impersonal, self-operating mechanism, we will falsely tend to blame technology as such or population growth as such for environmental problems. We will ignore their root causes, such as trade for profit, industrial expansion, and the identification of “progress” with corporate self-interest. In short, we will tend to focus on the symptoms of a grim social pathology rather than on the pathology itself, and our efforts will be directed toward limited goals whose attainment is more cosmetic than curative.”

(Murray Bookchin in 'Social Ecology and Communalism, 2006)

3.

INTERVIEW ANALYSIS

The document analysis shed light on the existing idea of degrowth for urban planning and the historical analyses has elucidated the development and current status of (sustainable) urban planning. What is still missing is more focus on the city of Amsterdam and the opinion and perspective of local actors from the field of planning and degrowth. To find out what obstacles and opportunities these actors see for a degrowth approach in sustainable urban planning several semi-structured interviews have taken place. In this section the results of these interviews are presented. The answers of the respondents have been taken together and are here ordered by theme. This section first starts with a brief introduction of the respondents to allow the reader to understand their answers in relation to their background and context. As stated in the methodology section in the background chapter four actors were identified from the field of sustainable urban planning and four from the degrowth field. Of both fields, actors were identified from the private sphere, the academic field, public bodies and finally civil society to get a broad multi-dimensional perspective.

After this introduction this section dives right into the different interview topics in the following order:

- A. Overview of the respondents
- B. Sustainable urban planning
- C. General concepts of urban planning
- D. Urban characteristics of Amsterdam
- E. Economic growth
- F. Definitions and the history of degrowth
- G. Opinions on degrowth
- H. Degrowth practices in or around Amsterdam
- I. Re-localization of the economy
- J. Concept of limits
- K. Other proposals for a degrowth in urban planning
- L. Downsides of- and risks for a degrowth approach
- M. Additional topics

These topics relate to the interview question list, an example of which can be found in the appendices.

A. overview of respondents

degrowth group

1. **Academic field** → Julien-François Gerber: assistant professor of environment and development at the Erasmus International Institute of Social sciences, The ISS in the The Hague. Gerber has an interest in degrowth about which he also writes and gives a course at the ISS. His main focus is on degrowth in the global south and rural areas. Additionally, he is part of a Dutch degrowth network by the name of Ontgroei and part of the organizing committee for the 2022 degrowth conference in the Hague Netherlands. Interview date: 23-09-2019.
2. **Public sphere** → Corjan Brink: scientific researcher of environmental economics at the Planbureau voor de Leefomgeving (PBL), the Dutch environmental planning agency. He has a focus on climate and energy policy and related instruments and policy proposals in general. Interview date: 14-10-2019.

3. **Civil society** → Carla Huisman: president of Housing Association SOWETO, PhD researcher at the Rijksuniversiteit Groningen (RUG) with the topic of 'the precarization of the Dutch housing market'. Editor of *Rooilijn*, a policy and science journal on spatial planning. Postdoctoral researcher on collaborative housing at the TU Delft. Interview date: 25-09-2019.
4. **Private sphere** → Michel Kegels: owner of- and urban Farmer at Groenhartig, a small-scale urban farm in Amsterdam West that mostly supplies restaurants in Amsterdam with food and also produces for a local food cooperative. Interview date: 17-09-2019.
5. **Academic field** (extra interview) → Ana Poças: Ribeiro PhD researcher on the topic of sustainable consumption at Utrecht Universiteit. Poças Ribeiro has an interest in degrowth, visited a conference on the topic and was also part of the aforementioned ontgroeï network for a while before moving to Portugal. Interview date: 02-09-2019.

urban planning group

1. **Academic field** → Verena Balz: Assistant professor, Chair of Spatial Planning & Strategy, TU Delft. Additionally Balz works for her own private practice on assignments within the field of spatial planning and design. Interview date: 20-09-2019.
2. **Public sphere** → Maaike Zwart: Program manager sustainable area development at the Municipality of Amsterdam. Interview date: 11-10-2019.
3. **Civil society** → Anonymous: this respondent is director at De Gezonde Stad, a local nonprofit aimed at making the urban area more sustainable. Interview date: 21-10-2019.
4. **Private sphere** → Rob van Leeuwen: former urban and landscape designer in private practice and at the municipality of Amsterdam. Current member of advisory board on the Technische Advies Commissie Hoofdgroenstructuur Amsterdam. Interview date: 18-10-2019.

B. sustainable urban planning

Some of the main questions of the interviews addressed how sustainable urban planning has shaped Amsterdam (Noord) and how successful sustainable urban planning is in addressing environmental and social issues. This gave an insight to how the respondents view sustainable urban planning, what topics the respondents were most occupied or concerned with regarding sustainable urban planning and to what extent sustainable urban planning is effective in finding solutions to relevant challenges.

B.1. definition of sustainable urban planning and the issues it addresses

Respondent Ana Poças Ribeiro described sustainable planning as '*a holistic approach and vision*' that '*looks for integrative solutions*'. (A. Poças Ribeiro personal communication, September 2, 2019). Furthermore, Poças Ribeiro states that urban planning can have a strong impact on sustainable consumption and thus is an important tool for making urban areas more sustainable (A. Poças Ribeiro personal communication, September 2, 2019). Based on the interviews sustainable urban planning is aimed at many different challenges and supports and proposes a wide range of solutions. Between the respondents the issues that SUP addresses ranged from climate change to biodiversity loss and housing accessibility to air pollution. A differentiation can be made between the various issues addressed by SUP. Several issues such as 'climate change' and 'biodiversity loss' were named more frequently and by more of the respondents as compared to for example 'over-tourism' and 'housing accessibility'.

B.2. proposed solutions from the field of sustainable urban planning

There seemed to be a certain measure of agreement on the issues that urban planning is aimed at. However, the proposed solutions for making the urban sphere more sustainable had a bigger variety. Furthermore, there



figure 3.43. Michel Kegels at work in his urban farm in the area known as 'Tuinen van West' in Amsterdam



was also disagreement between different respondents on the effectiveness of certain measures. Where one respondent's idea was to make the urban sphere more sustainable by means of increasing civil participation, another respondent pointed out the limited capacity and motivation people have for participating. In another example two respondents from the urban planning sphere saw densification as an important step for more sustainable Amsterdam, as Maaïke Zwart stated on the topic of densification that in a spatial sense it is a logical step and also regarding sustainability as you do not have to sacrifice existing green areas (M. Zwart, personal communication, October 11, 2019). A third respondent however disagreed. This person called the ongoing densification one of the big problems of the city as it eats away all the inner city green areas that are so vital to a sustainable city for many reasons such as cooling, water buffering, strengthening biodiversity but also for mental health and food production (anonymous respondent, personal communication, October 21, 2019). Other frequently mentioned solutions from the field of urban planning were 'impact monitoring' and 'assessment of environmental and social impact', 'stimulating reuse and recycling', 'facilitating the energy transition' and 'environmental tax reform'.

As the respondents come from different fields of society the way they engaged with these issues and solutions differed greatly. Several scientists theorized about the topics, other respondents were personally engaged in practically setting physical projects and yet others formed policy or helped steer small or large urban developments.

B.3. progress of Amsterdam as a sustainability city

Asked about progress of Amsterdam in terms of making the Amsterdam a more sustainable city a respondent who works at the municipality was not certain, she mentioned how the current impact measurement is quite fragmented which made it hard to form a clear picture. However, she mentioned with the new left oriented city council there is a strong '*green agenda*' (M. Zwart, personal communication, October 11, 2019). The anonymous respondent

mentioned an independent impact analysis that takes place each year to monitor the municipal progress on environmental sustainability goals. This analysis was quite negative of the progress made, stating the goals were ambitious enough, but the required yearly milestones were mostly not achieved (anonymous respondent, personal communication, October 21, 2019).

B.4. goals and effectiveness of sustainable urban planning

According to two of the respondents the field of (urban) planning has always been about sustainability as it has always been about long term thinking. Though they both acknowledged that mainly the importance of environmental sustainability has become much more important than it used to be over the last years decades (V. Balz, personal communication, September 20, 2019; R. van Leeuwen, personal communication, October 18, 2019). However, when asked about the effectiveness of urban sustainable planning in general, the most critical remarks came from the academic respondents that engage themselves with the topic of degrowth. Poças Ribeiro, who for her own thesis researched how sustainable 'sustainable urban planning' actually is, remarked that the Netherlands is well known when it comes to dealing with local social and environmental issues as demonstrated by high levels of biking, green spaces in the city and by avoiding local environmental pollution. However, she mentioned that issues with global effects such as greenhouse gas emissions or issues with global causes such as over-tourism and affordable housing as much less addressed by sustainable urban planning (A. Poças Ribeiro personal communication, September 2, 2019).

This was confirmed by a comment of respondent Corjan Brink, an environmental economist at the Planbureau voor de Leefomgeving (PBL). He mentions how a lot of local improvements regarding environmental pressure came at the cost of exporting the pressure to other countries such as China (C.

Brink, personal communication, October 14, 2019). He did nuance this comment by adding that there is also environmental pressure in the Netherlands due to other countries. Asked whether on an absolute level environmental challenges are getting worse Corjan Brink stated that he agrees with that outlook, for climate change 1,5 degrees of global warming is already being approached (C. Brink, personal communication, October 14, 2019). Julien-François Gerber, a researcher at the International Institute of Social Studies (ISS) in the Hague, stated:

'When looking at socio-metabolic studies that show the use of materials and energy, so-called sustainable urban planning in countries like the Netherlands and Switzerland is a joke; we are not sustainable at all!' (J.F. Gerber, personal communication, September 23, 2019).

Gerber thinks that *"People have often very naïve ideas about the social metabolism"* stating for example that a *completely circular economy is not possible* (J.F. Gerber, personal communication, September 23, 2019). He called the idea that the Netherlands is good at sustainable urban planning a dangerous illusion, as it can prevent people from taking the kind of serious action that is required to solve important issues (J.F. Gerber, personal communication, September 23, 2019).

C. general concepts of urban planning

A part of the subquestions of this thesis address how (sustainable) urban planning has shaped Amsterdam Noord and how successful (sustainable) urban planning is in addressing environmental and social issues. During the interviews, these questions revealed certain concepts central to urban planning that influence the development of the city which can be relevant to point out opportunities or obstacles for a degrowth approach in urban planning.

C.1. agglomeration thinking

During the interviews it became apparent that concepts like 'competing polycentric regions', 'interdependent cities' and 'agglomeration economies' are central to current thinking in urban planning. Verena Balz, assistant professor at the Chair of Spatial Planning and Strategy at the TU Delft, describes polycentric regions as *'the oldest economic model that there is'* (V. Balz, personal communication, September 20, 2019). She explained it as a relation between the expansion of markets, in the sense of dependencies, and the measure of functional integration of cities. The bigger these integrated areas are, the bigger are their agglomeration benefits (V. Balz, personal communication, September 20, 2019). In her view the development of this approach needs to be seen in the broader picture of the opening of the borders of the European union:

"This focus on economic competitiveness on the regional level of scale had to do with the opening of the borders in Europe. The EU tried to, above all, de-emphasize nation states so they emphasized regional development instead. This also meant, with open borders, that everybody and everything could move so all these regions started to compete with each other for headquarters, for inhabitants and so forth. This led to a great emphasis on economic competitiveness. And of course, the benefits were the European integration, markets expanded, grew in a sense but with it came the integration of nation states under the umbrella of the European Union". (V. Balz, personal communication, September 20, 2019).

Several other respondents confirmed this as the dominant way of thinking in urban planning currently (C. Huisman, personal communication, September 25, 2019; M. Zwart, personal communication, October 11, 2019). Verena Balz explains there is a link between agglomeration thinking and economic growth or degrowth:

"It would mean if you cut them off [the interdependent cities], there is less benefit, so degrowth. In my knowledge, that is what I mean when I say decentralization. Autonomy is probably

the better word for it, so regions become more autonomous, you have less agglomeration benefits, less growth." (V. Balz, personal communication, September 20, 2019).

C.2. urban planning versus urban design

Another important concept that was mentioned a lot in relation to urban planning was urban design. Furthermore, the relation between urban planning and urban design and their respective definitions were often mentioned. Rob van Leeuwen put specific emphasis on what he perceived as a strange divide between the world of language in which policies are formed and the world of physical space in which designs are made. According to van Leeuwen urban planning can be found mainly in the former and urban design mainly in the latter (R. van Leeuwen, personal communication, October 18, 2019). Verena Balz describes planning as being about understanding the impact of designs, the relevance of design and about how to execute and realize designs (V. Balz, personal communication, September 20, 2019). Van Leeuwen defines planning as being more focused on the process side and on allocation where spatial design focuses more on the arrangement of the physical space. He mentioned that spatial planning also deals more with laws and regulations, policies and the relation between politics and other aspects (R. van Leeuwen, personal communication, October 18, 2019). Van Leeuwen thinks that there is a lack of understanding between people who strictly focus on either design or planning. He states that by jumping back and forth across the divide between language and space we can develop integrated combinations, alternatives that we have not even thought of yet (R. van Leeuwen, personal communication, October 18, 2019).

C.3. urban planning and market dependency

Finally, regarding urban planning approach at the municipality, the interview with Maaïke Zwart who is responsible for sustainable urban area development shed light on the dependency of market developments for urban planning. Zwart stated that the municipality is very dependent of market action to achieve their goals since

they work in existing city fabric and the land is all owned by private parties or given in long leasehold. The only places where they as a municipality have more control are the new artificial islands that are being built around IJburg (M. Zwart, personal communication, October 11, 2019).

D. urban characteristics of Amsterdam

Some of the main questions specifically addressed the areas in Amsterdam Noord that have been selected as a spatial focus. During the interviews several specific urban characteristics of Amsterdam came up that help in understanding the City's trends, qualities and underlying systems.

D.1. ongoing urbanization and growth

Carla Huisman stressed the importance of the ongoing urbanization trend in the Netherlands, people still tend to move to the bigger cities and the countryside gets emptier (C. Huisman, personal communication, September 25, 2019). At the same time there is an increase in the number of households in a general sense, as mentioned by Rob van Leeuwen and the anonymous respondent (R. van Leeuwen, personal communication, October 18, 2019; anonymous respondent, personal communication, October 21, 2019). This has to do with the decrease of the number of persons per household, which went along with an increase in the amount of space per person. This latter ongoing trend means even if there was no more increase of households Amsterdam would still grow, it would still need more space. Rob van Leeuwen stated that this is also a development that runs contrary to degrowth (R. van Leeuwen, personal communication, October 18, 2019). The anonymous respondent thinks Amsterdam is reaching a maximum number of people that can be squeezed into the existing city fabric without losing quality of life (anonymous

respondent, personal communication, October 21, 2019).

D.2. primary green structure

Another characteristic of Amsterdam that multiple respondents mentioned and appreciated was the 'Hoofdgroenstructuur' of Amsterdam which translates to the 'main green structure' of Amsterdam (R. van Leeuwen, personal communication, October 18, 2019; anonymous respondent, personal communication, October 21, 2019). Van Leeuwen describes it as a distributive system of green throughout the city, from the inner-city parks to the surrounding green. It ensures several qualities of the city such as the rural green area around Amsterdam, which can be reached from anywhere in the city within 10 minutes. It also entails the green wedge structure of the city that gives Amsterdam a very specific quality by letting the green areas enter deeply into the city (R. van Leeuwen, personal communication, October 18, 2019). Van Leeuwen added to this that another strong quality of Amsterdam is the fact that Amsterdam is a water-city, the canals and water ways ensure open space in the city that will never be built up. Combined the green and the water structure provides a contra-shape of the city according to van Leeuwen that should be carefully considered and designed as the city densifies.

D.3. land ownership in Amsterdam

Finally, an interesting characteristic of Amsterdam is the situation of land ownership. Maaïke Zwart mentioned the very high ratio of long leasehold contracts, where the municipality effectively owns the land on which the houses are built. This is the case for most of the houses in Amsterdam and it gives some steering power to the municipality when the contracts are renegotiated (M. Zwart, personal communication, October 11, 2019). Van Leeuwen mentioned that a lot of the land next to the urban borders of Amsterdam is not owned by the local farmers nor the municipality but by investment firms with the hopes and expectations to make a

considerable profit when new development is authorized (R. van Leeuwen, personal communication, October 18, 2019).

E. economic growth

As degrowth is a call for abandoning the ideal or goal of economic growth, during the interviews the respondents were asked for their views on economic growth. Questions revolved around whether economic growth is an important goal in their work and whether it should be.

E.1. differentiation of economic growth

Michel Kegels, an urban farmer working in Amsterdam warned not to think too simplistically about economic growth. According to Kegels growth can be achieved in multiple ways. Growth can be the consequence of more resource extraction but also of more value adding due to crafts that do not require a lot of energy or resources, such as more recycling or reuse for example (M. Kegels, personal communication, September 17, 2019). On a similar line of thought but more critical of growth the anonymous respondent gave an example of how even a car crash means GDP growth. The ambulance creates job opportunities, the car needs to be fixed and there might be an increase in the health care contributions. The respondent mentioned this as an example of the perverse incentives triggered by striving for an increase of GDP (anonymous respondent, personal communication, October 21, 2019).

E.2. economic growth as a goal

None of the respondents chased economic growth as an explicit goal in their own work or research, and most also held the opinion that it should not be chased as a goal in itself. Corjan Brink stated that economic growth should definitely not be the main societal goal. At the same time, he added that it is not a task of the PBL to state whether a country should grow

fast, grow slow or grow at all. Their task is instead to show the consequences of economic growth, the related increase of energy use and the environmental pressure it creates. The choices how to act are for politics to decide. (C. Brink, personal communication, October 14, 2019).

According to Verena Balz, compared to today in the eighties economic growth and competitiveness were even more prominent and explicit goals in the field of planning. She gave the example of transit-oriented-development which used to be motivated only by the positive effects on economic performance. Besides that, nowadays its environmental benefits are emphasized. Currently, she mentioned, environmental sustainability and social justice are presented alongside economic development as main goals in urban planning (V. Balz, personal communication, September 20, 2019).

Carla Huisman described how in high school she was confronted with a famous quote by Kenneth Boulding: *'anyone who thinks that economic growth can go on forever is either a madman or an economist'* (Boulding as cited in Olson, 1973, p. 3). This sounded very logical to her. She wondered why there is a need for continuous growth and stated that it cannot go on indefinitely considering ecological limits (C. Huisman, personal communication, September 25, 2019). For Maaïke Zwart in working on sustainable urban area development, economic growth is not at all a goal in her portfolio at the municipality. However this might have to do with the division of expertise in the municipality, they work in multidisciplinary teams on projects and she stated it could very well be a goal of her colleagues at the municipality who work on economic affairs (M. Zwart, personal communication, October 11, 2019).

E.3. effects of economic growth

The respondents also touched upon several effects of economic growth. Some of these effects are explicit goals in the pursuit for economic growth. As touched upon in paragraph 2, Verena Balz sees economic growth as a consequence and a cause of international cooperation: *"I think there are two sides to it. It's the economic upscaling*

but also the cooperation between countries, which was of course good for us I think, that we got to work with along with polish people for example". (V. Balz, personal communication, September 20, 2019).

However other effects of economic growth are unplanned. According to Rob van Leeuwen the economic growth planned for by the Dutch and European government in the agricultural sector under the leadership of Sicco Mansholt illustrates what can be considered as unwanted and unforeseen side effects of economic growth. The desired effect was to improve the reliability of the food system and the income of the farmers. While both ambitions were realized, nowadays farmers have to grow or be outcompeted, an important reason for the dwindling number of farmers in the Netherlands of the last decades. This is partly because of the large power that the supermarket chains can exert due to their enormous size according to van Leeuwen. The growth of the farms has also taken its toll on the biodiversity because of the fertilizer and pesticide use and because of the large monocultures. And it also has a large impact on the recreational value of the Dutch landscape. Van Leeuwen mentions how later in his life, confronted with negative ecological and landscape consequences Mansholt himself had regrets and pleaded for a change of direction with reduced investments, reduced outputs but still a good income for farmers (R. van Leeuwen, personal communication, October 18, 2019).

Van Leeuwen relates this agricultural example back to the urban sphere, the city with its hinterland. According to him, the fact that production per hectare is very demands a lot of space which collides with a city that is densifying. In Amsterdam in the Sluisbuurt buildings will reach 120 meters, so if you densify the city grows upwards. But these people also want to go outside, so the importance of the surrounding countryside as recreational area also increases when the city gets more populous and denser. Regardless of who's fault it is, when the agricultural sector damages the countryside

there is a societal concern that needs to be addressed (R. van Leeuwen, personal communication, October 18, 2019).

E.4. dampening economic growth / Defence of economic growth

Corjan Brink states that these kinds of negative externalities should all be included in the deliberations regarding investments by putting a price on it. He states that this by itself might already lead to a reduction of growth or a state in which there is no economic growth at all. On the other hand, Brink states, we might not care as much about environmental issues as we do today, if we did not have our current level of income. He referred to the hypothetical 'environmental Kuznets curve' (EKC) which describes the relation between the income per capita of a country and the measure environmental degradation. The inverted U-shaped curve of the EKC signals that as per capita income rises environmental degradation initially increases but at a certain income level this starts to reverse (C. Brink, personal communication, October 14, 2019). However Brink himself also called this observation into question by pointing to findings that this decoupling of environmental impact and economic growth was mainly the case for a specific country, but came at the cost of exporting the environmental pressure to other countries, as already mentioned in paragraph 1 (C. Brink, personal communication, October 14, 2019).

E.5. critique of economic growth

Other remarks by the respondents question the idea of economic growth more explicitly. Before introducing the concept of degrowth in the interview, van Leeuwen already referred to the pursuit of economic growth as an ideology, as the belief that without it we are heading towards disaster. He mentioned there are certain countries with much less growth that allow for a good life nonetheless (R. van Leeuwen, personal communication, October 18, 2019). He also discussed the uneven distribution of the benefits of growth, again

in agriculture, by stating that during the last decades while farms have increased in size, efficiency and production volume, the amount of farmers has reduced and the income of the average farmer has stayed the same. The parties that according to him benefited most from the growth were the large banks, the supermarkets and other privately owned companies (R. van Leeuwen, personal communication, October 18, 2019). Corjan Brink added that for western countries the question whether to pursue economic growth is a legit one considering the discussions on how more growth often does not mean more happiness (C. Brink, personal communication, October 14, 2019). Moreover, both the anonymous respondent and Carla Huisman described economic growth as an untenable goal either because certain values such as that of urban green are not easily expressed in economic terms or because of the fact that there are boundaries to the planetary resources (C. Huisman, personal communication, September 25, 2019 ; anonymous respondent, personal communication, October 21, 2019). Ana Poças Ribeiro went further, and called economic growth a self-defeating system, as illustrated by the following quote:

"...we are overusing and overexploiting, such as overfishing, if growth is at the core of fishing you need more and more fish, but the stocks of fish have a limit. At the same time, this growth causes additional emissions, because of the fossil fuel dependence. This leads to warming of the sea temperature which is putting species at risk that are not used to it or cannot cope with it. And at the same time, you have more and more plastics in the sea because of all the mass-produced products based on fossil fuels that we use in the current system. It is no one's specific intention, but if we do not think about the consequences, that is what happens. And it accelerates each other. And this is undermining the basis of growth itself. Therefore, an economic growth-based system is a self-defeating system." (A. Poças Ribeiro personal communication, September 2, 2019).

F. definitions and history of degrowth

As degrowth is not a mainstream concept at the current moment, most of the respondents were not previously introduced to the topic. The respondents that were familiar with the concept beforehand were asked about their personal definition of degrowth. Furthermore, during the interviews certain aspects of the history of degrowth emerged as well as several degrowth concepts, these are also described below.

F.1. definition and history of degrowth

According to Julien-François Gerber the degrowth movement really started as a social movement in the beginning of the years 2000s in France. It is only later that degrowth became a topic of academic research; it spreads to Barcelona around 2009, and this city now hosts a 'stronghold' of degrowth research in Europe. Gerber defines degrowth as diminishing the social metabolism while increasing well-being. He purposely uses this definition because of the apparent contradiction that decreasing the metabolism will increase well-being. Gerber states: *'And it can literally be true, but many people would disagree with that of course. That you can actually increase well-being by decreasing the social metabolism. And there are of course huge questions of distribution that immediately appear'* (J.F. Gerber, personal communication, September 23, 2019).

Ana Poças Ribeiro views degrowth both as an alternative to the current system as well as a specific and in-depth diagnosis of why economic growth is not the way forward. She gives a similar definition of degrowth: *'reducing the material flows and material basis for the economy while at the same time redistributing what is already there. And transforming society in a way, that we can live better, but with less material impact and basis'* (A. Poças Ribeiro personal communication, September 2, 2019). Poças Ribeiro states that if the current system fails, a predictable outcome is a so-called re-feudalization of society, as

described by Barbara Muraca, in which strong market players accumulate wealth purely for their own well-being, leading to rising inequality and harsher social repression. The only real alternative according to her is degrowth, which Poças Ribeiro makes more tangible by illustrating it as a paradigm shift towards another form of society focused instead on reducing inequalities, fortifying the natural environment, providing more green space, lowering stress and facilitating more healthy free time (A. Poças Ribeiro personal communication, September 2, 2019).

When asked whether a degrowth society has ever existed Poças states that a hundred years ago in more rural settings life was less based on fossil fuels, goods lasted longer as did work traditions. Life was naturally more circular, waste such as horse manure was used locally as fertilizer, there was trade in rags and there was a whole non-waste economy. Poças thinks we need to learn from this history (A. Poças Ribeiro personal communication, September 2, 2019).

F.2. degrowth concepts

According to Julien-François Gerber there are four main angles for criticizing the economic system. There is Marxism, challenging the capitalist system, then there is anarchism, challenging capitalism and state power. Gerber goes on to state post-development is another main avenue for critique that focusses on imperialism or the westernization of the world. And finally, there is the latest one, degrowth, which criticizes growthism as an ideology. They do not have to exclude each other but can be complementary according to Gerber. The question he poses is, if communism promotes socialism and anarchism promotes anarchy, what does degrowth stand for, what does it propose as a system? Gerber thinks it could be a kind of eco-municipalism or bioregionalism by which he refers to the work of Murray Bookchin (J.F. Gerber, personal communication, September 23, 2019). Furthermore, in explaining degrowth Gerber also points out the importance of the so-called Jevons paradox which states that efficiency

gains are often accompanied by an increase in demand, nullifying or worsening the environmental impact. This is also known as the rebound effect (J.F. Gerber, personal communication, September 23, 2019).

G. opinions on degrowth

One of the goals of the research is to find out whether a degrowth approach can be useful in urban planning, therefore it can be of value to find out what the respondents opinion is on the idea of degrowth, whether they have any specific reasons for deeming it a promising concept or concrete critiques that could be of value in rejecting or further refining the concept.

G.1. questioning growth

Apart from their opinion on degrowth as a proposal, many respondents questioned the growth imperative themselves or they found questioning the growthism valid as already stated in section E on economic growth. Maaïke Zwart called the question of what sustainable growth is a difficult question and stated that you can wonder whether growth can ever be truly sustainable (M. Zwart, personal communication, October 11, 2019). The anonymous respondent called the current way of growing unsustainable and said we need to find other ways to grow (anonymous respondent, personal communication, October 21, 2019).

Van Leeuwen stated that we need to look for alternatives to depleting our resources and sinks. He thinks that will definitely slow growth or could even stop it. Which he followed up by posing the question, is that a bad thing? (R. van Leeuwen, personal communication, October 18, 2019). There were other respondents that, again apart from the degrowth proposal, equally deemed slowing growth as a plausible consequence of more environmental consideration such as Corjan Brink stated in paragraph E.4.

G.2. critique of degrowth

Other remarks were more critical of degrowth. A recurring critique had to do with the name. Michel Kegels for example would himself not literally associate with degrowth currently as he, as an urban farmer, wants to grow his small company in terms of production, experience and quality. He would rather be associated with regenerative or nature inclusive agriculture (M. Kegels, personal communication, September 17, 2019). Furthermore, when introduced to the term degrowth, both the anonymous respondent and van Leeuwen found degrowth to sound too reactionary because it seemingly proposes the opposite of the current dominant paradigm, that of growth. Which they rejected as too simple (R. van Leeuwen, personal communication, October 18, 2019; anonymous respondent, personal communication, October 21, 2019). As the anonymous respondent stated, 'just aiming for the reverse of growth? Would that be shrinkage? That does not sound great either'. This respondent felt something completely different is needed, that is what constitutes a real transition, not more or less but different (anonymous respondent, personal communication, October 21, 2019).

Another critique or difficulty that several respondents pointed out is the questioning of progress as a force for good, which is part of degrowth. Julien-François Gerber, who is a proponent of degrowth, mentioned that even to him initially "*...it was a bit unwelcome to question this idea of progress.*" (J.F. Gerber, personal communication, September 23, 2019). Van Leeuwen stated that one of the hardest things to do, is to reverse progress. He explained by using himself as an example that when people did not have modern luxuries of say several decades ago, they did not care, life was good. But when people have to give up modern comforts like computers or cars, people care a lot, nobody wants to do that, it makes people very unhappy. In other words, he said the standard of living people assume as basic is always the standard they currently have, not the one they used to have. There is a peculiar psychological component there according to van Leeuwen (R. van Leeuwen, personal communication, October 18, 2019).

The anonymous respondent touched upon the same topic by stating that everyone always wants to increase their welfare. According to him that means that society needs to dive into what welfare or wellbeing actually means and redefine that (anonymous respondent, personal communication, October 21, 2019).

Corjan Brink raised other issues regarding degrowth. He found the theory lacking in explaining what really happens during structural degrowth. He found it difficult to see how an economy would work if there really is a decreasing GDP. Especially in a world where other countries do have growth and rapid progress. He wondered whether that does not turn stagnation into decline and thus the start of a negative spiral downwards (C. Brink, personal communication, October 14, 2019).

G.3. positive opinions

Other respondents felt degrowth made a lot of sense. As mentioned before, Carla Huisman referred to the famous quote of Kenneth Boulding which summed up degrowth to her, which she felt sounded very logical (C. Huisman, personal communication, September 25, 2019). The anonymous respondent was at first more skeptical, illustrated by his opinion on degrowth being simply the opposite of growth. However, when explained in more depth what degrowth stands for, he stated he felt affinity for it, stating it captured more eloquently what he tried to say himself regarding a shift from welfare to wellbeing, redefining growth and letting go of GDP as a goal (anonymous respondent, personal communication, October 21, 2019). Partly because of the positive response he receives from his students, Julien-François Gerber thinks very positively of degrowth:

"I think there is a need for an alternative narrative there. It is kind of obvious you know; it captures something that is in the air. A lot of my students like the topic, they want to work with it." (J.F. Gerber, personal communication, September 23, 2019).

Moreover, Gerber also thinks a degrowth approach is

necessary in urban planning since urban areas use so much resources and are completely dependent on the countryside (J.F. Gerber, personal communication, September 23, 2019). Another facet of degrowth that both Gerber and Poças Ribeiro mention as an important quality is its prefigurative attitude:

"It is a deep or important idea of degrowth, emphasizing prefigurative politics, meaning that in your own activist groups you already live the way you want to live, and of course there will be contradictions, its unavoidable. But you learn to live it and you invite others, so it is really a training ground." (J.F. Gerber, personal communication, September 23, 2019).

Or as Poças Ribeiro states:

"it is a movement that tries to really practice what they are preaching, to create the alternatives right there, that is really inspiring and empowering" (A. Poças Ribeiro personal communication, September 2, 2019). Asked whether he thinks that a broad support can be found for degrowth amongst the inhabitants of degrowth, the anonymous respondent answered that he recently heard that for all great transitions of the world a certain mass of people was needed, about 3% of the population. So, in order to realize degrowth 3% of the people of Amsterdam needs to be convinced, which according to this person should be possible (anonymous respondent, personal communication, October 21, 2019).

H. degrowth practices in / around Amsterdam

Another one of the goals of this research project is to find out what principles and concepts of degrowth can help address issues that are not taken up successfully by sustainable urban planning. If certain degrowth practices are already taking place in Amsterdam this can shed light on what works in the local context and why.

H.1. local agriculture and tension between growth and degrowth

The example of a degrowth practice in Amsterdam that came by most often was local food production and consumption. Michel Kegels mentioned several restaurants in Amsterdam that work with local produce such as Instock and Circl. Kegels also stated that there are multiple urban farm initiatives in Tuinen van West, where his own farm is also located. Interestingly, an explanation he gave for the reservation of this land for urban farming was the fact that it cannot be built up due to the kerosene pipelines of Schiphol that run below through the subsurface (M. Kegels, personal communication, September 17, 2019).

Multiple respondents gave another example of local food production: the ecological care farm 'de Boterbloem' located in the Lutkemeerpolder, one of the last patches of fertile farming soil within the municipal borders (M. Kegels, personal communication, September 17, 2019); A. Poças Ribeiro personal communication, September 2, 2019.; anonymous respondent, personal communication, October 21, 2019). When asked if urban planning could stimulate local food production Ana Poças Ribeiro replied that municipal policy can help if it also reaches urban hinterlands where food can be produced. This reminded her of the Lutkemeerpolder, as it lies within the borders of Amsterdam and there is still farming happening there. Ana mentioned the farmers will be evicted by the municipality to make space for a new business terrain with a large-scale food distribution center. Which made this area to her a perfect depiction of the growth mindset versus a degrowth approach in Amsterdam; the small scale local and biological food production versus the large-scale global food distribution (A. Poças Ribeiro personal communication, September 2, 2019). Michel Kegels also referred to the Lutkemeerpolder when asked how regional food production could be stimulated. His answer was that the municipality can play a large role in providing more areas for local ecological and biological companies in horticulture and agriculture. He went on to state how

he found it quite curious that a municipal council like that of Amsterdam with significant green ambitions destroys its main biological agricultural area for business parks (M. Kegels, personal communication, September 17, 2019). Asked about Lutkemeer, van Leeuwen was more pragmatic, coming from a familiarity with these kinds of procedures, he said that it was an old policy choice, a reservation made long ago (R. van Leeuwen, personal communication, October 18, 2019). When confronted with the situation of the Lutkemeerpolder Julien-François Gerber said it is a powerful symbol which speaks to people, it is something that they cannot accept. He stated these kinds of situations can help to illustrate degrowth ideas and that there are many more of these environmental justice struggles that can be allies of degrowth (J.F. Gerber, personal communication, September 23, 2019).

H.2. collaborative housing

Both Carla Huisman as well as the anonymous respondent mentioned collaborative housing or co-housing as an example of a degrowth practice taking place in Amsterdam currently (C. Huisman, personal communication, September 25, 2019). The anonymous respondent mentioned the case of De Warren taking shape in IJburg in Amsterdam. The respondent described co-housing initiatives as housing with shared amenities often combined with small scale urban agriculture (anonymous respondent, personal communication, October 21, 2019). Carla Huisman is herself the president of SOWETO, a housing association based on solidarity and an empowering approach of DIY or do-it-yourself. This organization developed the co-housing project Nieuwland in Amsterdam and is collaborating on an autonomous spin-off project called 'De Nieuwe Meent'. Parallels she saw in these co-housing projects and degrowth included the idea of good quality housing with affordable rent instead of private ownership and the minimalistic renovation of existing buildings. She expressed her doubts about their scalability as she saw co-housing as something that appeals only to a niche (C. Huisman, personal communication, September 25, 2019).



figure 3.44. leveling of former fields of the ecological farm 'De Boterbloem' in the Lutkemeerpolder in Amsterdam



H.3. regional economy

Julien-François Gerber gave an example of an initiative taking place in the Czaar Peterbuurt in Amsterdam regarding a neighborhood-economy. There, they are considering their neighbourhood economy in a broad sense, reflecting on what a good life constitutes while dealing with questions of growth. According to Gerber, it is an example of degrowth-related thinking put into practice. The initiative is part of the societal agreement (maatschappelijk akkoord) Maak020 initiated by several civil actors together with the municipality of Amsterdam.

H.4. autonomy and decentralization

Verena Balz mentioned the development of the neighborhood Almere Oosterwold as an interesting parallel regarding autonomy and participation. She found it especially interesting since it has been going on long enough to have produced nuanced results. She stated it can shed light on what works in an autonomous situation and what new organizations emerge when the whole idea is that people develop an area themselves. Finally, she also mentioned eco-villages as another example that might have a connection to degrowth (V. Balz, personal communication, September 20, 2019).

I. re-localization of the economy

The literature review and document analysis that took place before the interviews showed that some central principles of degrowth might play a large part in any form of urban planning aimed at degrowth. A re-localization of the economy can be found in many books, articles on degrowth as a central tenet, a way to both reduce transport and make ecological impacts tangible. Therefore, it was a specific topic of discussion during the interviews.

I.1. what is local? how to define a region?

A point that many respondents made when introduced

to the idea of re-localizing the economy is that local is an ambiguous term. What people perceive as local and what the scale of a region is, can vary a lot. Different respondents had different visions on this, it raised questions like where to draw the boundaries and how to decide on these boundaries. Michel Kegels stated that if the question is raised whether all food can be produced locally for Amsterdam, first there is a need to define local. He mentioned that in the US everything within 500 kilometers is already local since lettuce for New York currently comes from California (M. Kegels, personal communication, September 17, 2019). Verena Balz went deeper into this question of defining regions:

“...how do you then define a region by its spatial development? It is acknowledged that there are a hundred different regions. A landscape architect would define a region based on landscape, and urban planner would define it by density, and someone else would define it by identity or history.” (V. Balz, personal communication, September 20, 2019).

She mentioned regional planning and design is engaged with setting these kinds of boundaries also from more visionary points of view of what you want to achieve. She mentioned that at a certain moment some kind of boundary is always necessary, but from a regional planning perspective there must be a good reason for setting a boundary. And it must rest on some autonomous spatial development patterns like a river or in the case of degrowth maybe economic relations.’ (V. Balz, personal communication, September 20, 2019).

Julien-François Gerber referred to the idea of using ecosystems for inspiration like ‘bio-regions’ and river basins in setting regions. He mentioned it involved some tough questions such as how to deal with ethnicity and religion which he felt could be resolved as things move on, according to him such a question needs discussion and constructive clashes of ideas (J.F. Gerber, personal communication, September 23, 2019).

I.2. regional food production and consumption

Despite the difficulties in defining the local and the scale of regions, generally working towards a regional economy was one of the degrowth ideas that elicited some quite favorable responses from the respondents. Especially the food system was deemed as a sector with the need and potential to function on a more local level. As an urban farmer himself Michel Kegels obviously sees a lot of potential there (M. Kegels, personal communication, September 17, 2019). But also a respondent who is more critical towards a general regional economy such as Corjan Brink thought that a regionalization seems quite feasible for the food sector and could be a good idea (C. Brink, personal communication, October 14, 2019). Maaïke Zwart also proposed the food sector as a logical sector to look for in a regional economy as did the anonymous respondent (M. Zwart, personal communication, October 11, 2019; anonymous respondent, personal communication, October 21, 2019). The anonymous respondent mentioned that he knows of a project to set up a platform to stimulate local food production and consumption and to inform people what is already possible in Amsterdam (anonymous respondent, personal communication, October 21, 2019).

I.3. other sectors and positive opinions

The anonymous respondent also saw regionalization of the economy as an important part in the transition towards a circular economy and he mentioned regionalization is also important for employment, logistics, water management and mobility (anonymous respondent, personal communication, October 21, 2019). Julien-François Gerber called a regional economy crucial to degrowth but contrary to current common sense in economics, which he saw as based on specialization and competition between regions. Rob van Leeuwen also agreed a regionalization of the economy could have a big impact (J.F. Gerber, personal communication, September 23, 2019); R. van Leeuwen, personal communication, October 18,

2019). The anonymous respondent even stated that the local level is crucial in involving the average citizen of Amsterdam; If you try to involve citizens with the ambition of working towards global greenhouse gas reductions, to work towards a climate resilient city or to work towards a circular economy, people do not care, they are not interested. The respondent stated that you need to connect these themes to things people do care about in their direct local environment such as greening their street, their own income or local shops and amenities. That opens the door to discussing the larger issues with the context of the local concerns (anonymous respondent, personal communication, October 21, 2019). Maaïke Zwart saw it as a valid avenue for research how to re-localize the economy of Amsterdam inside the metropolitan region (MRA) (M. Zwart, personal communication, October 11, 2019).

I.4. critical discussion and opposition.

Despite looking favorably towards the idea, van Leeuwen raised the point that it sounds so logical that the question should be, why it is not already the case that we produce and consume locally? According to him there are underlying mechanism that we do not always understand well enough. One of the reasons is the low fossil fuel price, when the fuel prices would rise the apples from New-Zealand would be unattainable. Secondly the high Dutch agricultural land prices are to blame according to van Leeuwen. For a large part that has to do with all the European and national subsidies farmers get, any hectare of land, even when no crops are growing there, already generates an income, that raises prices and influences what the land is and is not used for. Van Leeuwen adds that another opposition to change to a more regional food system could come from the existing food culture such as a large amount of cheap fast-food and the considerable amount of meat that is consumed (R. van Leeuwen, personal communication, October 18, 2019). The anonymous respondent mentioned he understands why it is not a current priority for the municipality, as Amsterdam has an outlook that is focused on globalization with the

harbor, the Zuidas and the large number of expats in the city (anonymous respondent, personal communication, October 21, 2019).

Another question revolved around the fact that if an economy would be more regional, current displaced environmental problems might also be more visible which might stimulate action as currently with the nitrogen crisis or the earthquakes in Groningen. Corjan Brink states that this might help to create awareness but that is not enough. Even if people agree the gas from Groningen needs to be reduced, that does not mean people are convinced of living without gas and making the necessary changes. Often the path of least resistance is chosen as a solution, in this case importing gas (C. Brink, personal communication, October 14, 2019).

I.5. prerequisites for a regional economy

Some respondents gave ideas regarding what is needed to work towards a more regionalized economy. In the case of regional food system Ana Poças Ribeiro mentioned more municipal support would be required: *'one issue is that alternative food networks now are not getting a lot of support from municipalities nowadays, they just help with networking but are not using procurement for getting food from local sources or by providing affordable space or financial aid'* (A. Poças Ribeiro personal communication, September 2, 2019). She gave a concrete example of the municipality of Copenhagen that had used public procurement to give a big boost to local organic farming (A. Poças Ribeiro personal communication, September 2, 2019). Michel Kegels was another respondent who shared this idea. He thought the municipality could and should play a more substantial role in reserving areas for ecological, organic companies in agriculture and horticulture. Besides he stated that more could happen on vacant plots in business parks and in the city itself (M. Kegels, personal communication, September 17, 2019). Van Leeuwen again referred to the systemic issues such as the low fossil fuel price and high land price that reinforce the current global food system. He stated that if the goal is a more local, circular agrofood system, farmers cannot be expected to

change the underlying systemic issues that prevent that from happening. That means that the national government needs to come up with restrictions and policy changes while at the same time there is a need to create and facilitate new business models to provide opportunities for a decent income (R. van Leeuwen, personal communication, October 18, 2019).

I.6. downsides to regionalization of the economy

On a more critical note, Corjan Brink stated that a general regionalization of the economy, as in going back to kind of self-sufficiency, seemed very complicated to him and could also be a regression. He mentioned that next to the downsides of globalization like displacement of environmental issues and the extensive damage because of all transport movements, it has also brought positive effects such as increased efficiency or a reduction of certain environmental issues. Global cooperation and treaties, according to Brink, could be the best method for tackling climate as they can help to avoid the free rider problem and capital flight. Furthermore, he stated we have actually experienced a reverse transition the last century from a production-based economy to a service-based economy that now generates over 80 percent of our GDP. Brink stated that being more self-sufficient, more autonomous as a country or region might also include closing borders. Then you might still need to import certain products you cannot produce yourself and thus you might still stimulate unsustainable production elsewhere (C. Brink, personal communication, October 14, 2019).

J. concept of limits

The literature review and document analysis that took place before the interviews showed that some central principles of degrowth might play a large part in any form of urban planning aimed at degrowth. Next to a regional economy another central concept in degrowth is that of limits. Underlying degrowth is a worldview of

finity instead of infinity which can be applied to a broad range of topics, from the economic throughput or the measure of pollution to the the use of land. Therefore, it was a specific topic of discussion during the interviews.

J.1. built-up land limits

Maaïke Zwart notes that Amsterdam has the ambition to limit the city to its current extent. The goal is to create the extra housing that is required within the existing city fabric by densifying the city. She mentioned this is a strategy not a full stop. Zwart describes this as an important but complex task, the easiest option is always to build in green areas, since nobody wants a tower in their backyard (M. Zwart, personal communication, October 11, 2019). As mentioned before, Rob van Leeuwen stated that this densification, though necessary in his view, also puts extra pressure on the surrounding countryside for recreation which already experiences pressure from the intensive agricultural sector. Besides that, van Leeuwen referred to the publications of Dirk Sijmons which show that the energy transition will place yet another space claim on the countryside. It is also going to have a huge impact on the Netherlands as Dirk Sijmons has shown for example in his book 'Energie', the landscape will look very different within 10, 20 years. This will further blur the lines between production landscapes, recreational landscapes, nature etcetera. When asked whether this will all fit in the Dutch landscape, he stated it will not, and it will at the same time. It will not fit since it will require changes, and people do not like changes. And it will fit since we have no choice but to make it work, but it requires some hard choices. If we are opposed to having windmills everywhere, we should use less electricity and if we want meadow birds, then we should reduce our production levels and eat less meat (R. van Leeuwen, personal communication, October 18, 2019).

J.2. climate change and emission limits

Corjan Brink mentioned that a global warming limit was set in the Paris agreement of a maximum of two

degrees. This limit describes a point at which there are big uncertainties and risks according to scientist from around the world. They just cannot predict anymore what might happen if that limit is exceeded according to Brink. However, the Paris agreement allows for voluntary and nationally determined targets which means the specific goals are politically encouraged, rather than legally bound. Brink stated the most rigid limit on emissions is in fact the European Emissions Trading System (ETS), despite the current low prices for emission allowances, as it sets an absolute cap that decreases over time. In the Netherlands the the Urgenda climate case had a big impact in forcing the national government to take serious action. Despite that, Brink stated that current observations seem to indicate the national goal of 25% CO₂ reduction for 2020 will not be achieved in the end (C. Brink, personal communication, October 14, 2019).

Regarding urban or municipal ambitions or limits, Brink states that since there is a national framework and goals, extra municipal ambitions might just mean that other cities end up doing a little bit less. However, he also mentioned another side of the other side of the story, which is that it can help if cities stimulate their inhabitants to actively participate in these issues by setting local ambitions (C. Brink, personal communication, October 14, 2019). Amsterdam does indeed have an ambition to reduce greenhouse gas emissions with 55% in 2030. The anonymous respondent mentioned that an organization started monitoring this and other metrics such as the amount of green space and recycling rates to hold the municipal council accountable for the milestones they should be achieving on the road towards the goal. In general, the judgement was that most ambitions were not achieved (anonymous respondent, personal communication, October 21, 2019).

J.3. economic growth limits

Van Leeuwen stated that in the seventies many people became aware of the idea that there are limits to humanity's economic development. This became apparent with the ecological awareness that evolved with the report

of the club of Rome and other similar publications around that time. But ever since, he points out, the ecological degradation has only worsened. He stated that there will be a moment when more people will see this. At a certain point, earth's resources will be depleted, but what happens then he does not know, nobody does. However, van Leeuwen also stated that he thinks there are only limits in a drastic sense, implying a crisis might precede action (R. van Leeuwen, personal communication, October 18, 2019). This idea that a serious ecological or economic crisis might be a trigger for real sustainability policy action was mentioned by Julien-François Gerber. He stated that he thinks society is headed towards that direction but also said that a lot can be learned from existing cities that have witnessed serious crises such as San Juan in Puerto Rico after hurricane Maria, society became more cooperative, solidarity increased people shared what limited resources they had and pulled through together (J.F. Gerber, personal communication, September 23, 2019). This also relates to the statement of Ana Poças Ribeiro that the model of economic growth is a self-defeating system precisely because it exceeds the natural boundaries (see paragraph E.5.).

J.4. household growth limits

Maaïke Zwart stated that as a government they cannot just put limits on the number of households or houses and stop developing because there are more households each year, and then these people will not have homes. Besides they cannot force smaller households out of bigger houses as this is private property and furthermore people are rooted in their neighborhoods. Her opinion was clear, people need houses and as long as they do, the building of more houses needs to be facilitated by the municipality (M. Zwart, personal communication, October 11, 2019).

J.5. land use limits

Van Leeuwen mentioned that currently the limits the Dutch countryside naturally poses on production are being transgressed, most notably by importing large amounts of cattle feed. The capability of transgressing these

boundaries has to do with the aforementioned cheap fuel prices facilitating for example soy production in south America. If this was not affordable and the only possibility was local production of for example cattle feed the limits of production would be much more obvious (R. van Leeuwen, personal communication, October 18, 2019).

J.6. nitrogen crisis as an example of hard limits

Finally, an interesting parallel can be drawn between setting limits in degrowth and the current nitrogen crisis in the Netherlands. When asked about this recent development and the new strict handling of the limits to nitrogen emissions, several respondents called this a positive development (C. Brink, personal communication, October 14, 2019; M. Zwart, personal communication, October 11, 2019; R. van Leeuwen, personal communication, October 18, 2019). Corjan Brink stated that in the nitrogen crisis the current action and the invoking of strict limits was the consequence of legal action from civil society in relation to European legislation. But he warned that again also this limit remains a political choice, if the political majority decides to reduce the importance of nature in the Netherlands then there is no restriction anymore. He added that, the fact that it became clear that not everything is possible anymore, does not mean that people are convinced of degrowth, there are also people who are extremely optimistic about technological developments for example (C. Brink, personal communication, October 14, 2019). Van Leeuwen called the nitrogen crisis an unwanted side effect of economic growth. Besides, he mentioned this issue has been known for a long time, he showed an article from the 1980's in which the same problem with ammonia, nitrogen overshoot plagued the Netherlands (R. van Leeuwen, personal communication, October 18, 2019). Maaïke Zwart mentioned dealing with such a limit can be extremely complex, so you need good strategies and you need to make difficult decisions (M. Zwart, personal communication, October 11, 2019).

K. other proposals for a degrowth approach in urban planning

Yet another the goal of this thesis is to identify principles and concepts of degrowth can help address issues that are not taken up successfully by sustainable urban planning. Listed below are several different categories of degrowth proposals that came up during the interviews.

K.1. the built environment

Both Carla Huisman and Ana Poças Ribeiro mentioned sustainable repurposing of existing buildings to have a strong connection with degrowth. Huisman gave the example of Nieuwland, where they let the inhabitants do part of the renovation themselves and focused on the pure essentials needed for livable building. Poças Ribeiro stated that though new buildings might be cheaper renovation is more sustainable. She proposed policies that incentivize working with what is already there in terms of physical structure but also in terms of functions (C. Huisman, personal communication, September 25, 2019; A. Poças Ribeiro personal communication, September 2, 2019).

Regarding the public space, Poças Ribeiro mentioned that cities are currently structured as sites of global supply chain consumption and she wondered what would occupy the space if that is reduced. She was in favor of more experiments:

“...it would be nice to see more space for experimenting, community activities, work less to have more time for communities, sharing skills, teaching each other stuff, doing arts, music. This would have to be promoted, it does not just happen, it is a cultural shift that requires an effort to take over the space of consumption” (A. Poças Ribeiro personal communication, September 2, 2019).

As a related idea she proposed to get production back

into the city, to produce goods while creating work and liveliness. And thus, also stimulating a local economy and the use of local resources. Which would combine well with the increased need for repair and maintenance in a degrowth society. Another idea she proposed was to use art in public space to create awareness about the urban metabolism (A. Poças Ribeiro personal communication, September 2, 2019).

K.2. civil participation and action

Julien-François Gerber mentioned activism is an important step towards degrowth, such as activism aimed at stopping large unwanted projects. He saw it as a way to get the truth out there and specifically noted the environmental justice movement as one of the most powerful anti-capitalist forces of the moment worldwide (J.F. Gerber, personal communication, September 23, 2019). The anonymous respondent felt strongly that the citizens of Amsterdam should be placed much more at the center of the attempts to make the city more sustainable. According to this person the citizens know very well how to do that, and in order to tackle these large issues, everyone needs to be on board. To the respondent that means more participation and more real citizen power (anonymous respondent, personal communication, October 21, 2019).

With the Nieuwland project and SOWETO Carla Huisman also worked on increasing participation and the influence citizens have over their own living environment. At the same time, she also warned about the limits of participation; people have a lot of things to do already, and many people are not well trained in meetings and assemblies or in practical home improvement work (C. Huisman, personal communication, September 25, 2019).

K.3. collaborative and social housing

As mentioned in paragraph H.2. co-housing was named as an example of a degrowth practice in Amsterdam. Carla Huisman stated that she had doubts about the scalability and therefore its ability to contribute on a large level to degrowth. She did think it could have an inspiring function as an example project to show what is possible and make

people think about possibilities. after the completion of Nieuwland they received many requests and questions from interested people. However, she thought it might be too exclusive because of time constraints, since it is specifically interesting to a certain subculture and perhaps too extreme to be adopted by a large target group (C. Huisman, personal communication, September 25, 2019).

Huisman did mention that elements from co-housing could be used in other projects like sharing certain amenities such as washing machines and it could also be a good form for elderly people. Another important underlying idea of the Nieuwland project and the SOWETO housing association is the idea that renting a house is a good thing and that arranging rental property together has merit as opposed to the individual owner-occupied form of housing. The question according to Carla Huisman is, whether a house is seen as a consumption good or an investment good. SOWETO looks at houses as the former, the goal is to have housing that is affordable right now, is good quality and makes you feel at home. SOWETO proposes renting not just for poor people, and not just for young people but as a full-fledged form of providing quality housing. And there are advantages, the houses are maintained well by professionals and there are no worries about mortgages (C. Huisman, personal communication, September 25, 2019).

Carla Huisman stated that for the biggest part of the 20th century the majority of Dutch people rented their houses. Between 1910 and 1997 more than 50% of the people lived in social housing and until the 1990 all rental properties were social housing. And people would live there as if it was their own property, in the sense that they had a permanent contract. Since they could stay there indefinitely, they also felt a sense of ownership, they were allowed to make adjustments to their house and there was no stigma, rents were low, and the housing quality was high. Huisman mentioned that this all changed quickly under neoliberal administration. The idea was that people should be stimulated to buy houses then they will take better care of them. The rental housing market is liberalized and from 2000 onwards it went very fast, rental

prices rose quickly in both the social and liberalized sector and social housing became something for the poor, not unlike social benefits according to Huisman. But her point was that this is actually a very recent development and that it does not have to be like that (C. Huisman, personal communication, September 25, 2019).

Huisman stated that with the stimulation of private housing property came the idea of the 'woonladder' (housing ladder) that as you become richer you need to find a bigger house matching your new social status. Which also increases the amount of time people move to a new house, whereas traditionally people, once settled, like to stay in the same place for long time. In the context of unnecessary economic growth, Huisman mentions, stimulating people to move, making them feel normatively that they have to improve, is a bad thing. Of course, at a certain point it becomes a rational choice. Today rents have risen so much that having a mortgage is financially smarter as compared to renting a house. Huisman stated that the non-commercial provision of houses is already quite strong in the Netherlands since the Dutch housing corporations are not very commercial. But the movement of social housing as something that used to be for everyone towards something that is only aimed at a (troubled) target group is still ongoing. In this light Huisman also sees co-housing in part as a way for people to be able to stay in Amsterdam, as an attempt of people with too little money for buying a house in Amsterdam but too high an income to be eligible for social housing. Huisman warned that this can also endanger the accessibility of existing social housing further, as an argument to further reduce the scope of the target groups. Therefore, she advised that in trying to improve the situation the merits of the current system should not be forgotten (C. Huisman, personal communication, September 25, 2019).

To reinforce social housing in the Netherlands Huisman mentions it could help to make the corporations more democratic. They once started out

as democratic member organizations but nowadays they are curious, non-profit entities, without members, with a lot of autonomy, a non-democratic board of directors who are not owned by the government either (C. Huisman, personal communication, September 25, 2019).

K.4. economic reform, national policy

The anonymous respondent criticized the perverse impulses created by striving for GDP growth and mentioned that other ways of growth and other ways of measuring are needed (anonymous respondent, personal communication, October 21, 2019). Corjan Brink also gave the example of the sustainability monitor of the CBS has recently started to be presented yearly just like the presentation of the national policy plans for the upcoming year (C. Brink, personal communication, October 14, 2019).

Ana Poças Ribeiro mentioned that squatters raise the point of using empty real estate, which could reduce the need for new commercial real estate. She agreed that an obligation to use empty real estate could help but also proposed shifting ownership scheme's, moving towards more collective ownership. Poças Ribeiro also stated that ownership by owners from far away reduces accountability. She described the current culture in real estate as one revolving around maximizing income from investments without thinking about the other impacts of these choices such as reduced accessibility to housing or prizing out interesting small-scale shops and functions. Poças Ribeiro gave the example of Berlin where a lot of interesting things are going on regarding this topic. With referenda people force the government to act to regain rental property for housing, to avoid speculation and rising prices by owners from all over the world that use real estate purely for investment purposes (A. Poças Ribeiro personal communication, September 2, 2019).

Julien-François Gerber saw partial planning of the economy as a good alternative to a market-based system that can help fulfill human needs while meeting

environmental standards. His inspiration for this was Karl William Kapp, arguably the first modern ecological economist. Gerber thinks this has to be re-discovered in economics. As part of such a proposal he could see that this would be combined with small businesses competing in a market, but some strategic sectors such as water supply, education and banks need to be democratized according to him. That can be done at the national level but also at a city or municipality level. He specifically mentioned the case of banks and investments:

"Banks have such a huge power in deciding the trajectory of our society, just by giving money in the form of loans, and we should have a say in it . . . Basically, the idea is to democratize investment and not to give this power of investment in the hand of the private sector for the biggest profit-making activities. That is not okay, degrowth does not agree with that" (J.F. Gerber, personal communication, September 23, 2019).

Furthermore, Gerber is a firm proponent of a bio-regional approach in economics. And he proposed a shift away from property towards possession, to stop the capability to accumulate property and take out many loans. He described these as post-capitalist measures but necessary ones to tame capitalism and stop the dynamics of growth. Related to that, he warned for debt and loans in general which is an often-heard line of thinking in degrowth as interest on loans is an important driver of growth and an expanding economy. Gerber describes loans and mortgages as something that binds people and puts pressure on them but also as a socially accepted discipline (J.F. Gerber, personal communication, September 23, 2019).

Rob van Leeuwen gave the example of a (lack of) national policy that had driven up prices for housing and given huge profits to private actors at the cost of individual households. This was the consequence of the fact that the proposed regulations that stated that governments could buy land for their current use value instead of future speculation value was rejected in the eighties. The so





figure 3.45. for the nieuwland project the inhabitants of the project collaborated on the renovation of the building (Nieuwland .n.d.)

called 'grondpolitiek' was opposed mainly by the right-wing parties. He stated that planning can point to these kinds of mechanisms in order to change them, however he warned for strong opposition (R. van Leeuwen, personal communication, October 18, 2019).

K.5. the food system

Michel Kegels thought that a lot more could be achieved in local food production whether it is on a national level, the hinterland of the city or in the city itself. The method he proposed for this agriculture is regenerative agriculture which has to do with strengthening the soil, sequestering carbon in the soil, stimulating biodiversity while producing food (M. Kegels, personal communication, September 17, 2019). As mentioned before, several other respondents also mentioned similar ideas (A. Poças Ribeiro personal communication, September 2, 2019; R. van Leeuwen, personal communication, October 18, 2019; anonymous respondent, personal communication, October 21, 2019). Rob van Leeuwen also mentioned farming co-operations as other form of doing business in agriculture and smaller scale local shops and restaurants which are not part of the global food system or large corporates (R. van Leeuwen, personal communication, October 18, 2019).

K.6. municipal policy

Ana Poças Ribeiro mentioned that there is a strong consumption culture currently. She stated that limiting advertising could help to decrease unnecessary wants or allowing for example only advertising for local projects and businesses. Poças Ribeiro also stated that municipalities should have a more facilitating and promoting role to test examples of alternative economies, stimulate farmers markets, local food networks, supply space for them, support them with tools and space (A. Poças Ribeiro personal communication, September 2, 2019). Corjan Brink stated that it can help if cities stimulate their inhabitants to actively participate in environmental issues by setting certain ambitions or limits (C. Brink, personal communication, October 14, 2019).

K.7. regional economic distribution

Carla Huisman noted that over the last few decades in planning there has been a shift from working towards spreading the welfare towards investing in 'winner-regions'. The government used to give subsidies for placing companies in less crowded areas and spread her own services across the country. The current idea is that investing in the winner-regions creates the most economic growth and is therefore a better investment, as pointed out in paragraph C.1. on agglomeration thinking. But what happens as a consequence of that, according to Huisman, is that there is an increased population growth in the Randstad due to labor migration which is causing local crowding and at the same time shrinkage of municipalities in the peripheral areas of the Netherlands. This is also related to the pressure to build a great deal in the big cities, while demolishing buildings in the more rural areas. Huisman called this a political choice; policy could also be direct towards creating more regional economic redistribution instead and towards decreasing growth. Which could help to reduce the pressure on housing in Amsterdam and reduce the need to build and demolish as much (C. Huisman, personal communication, September 25, 2019).

When confronted with this idea Maaïke Zwart deemed it a naïve thought from an economic perspective. Positioning offices or governmental functions elsewhere can have all sorts of side effects apart from the ideal goal, it could prove difficult for couples since both need to find adequate work and it could also mean an increase in commuting instead of people staying or moving there (M. Zwart, personal communication, October 11, 2019). Rob van Leeuwen found the thought interesting and did not want to dismiss it completely but also noted that unwanted or opposite effects might occur. He added that he himself would also not be inclined to leave the city, with all its interesting functions and cultural life (R. van Leeuwen, personal communication, October 18, 2019). The anonymous respondent saw merit in the

idea of economic redistribution because at least for once it questioned the mantra 'build more, build more, build more' that according to this respondent was not enough a topic of discussion. The respondent proposed to discuss the questions it raised like, why the need to build? For whom is Amsterdam building? And where are these buildings placed, what are the consequences? (anonymous respondent, personal communication, October 21, 2019).

K.8. tax reform

Both Corjan Brink and Rob van Leeuwen raised the point of taxes on fuels and (virgin) resources. Van Leeuwen explained how this could stimulate a regional food system (R. van Leeuwen, personal communication, October 18, 2019). Brink saw it as the core of the problem that a lot of environmental damage is not prized currently, from biodiversity to air pollution to CO2 and more. Because there is no monetary price for this environmental damage, it is not taken into account in deliberations regarding investments. His opinion was that if all negative externalities would be included in the economy that would strongly reduce economic growth or might even mean no growth. Then technological progress would then be aimed much more at reducing environmental pressure (C. Brink, personal communication, October 14, 2019).

L. downsides of- and risks for degrowth

Another important goal found in the sub questions of the thesis is to identify what might prevent a degrowth approach from being implemented in urban planning and what might be downsides to degrowth in urban planning. These were specific questions for the respondents, but the points also came to pass spontaneously several times during the interviews.

L.1. lack of inter-regional or international vision

Julien-François Gerber stated that an often-heard critique is that degrowth is really a localist project, that it jumps from local to the global without having an answer how to deal with intermediate levels of scale. In the spirit of Kallis he proposed the idea of the incubator, a test ground of local projects with a goal to be scaled up. Many incubators together can help to generate a new common sense, a concept of Antonio Gramsci that Gerber deems a valuable idea (J.F. Gerber, personal communication, September 23, 2019). Verena Balz stated that if cities become more autonomous as many degrowth scholars propose, they would lose certain agglomeration benefits leading to less growth or degrowth. Though she did not oppose that idea, she did mention there is a risk attached:

"I think, that is not bad, we live in a huge luxurious world, we can kick off a little bit. But my fear is that we lose lots of other qualities that come from cooperating with other countries, other people and other cultures". (V. Balz, personal communication, September 20, 2019).

Gerber did not agree that this worry is justified as he thinks that regions can still be in a dialogue with each other (J.F. Gerber, personal communication, September 23, 2019). However, Corjan Brink, when asked about degrowth ideas regarding regionalizing the economy, seemed to share this worry when he stressed the best way is to solve these issues globally and mentioned the need for global agreements that go beyond what has been set forth in the Paris climate agreements (C. Brink, personal communication, October 14, 2019). Balz did state that in fact a combination of a strong global frameworks with more local autonomy is not such a strange idea, it is recognized in ideas about resilient planning and adaptive planning. It is also something that historically the Netherlands have been good at, or as Balz states:

"...you need to engage local people and give them trust, try to empower them. But you cannot do this without a few key,

very robust guidelines. But this is of course an ideal world. The Netherlands have traditionally not been so bad in that because that lies also in the very form of the country where you have a concentration of water and floods, so people need to work together on the local level for a bigger goal. But okay, it is very difficult to organize and plan that.” (V. Balz, personal communication, September 20, 2019).

L.2. lack of shared popular vision

Ana Poças Ribeiro stated that degrowth requires asking some tough questions of the citizens, where they want to go as a society. (A. Poças Ribeiro personal communication, September 2, 2019). Corjan Brink was skeptical about the willingness of people to limit their behavior, even if there was a more widespread consensus on the downsides of growth (C. Brink, personal communication, October 14, 2019). Comments by van Leeuwen underline this challenge. He gave the example of the current situation with the excess nitrogen affecting biodiversity. Many farmers do not agree there is a problem, which shows that we do not all agree on the importance of environmental regulations (R. van Leeuwen, personal communication, October 18, 2019).

L.3. status quo and the existing culture

Ana Poças Ribeiro noted several other challenges for degrowth, she saw existing power structures as a major difficulty:

“Big multinationals with unsustainable supply chains based on overproduction and consumption, they bring in a lot of money, the financial dependence on multinationals is a big obstacle.” (A. Poças Ribeiro personal communication, September 2, 2019).

A related obstacle that Poças Ribeiro mentioned is the presence of existing networks which are in favor maintaining the status quo. This could be exacerbated by friendly relations between developers and municipalities for example. She characterized it as an issue that might be more present on a local level. A more severe form of

this issue that could also be detrimental to degrowth is corruption (A. Poças Ribeiro personal communication, September 2, 2019). Besides that, Poças Ribeiro stated that she thinks municipalities either might not want to interfere with the free market, or they are not allowed to support certain initiatives because of neoliberal public procurement legislation. This could further impede the implementation of a degrowth approach in urban planning. Next to existing power structures and their paradigms Poças Ribeiro mentioned that citizens currently have a strong consumption culture that might result in backlash if limits are imposed. Finally, Poças Ribeiro mentioned that a potential risk is that during the transition towards a degrowth approach in urban planning there might be initial issues with financialization of the built environment (A. Poças Ribeiro personal communication, September 2, 2019).

L.4. systemic issues

Furthermore, several risks were mentioned that might be qualified as systemic issues that one could encounter in any kind of transition such as the well know free rider problem, self-deception and the rebound effect.

Corjan Brink mentioned multiple times that he saw a kind of free rider problem and capital flight as a major hurdle to implementing degrowth. The best way in his opinion to tackle environmental issues is on a global level. But if you cannot get all countries to join then what might happen according to Brink, is that some countries try to profit from the restrictions other countries put in place. Then you could get environmental and or social benefits on a national level that might be negated on a global level (C. Brink, personal communication, October 14, 2019).

Asked what he thought are the most important things that would prevent implementing degrowth in urban planning Julien-François Gerber answered that the false idea that we live in sustainable cities is a big hinderer for true sustainability: *‘This false consciousness, false information that we are doing great, we are too good at that’* (J.F. Gerber, personal communication, September

23, 2019). Furthermore, Gerber mentioned the Jevons paradox, a very important concept to degrowth. He saw this as another risk that might be an obstacle to the implementation of degrowth ideas. This paradox describes a phenomenon first signaled by William Stanley Jevons. He found out that for certain resource extraction processes the more efficient we are, the more we use. Today this idea is also known as the rebound effect and is often quoted in degrowth literature to illustrate how growth outpaces improvements in efficiency (J.F. Gerber, personal communication, September 23, 2019).

L.5. downsides of degrowth

Next to these risks several possible downsides of degrowth were mentioned. Corjan Brink wondered if you really have an economy decreasing in size with a decreasing GDP, especially in a world where other countries then do experience growth, does that not make it a decline, the start of a negative spiral downwards (C. Brink, personal communication, October 14, 2019). This relates to another potential downside mentioned by several respondents, a reduced quality of life. Julien-François Gerber thought we could easily adapt to that if necessary, but he still mentioned the possible disadvantages: ‘...could your life quality be deteriorated? Are you going to grow your food? Are you going to not visit your family far away? Are you going to take shorter showers?’ (J.F. Gerber, personal communication, September 23, 2019).

Van Leeuwen emphasized a similar point we he mentioned that when people have to give up modern comforts like computers or cars, people care a lot, nobody wants to do that, it makes people very unhappy because they assume their current level of material welfare as the standard (R. van Leeuwen, personal communication, October 18, 2019). Gerber also raised doubts about the work issue. Often degrowth scholars state there is a need and possibility in degrowth to reduce the amount of work in an absolute sense, to regain more free time. Gerber stated that this might

be unlikely in organic agriculture for example which could actually require more work. A degrowth society might be a society where people would have to work quite a bit (J.F. Gerber, personal communication, September 23, 2019).

M. additional topics

In this category, two other themes are discussed that came up during the interviews but did not directly fit in the other categories.

L.1. capitalism & degrowth

Often people wonder whether degrowth is compatible with capitalism. Julien-François Gerber stated that he thinks that degrowth is not possible in a capitalist system. Asked whether that meant that the capitalist system first needs to be overthrown he stated that it is important to perceive the existing diversity capitalism:

‘I think it is useful to see some heterogeneity in capitalism. It is not just a big block that is fully coherent. Within a capitalist society, meaning a society where capitalist relations are dominant, there are many other types of relationships and many types of activities, there is a gift economy, there are mafias, not everything that is not capitalist is positive!’ (J.F. Gerber, personal communication, September 23, 2019).

Gerber stated that he does not believe in a revolution, a completely new start. He felt it was a macho way of thinking. Instead he emphasized the point of recognizing the existing diversity and seeing where the cracks in the system are. And these cracks need to be encouraged according to him, which has a strong parallel with the aforementioned prefigurative approach present in degrowth (J.F. Gerber, personal communication, September 23, 2019). Michel Kegels also stated that he does not believe that a revolution can really shift the balance of power in a long term and stated that they are accompanied by tremendous destruction (M. Kegels,

personal communication, September 17, 2019). Ana Poças Ribeiro also saw a transition towards degrowth more as a gradual shift (A. Poças Ribeiro personal communication, September 2, 2019).

L.2. a planned economy versus a free market approach

As mentioned before, Julien-François Gerber saw partial planning of the economy as a good alternative to a market-based system that can help fulfill human needs while meeting environmental standards and getting as close as possible to a non-growing circular economy. Gerber stated that both sides can be criticized. In planning there is a certain hubris he said, the idea that intellectually you can just control everything in society can be dangerous. On the other hand, small businesses can also be very exploitative to people. According to him it is about finding a good balance (J.F. Gerber, personal communication, September 23, 2019).

The topic of a free market versus a planned market came up in multiple interviews (M. Kegels, personal communication, September 17, 2019; C. Huisman, personal communication, September 25, 2019; R. van Leeuwen, personal communication, October 18, 2019). Multiple respondents stated they did not see the current system as a free market system. Kegels stated that the current system is in fact better described as a type of 'corporatism' and what free market there is, is regulated to a large extent by the government. Kegels nuanced the idea of free markets, he stated that small scale local care for elderly in neighborhoods could also qualify as free market and that the separation between the social part and the commercial part of the market is an artificial divide that is unnecessary (M. Kegels, personal communication, September 17, 2019). Both Carla Huisman and Rob van Leeuwen said the market is regulated in a very specific way, for example farmers cannot unite to set a specific price for potatoes because of antitrust laws. But supermarkets are allowed to become so big that they can demand a very low price from individual farmers. Van Leeuwen states that

this happened in France to an even more extreme extent and that it forces farmers into a rat race of expansion and investment of which the main beneficiaries are the large corporations such as the private banks, the supermarkets and the agricultural engineering companies (C. Huisman, personal communication, September 25, 2019; R. van Leeuwen, personal communication, October 18, 2019).

discussion & conclusions

4

This chapter brings all the results together. By synthesizing the various analyses and the theoretical framework the discussion answers the sub-questions. The discussion ends with a section on the implications of the findings considering the existing research. Consequently, the conclusion summarizes the entire research project briefly and answers the main question posed in the introduction. This is followed by an overview of the limitations of the study and recommendations for further research.



1.

DISCUSSION

After the analysis of the results, it is time to discuss all the findings of this research project in light of the research questions that have been posed in the introduction. This means synthesizing the findings from the theoretical frame, the document analysis, the historical analysis and the interview analysis. To reiterate, the theoretical framework explored urban planning, sustainability, the growth paradigm, sustainable urban planning and the concept of degrowth. It showed what different opinions there are to be found within the existing literature. The document analysis gave insight into what the current proposals are from degrowth literature for (sustainable) urban planning. The historical analysis provided background information on the history of urban planning and revealed several similarities between historic proposals and current degrowth proposals. Finally, the interviews gave insight into the opinions and ideas of current practitioners from the field of sustainable urban planning and degrowth on the research questions. In order to find out what this all means when taken together, first the main research question is repeated:

'Is there a need and potential for degrowth in sustainable urban planning in Amsterdam?'

To answer this main question, it was divided into several sub-questions with their own research methods. The following five sub-questions were formulated:

sub-questions

- A. How does the growth paradigm influence (sustainable) urban planning?
- B. Can a degrowth approach tackle urban planning issues not addressed (sufficiently) by current sustainable urban planning concepts?
- C. What are promising principles and concepts of degrowth with which to address issues of sustainable urban planning?
- D. What might prevent urban planning from implementing a degrowth approach?
- E. What could be downsides of a degrowth approach in sustainable urban planning?

The theoretical frame as well as the interviews provided input to the answers of all sub-questions. Answering sub-questions, A, B and E was further supported by the historical analysis. And answering questions C and D was supported by the document analysis. Answers to these questions will now be discussed in the order shown above.

A. sub-question 1

how does the growth paradigm influence (sustainable) urban planning?

The growth paradigm or mindset refers to the belief that economic growth is always good, necessary and essentially limitless and that it is the driving force behind many social benefits (see chapter 2. theoretical frame, section 3.). The interviews and historical analysis show multiple ways in which both economic growth as a goal or the belief in infinite economic growth have shaped (sustainable) urban planning. Below some of the most important consequences that were observed in the theoretical frame, historic analysis and the interviews are listed. Next to challenges and negative side effects, several positive side effects of growth thinking in urban planning can be highlighted such as increased international collaboration or the development of strategic long-term plans. However, the focus here lies on challenges posed to sustainable urban planning because of the dominant growth paradigm.

1. the growth mindset leads to urban planning that is highly dependent of market activity.

In the last decades and certainly after the fall of the Berlin Wall the belief in the efficiency of the market and the positive benefits of liberal policies was very high. This is described in the interviews by Verena Balz as the belief that the markets would produce only win-win situations (V. Balz, personal communication, September 20, 2019). The historical analysis illustrated how this led to a disbelief in planning and a perception of planning as a process that restricted economic growth and competitiveness (Olesen, 2012). This caused deregulation and privatization and led to a type of 'permitting planning', where the government took a more enabling role and the planning departments curtailed their future-oriented and prescriptive side (de Klerk & Kreukels, 2015). The interviews confirmed this; respondent Maaike Zwart, who works on sustainable

area development at the municipality of Amsterdam, noted that indeed their influence was quite limited and dependent to a large extent on market activity and the willingness of market actors to cooperate with them (M. Zwart, personal communication, October 11, 2019).

The dominance of market dependent planning has implications for sustainability in urban planning. A relation can be found here with the statement of Barrie Needham in the theoretical background on sustainable urban planning. He wrote that contrary to the judgement of the Brundtlandt commission sustainability now means that environmental consequences need be considered only insofar as they are socially and economically acceptable in the short term (Needham, 2016). This has to do with the fact that commercial actors cannot be expected to have the same long-term ambition and stability as governmental agencies. Therefore, having a high dependency on these actors limits long term thinking required for sustainability.

2. growth based urban planning tends to focus on high potential areas and high value activities.

As mentioned in the theoretical frame, sustainable urban planning based on growth, which consequently has this large market dependency, has a tendency to develop where it is commercially viable and attractive which reinforces regional inequality (Rydin, 2013; Savini, 2019). Furthermore, it produces an inclination to develop for high value activities which can stimulate gentrification (Rydin, 2013). Speaking in terms of social justice these are clear challenges of a growth based sustainable planning.

3. a growth mindset stimulates agglomeration thinking.

Verena Balz, assistant professor at the TU Delft chair of spatial planning and strategy, stated in her interview that the integration of the European union and the development of the European internal market caused competitiveness between urban areas, which fuelled economic growth (V. Balz, personal communication, September 20, 2019). This is part of why the Dutch government adopted an agglomeration mindset and

started to invest in its 'winner regions'. As the historical analysis showed, this meant offering a good business climate and implementing the concept of the Netherlands as a distribution economy with certain 'mainports' such as the Harbour of Rotterdam or Schiphol became priorities. However, both the historical analysis and the interviews showed that this has been quite different in the recent past. Spreading the welfare and a concept of regional economic redistribution were important policies in the sixties and seventies (C. Huisman, personal communication, September 25, 2019). According to Balz the consequence of this agglomeration strategy and open markets is more economic growth (V. Balz, personal communication, September 20, 2019). Bigger harbors lead to more trade, well connected airports lead to more flights and more road infrastructure supports more commuting and transport. According to Carla Huisman it also leads to shrinking areas in one part of the country and crowded in the other, such as in Amsterdam (C. Huisman, personal communication, September 25, 2019). One of the consequences is more pressure on Amsterdam, and many new houses being built there. While at the same time houses are being demolished in other parts of the country. This can also reinforce the spatial injustice highlighted in the previous paragraph.

4. the growth mindset leads to private land speculation.

Both the interviews as well as the historical analysis point out that private land speculation is another consequence of the growth mindset, enabled by right wing political parties with a liberal agenda (interview: R. van Leeuwen, personal communication, October 18, 2019) (historical analysis: Needham, 2016; Vollaard, 2005). The last progressive left-wing government in the Netherlands at the end of the seventies, before a period of right-wing dominance, proposed a law to keep housing and collective amenities affordable by giving municipalities a pre-emptive right to buy land (known as de 'grondpolitiek'). The proposal allowed them to buy the land for the current usage value instead of future development value. However,

the proposal was never signed into law because it led to a cabinet crises and new elections that started a period of right wing, neoliberal dominance. An important reason was that both farmers as well as developers wanted the freedom to chase private economic improvements. Respondent Rob van Leeuwen also pointed out this proposed legislation. He stated that a large part of the land bordering Amsterdam is currently owned by investments firms with the hopes to make a considerable profit when new land is designated for development (R. van Leeuwen, personal communication, October 18, 2019). The historical analysis showed how the introduction of commercial property developers on the land market pushed out municipalities as key players and raised the prices for land and in turn everything that the land is to be used for (Needham, 2016). This in turn either limits what the money would otherwise be spent on whether it is building quality, sustainability or flexibility or it reduces the affordability of the land and housing.

5. a growth mindset emphasizes densification of cities.

Tension between urban growth and environmental effects has long been acknowledged in Dutch planning as the historical analysis has shown. There have been differing policies that all had a goal to keep the countryside and what little nature there is in the Netherlands free of urban sprawl, from designating small cities as 'urban growth cores' to the idea of compact cities (Koomen & Bruinsma, 2018; van Schijndel, 2016). At the same time, as shown in theoretical frame, the growth paradigm suggested that a decoupling can be achieved to divorce economic growth as expressed in GDP or growth of land use, industry or housing from negative environmental impact (Ellen MacArthur Foundation, 2015; Matsumoto & Daudey, 2014).

In recent history, determining spatial planning policy has shifted towards lower regions of government because of the decentralization that has taken place.

The historic analysis showed the municipality of Amsterdam shares the compact city vision; it does not want to expand the city in terms of the amount of built-up land. It does want to facilitate the economic growth and population growth within the city. A willingness to facilitate growth combined with a strategy to concentrate leads to densification as a main approach to creating a sustainable city. Interviews with respondents who have worked at the municipality confirm this (M. Zwart, personal communication, October 11, 2019; R. van Leeuwen, personal communication, October 18, 2019). However, the interviews also revealed that Amsterdam copes with a diminishing amount of green space in the city and an increased pressure on the surrounding rural area because of the ongoing densification (anonymous respondent, personal communication, October 21, 2019). Densification is not a silver bullet and despite some clear advantages of compact cities, it collides with the recreational value of the surrounding land and with the agricultural landscape, which is aiming for every higher productivity because of similar growth impulses according to Rob van Leeuwen (personal communication, October 18, 2019). Another respondent said he felt the city was reaching its maximum capacity of people because of the friction with sustainability related goals (anonymous respondent, personal communication, October 21, 2019).

B. sub-question 2

Does a degrowth approach address issues not addressed (sufficiently) by current sustainable urban planning?

The general image that emerged from the interviews on the progress of Amsterdam is that sustainable urban planning has historically been good at tackling local issues such as reducing local air pollution, supporting cycling and conserving natural areas (A. Poças

Ribeiro personal communication, September 2, 2019). However, the answers also indicated that the weakness of sustainable urban planning lies in improving global and long term environmental and social issues such as greenhouse gas emissions, over-tourism and rising prices for housing (A. Poças Ribeiro personal communication, September 2, 2019; J.F. Gerber, personal communication, September 23, 2019; anonymous respondent, personal communication, October 21, 2019). Corjan Brink who works at the PBL stated that indeed environmental pressure has often not been eradicated but exported, though at the same time the Netherlands does also experience local environmental pressure due to consumption elsewhere (personal communication, October 14, 2019). Another respondent, Julien-François Gerber, stated that at a metabolic level sustainable planning is not sustainable at all. Gerber thinks that people often have very naïve ideas about the social metabolism. He called the idea that the Netherlands is good at sustainable urban planning a dangerous illusion, as it can prevent people from taking the kind of serious action that is required to solve important issues (personal communication, September 23, 2019). Another respondent mentioned an initiative that started monitoring the ambitions that the municipality has set such as the amount of green space per person, recycling rates and emissions. The goal is to hold the municipal council accountable for the milestones they should be achieving on the road towards the goal. He stated that the ambitions in general are quite good, but his judgement was that most ambitions were not being achieved (anonymous respondent, personal communication, October 21, 2019). Below several ways of how a degrowth approach can respond to issues that sustainable urban planning does not sufficiently address.

1. challenging systemic issues and drivers of unsustainable behavior

Degrowth starts out with a system analysis of why the societal system, or in this case the planning system does not achieve more equality and take better care of the environment. A quality of degrowth according to the



figure 4.2. a large part of the land bordering Amsterdam is currently owned by investments firms with the hopes to make a considerable profit when new land is designated for development (Heeling, 2017)



interviews is revealing the drivers or systemic issues that cause environmental pressure and fuel inequality. This is highlighted by examples from the document analysis such as proposals to limit the need for credit as the current monetary system stimulates an expansion of the economy because of compound interest and private money creation (see chapter III section 1). An example from the interviews is the aforementioned role of land ownership in speculation which drives up housing prices (R. van Leeuwen, personal communication, October 18, 2019). An example from the theoretical frame is the inequality arising from an urban planning based on growth (Rydin, 2013; Savini, 2019). Or the perverse incentives that arise when GDP growth is set as a goal, as signified by how things like cigarette advertising, weapon manufacturing, the destruction of forests and even car crashes all count towards economic growth (Kennedy, 1968; anonymous respondent, personal communication, October 21, 2019).

As stated in the theoretical frame sustainable urban planning tends to focus more on proposing solutions that do not challenge the current paradigm or the existing system (Poças Ribeiro, 2012), instead focusing on solutions that are still economically and socially feasible in the shorter term (Campbell, 2016; Needham, 2016). These goals might be more straightforward to realize since they require less change for the status quo, however their downside is a lack of significant impact.

An unexpected topic that came up during the interviews was a discussion on the way the current economy is planned. Gerber suggested that people should rediscover literature and experts on (partially) planned economy like the work of Karl William Kapp (personal communication, September 23, 2019). However, several other respondents noted that the current free market is in fact regulated to such an extent that it borders on corporatism (C. Huisman, personal communication, September 25, 2019; M. Kegels, personal communication, September 17, 2019; R. van Leeuwen, personal communication, October 18, 2019). An example is the large power supermarkets have to determine the price of the produce they buy from farmers. Which forces farmer to grow to be profitable. This in turn

reflects on the Dutch landscape and interferes with the goals and ambitions of the field of planning. It can be seen as another systemic driver that a degrowth approach could address.

2. setting strict limits to combat inequality and environmental degradation

As can be deduced from the document analysis, degrowth proposes the recognition of the earth as a place of finite resources and resource sinks and consequently advocates for the implementation of boundaries that limit inequality such as a maximum income per capita and boundaries that curtail environmental damage such as a limit to emission or large infrastructures. Degrowth also puts forward a viewpoint in which there is a strong relation between the social foundation and environmental overshoot, as illustrated most eloquently by the concept of the doughnut economy of Kate Raworth mentioned in the theoretical framework (Raworth, 2012).

3. regionalizing the economy to address global issues

Sustainable urban planning has high hopes of the positive benefits of a circular economy. In the interviews a respondent rightfully said that an advanced regional economy is a prerequisite for the circular economy (anonymous respondent, personal communication, October 21, 2019). Yet based on the interviews sustainable urban planning in Amsterdam pays little attention to re-localizing the economy, whereas for degrowth this is a major aspect of a sustainable economy and sustainable cities based on the document analysis and the theoretical framework (Latouche, 2009). Current sustainable urban planning tends to support the displacement of environmental and social pressure (C. Brink, personal communication, October 14, 2019). For degrowth a re-localization is a way to impact global social and environmental issues, by reducing distances between production and consumption, by making environmental and social

impacts visible and to connect the larger challenges such as climate change to local tangible local projects. This might include restricting current urban or municipal boundaries to re-connect rural and urban to change the autonomy, impact and economy of urban areas.

4. living the example, a prefigurative approach

Another value of a degrowth approach that the interviews pointed towards is its prefigurative approach (J.F. Gerber, personal communication, September 23, 2019; A. Poças Ribeiro personal communication, September 2, 2019). This means that degrowth supporters in their own groups already live the way they think is right, as illustrated by the local examples of collaborative housing and urban farming in Amsterdam that came up during the interviews (M. Kegels, personal communication, September 17, 2019; C. Huisman, personal communication, September 25, 2019).

Degrowth thus can be seen as a movement in which people try to practice what they preach, to create the alternatives on the spot and with that show what is possible and potentially influence policy. This is in line with ideas that a transition evolves through incremental change as opposed to a sudden transformation, an idea that seems to be dominant in degrowth thinking. Gerber saw this as a parallel with anarchist thinking and a difference with Marxist reasoning, in which a revolution is often seen as a prerequisite for change (J.F. Gerber, personal communication, September 23, 2019).

C. sub-question 3

What are principles and concepts of degrowth with which to address issues of sustainable urban planning?

Based on the document analysis of degrowth proposals and the interviews many propositions for a degrowth approach in urban planning were identified. Some

proposals are hypothetical, others are examples of existing practices already taking place in Amsterdam. Some measures have an overlap or similarity with existing proposals from the field of sustainable urban planning while others are new to the field. As seen in the results of the document analysis, measures were ordered thematically and according to strategy type using the categorization of Eric Olin Wright. He discerns three types of strategies: interstitial, symbiotic or ruptural (Wright, 2010). Interstitial refers to the strategy of creating practical alternatives or nowtopias that live the change, symbiotic refers to the strategy of working with the state on policy changes that head in the right direction and undermine the growth ideology.

In the model, following Schmelzer and Vetter (2019) the category of ruptural transformations was used to refer to all actions that stimulate a mental break with the existing paradigm. They mention activism, but also seminars and media that show the importance of a different approach (Stegehuis, 2019), it can also be seen as the internal dialogue within institutions criticizing and moving away from growth-based practices. As this proposed paradigm change from a growth based to a degrowth urban planning is similar for all themes, whether the topic is economic reform or changes in the process of planning, the ruptural strategy was placed in the middle of the model.

Below a list of promising proposals is offered ordered per theme for both the interstitial as well as the symbiotic strategies (see chapter 3 section 1 for the full overview of degrowth proposals for urban planning). This has also been visually represented as can be seen in figure 4.3, this shows the model of the thematic and strategic categorization of degrowth proposals for (sustainable) urban planning.

urban (public) space and ownership

- **Symbiotic: stimulate mixed, self-sufficient neighbourhoods** → this stimulates a local sustainable economy in urban areas, socially diverse and not dominated by private motorized transport (Alexander & Gleeson, 2019; Savini, 2019).
- **Interstitial: set up community land trusts to decommodify land ownership** → this can help to ensure housing affordability in cities and thus allows building for diverse groups of people, it also reduces speculation with houses (Mayerfeld Bell & Carolan, 2009; Wächter, 2013).

housing and construction

- **Symbiotic: making not for profit and affordable rental housing the norm again** → this can help to ensure affordability of urban housing for a broad target group and reduces the need for mortgages and loans (C. Huisman, personal communication, September 25, 2019), which helps to reduce the growth impulse of society at large and can make the economy more stable in situations of no-growth (J.F. Gerber, personal communication, September 23, 2019). As access to affordable housing is an important issue nowadays (see chapter 3.2.) this could be a popular proposal that generates goodwill.
- **Interstitial: setting up forms of collaborative housing** → collaborative housing can mean more people can live in the same urban area and it allows people to share time, skills and goods outside of the commodified economy which can have positive social and environmental benefits (Lietaert, 2010; C. Huisman, personal communication, September 25, 2019)

the urban food system

- **Symbiotic: utilize local food policies and procurement** → this can reduce the ecological

footprint of the urban food sector while giving meaningful work to people in a local economy (A. Nelson & Schneider, 2018a; Odum & Odum, 2001). It can also stimulate ecological regeneration with sustainable ways of farming (M. Kegels, personal communication, September 17, 2019).

- **Interstitial: engage in community supported agriculture** → the effects are the same as the symbiotic strategy: reducing the ecological footprint of the urban food sector while giving meaningful work to people in a local economy and stimulating ecological regeneration with sustainable ways of farming. It also increases awareness of the participants regarding food production.

the monetary or tax system

- **Symbiotic: implement a green tax reform** (*tax for motorized transport, property taxes, tax on capital and resources instead of labour etc.*). → taxes can help to limit urban sprawl and private motorized mobility, limit speculation with housing, determine who benefits of urban development, influence where companies settle and what their activities are and reduce vacant real estate (Alpkokin, Kuriyama, & Hayashi, 2004; Kallis, 2015; Mcfarlane, 1999)
- **Interstitial: create local currencies and introduce local credit systems** → currently investment decisions are often very undemocratic as many investors are private parties such as private banks or rich individuals. Local currencies and local credit systems can help to democratize this system (Gerber, 2015).

the economy at large

- **Symbiotic: employ a policy of regional economic redistribution** → regional economic redistribution can help to counter agglomeration thinking that is growth inducing and lead to more distribution of wealth, it might also help to reduce shrinkage

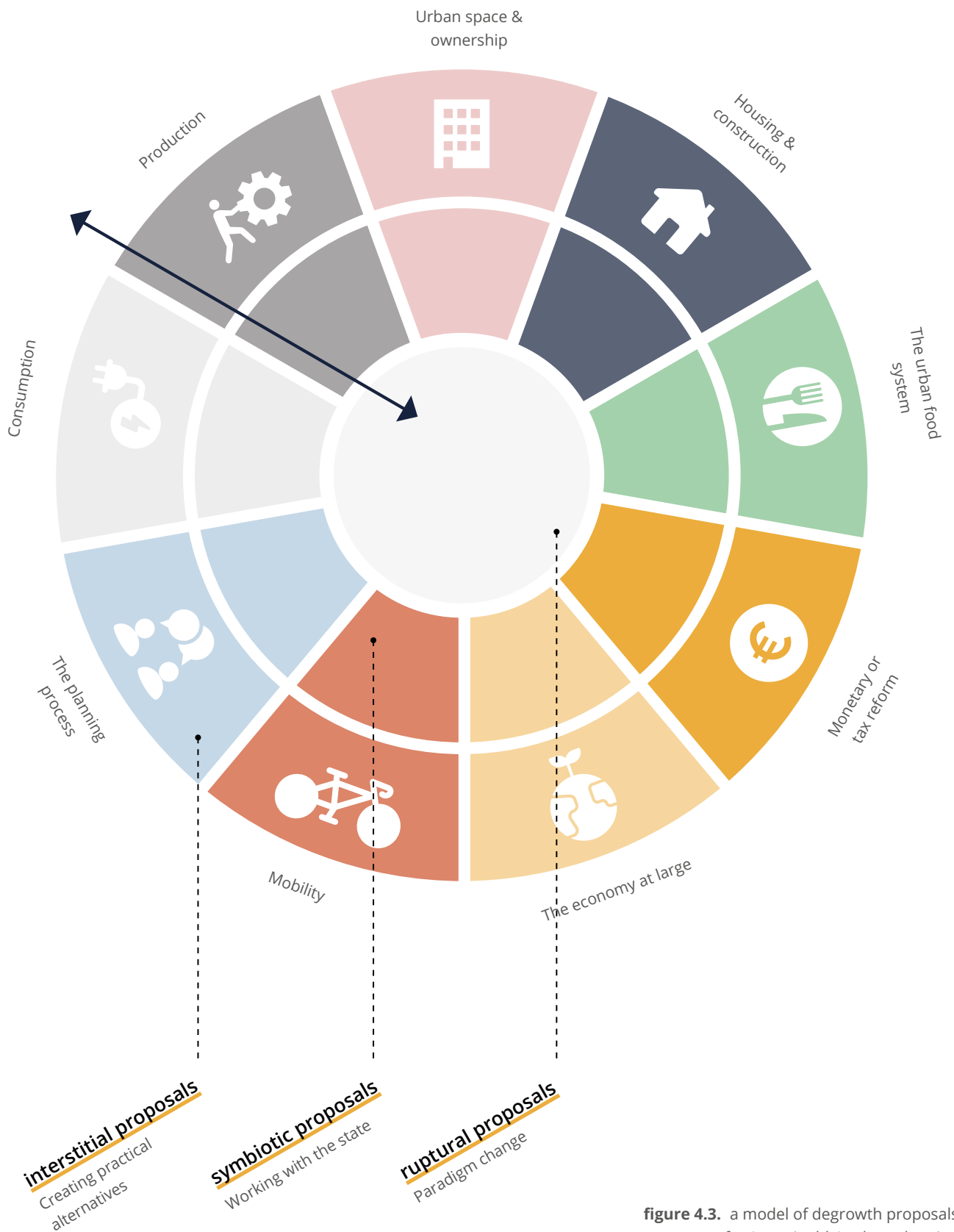


figure 4.3. a model of degrowth proposals for (sustainable) urban planning

and urban concentration, and thus unnecessary demolition and reconstruction (C. Huisman, personal communication, September 25, 2019).

- **Interstitial: reduce commodified work (supported by a basic income)** → this can help to stimulate a local neighbourhood economy where people share skills and resources. This reduces the dependence on economic growth for welfare (Alexander & Gleeson, 2019; Kallis, 2015)

mobility

- **Symbiotic: set limits and taxes on private vehicles and aviation** → this reduces the ecological footprint of urban dwellers and creates more space for public and active modes of transport (Lehtinen, 2018). It can also create space for other local neighbourhood economic activities such as urban farming (M. Kegels, personal communication, September 17, 2019).
- **Interstitial: use and support shared, public and active transport modes** → this helps to reduce the carbon footprint of transport in urban areas (Lehtinen, 2018).

the planning process

- **Symbiotic: improve participation and transparency of the planning process** → this stimulates the development of urban policy in the service of the common good instead of the growth of capital for private investors and corporations (Alexander & Gleeson, 2019: anonymous respondent, personal communication, October 21, 2019).
- **Interstitial: engage in participation processes and set up local interest groups** → just like the symbiotic strategy this stimulates the development of urban policy in the service of the common good (Alexander & Gleeson, 2019). Additionally, it increases the awareness of local needs and opportunities of the participants

consumption

- **Symbiotic: reduce consumption inducing advertisements and consumption inducing public space** → Reducing advertisements in urban areas can reduce consumption, relax positional competition and reduce the sense of frustration that comes with lack of growth (Kallis, 2015: A. Poças Ribeiro personal communication, September 2, 2019)
- **Interstitial: developing affordable and low-impact leisure activities** → functions that offer leisure activities in urban areas that are affordable and do not have a big negative impact can increase wellbeing while decreasing the environmental impact. Examples are engaging in making or repair activities; setting up second hand shops; or gardening (Alexander & Gleeson, 2019).

production

- **Symbiotic: stimulate local and circular production of goods** → the necessity of circular production is clear, many resources are scarce and energy intensive this can be reduced with circular production of urban goods and buildings (A. Nelson & Schneider, 2018a; Odum & Odum, 2001). A real circular economy needs to abandon the growth paradigm (J.F. Gerber, personal communication, September 23, 2019) and is highly dependent on a local economy for low-energy repair and re-use (anonymous respondent, personal communication, October 21, 2019)
- **Interstitial: set up regional cooperatives for food or energy** → regional cooperatives can help to make cities more autonomous (Savini, 2019) while providing a workplace with a democratic structure aimed more broadly at the common good instead of just profit and economic growth (Alexander & Gleeson, 2019; Kallis, 2015; Wächter, 2013)

D. sub-question 4

What might prevent sustainable urban planning from implementing a degrowth approach?

Many of the interview respondents questioned economic growth as a goal already. And although some respondents who were not familiar with degrowth at first, were pleasantly surprised upon further explanation this did not mean everyone was convinced of the need or the potential of a degrowth approach. Several critiques were given. The critiques can be separated into a category of risks for the implementation of degrowth and possible downsides of a degrowth implementation. The risks are listed below.

1. the name of degrowth

A frequent point of critique is the name 'degrowth', which was qualified as reactionary or too negative (M. Kegels, personal communication, September 17, 2019; R. van Leeuwen, personal communication, October 18, 2019). This is a critique that is leveraged against degrowth more often, as discussed in the theoretical frame. A consequence is that this term could potentially encourage negative judgement, scare people away, or make people think of degrowth in a very narrow way, that it is just about shrinking the economy, reducing the GDP (Drews & Antal, 2016). During the interviews, in one instance the opinions changed when more background information was given. In the case of the urban farmer, he held on to his statement that he would not quickly associate with degrowth since the core of his business is about growing fruits and vegetables and his starting company (M. Kegels, personal communication, September 17, 2019). Despite that, he did agree with many of the underlying ideas of degrowth and local and urban farming itself is strongly supported from a degrowth perspective. Perhaps another slogan that is growth critical but gives more context what to grow and what not to grow can reconcile the differences and

bridge the gap between the linguistics of degrowth and the local food industry, something along the lines of 'grow food, not the economy'.

2. degrowth questions progress

The questioning of conventional idea of progress was another point of critique or at least mentioned as a challenge to degrowth (R. van Leeuwen, personal communication, October 18, 2019; J.F. Gerber, personal communication, September 23, 2019). Gerber, as a degrowth proponent himself had some difficulties of how degrowth challenges the concept of linear progress when he was first introduced to it (J.F. Gerber, personal communication, September 23, 2019). Van Leeuwen mentioned that this is something people prefer not to be confronted with. According to van Leeuwen people always want to improve their situation, also in a material sense (R. van Leeuwen, personal communication, October 18, 2019). Several decades back the society might have been more sustainable and despite flying less and consuming less products people were just as happy, as Easterlin showed (Easterlin, 2016). But people take their current material affluence as their basic level and any limitation is seen as a regression. In essence, the point is that questioning and limiting current ideas of progress feels like taking something from people, which makes them more angry, more sad than they were before having it.

3. lack of popular support

Another respondent was sceptical about getting popular support for degrowth, he thought people would never 'degrow' voluntarily without strict top down limits, which might be hard to put in place (C. Brink, personal communication, October 14, 2019). This relates to the comment of Poças Ribeiro that people cherish the current consumption culture a lot, and that this might be an obstacle to degrowth (personal communication, September 2, 2019). Poças Ribeiro stated that alternatives to how people spend their free time need to be developed so that people begin to open up to alternatives (personal communication, September 2, 2019).

4. existing power structures, free riders and false ideas of progress.

Yet another risk that might prevent a degrowth approach from taking hold are existing power structures, such as the power held by big corporations or current free market legislation (A. Poças Ribeiro personal communication, September 2, 2019). Furthermore, Corjan Brink mentioned the free rider problem and the concept of capital flight. If the Netherlands or just the city of Amsterdam would implement a degrowth approach, other cities or global society might not follow suit and instead take over the current production, consumption taking place here leading only to a relocation or even a worsening of the situation (C. Brink, personal communication, October 14, 2019). If climate goals remain to be measured on a national level this could for example mean Utrecht relaxes its policy because Amsterdam is doing enough for two cities (C. Brink, personal communication, October 14, 2019). Finally, Gerber mentioned the false idea that urban areas are doing great as a big risk to taking real action. This is further exacerbated by the poor understanding of the rebound effect, that confuses energy efficiency with real impact reductions.

5. historical precedent: lack of system change

The historical analysis provided some insights as to why similar policies and ideas to current degrowth ideas failed before. The communes of Fourier and Owen failed in part because of the absence of authority which blocked planning and organized development (Kostof, 1991). Ebenezer Howards social ideals like communal land ownership, working in cooperatives and self-government were watered down by the concessions made to fit in to liberal democracy and their realization was too dependent on benevolent market actors (March, 2004; Tizot, 2018). And finally, the attempts in the Netherlands to decommodify the land market in the matter of the 'grondpolitiek' failed to get the political support to find passage, in part because of the private interest of Dutch farmers.

E. sub-question 5

What could be downsides of a degrowth approach in sustainable urban planning?

Many of the interview respondents questioned economic growth as a goal already. And although some respondents who were not familiar with degrowth at first, were pleasantly surprised upon further explanation this did not mean everyone was convinced of the need or the potential of a degrowth approach. Several critiques were given. The critiques can be separated into a category of risks for the implementation of degrowth and possible downsides of a degrowth implementation. The potential downsides are listed below.

1. reduced international cooperation

Both Verena Balz as well as Julien François Gerber noted that degrowth is quite focused on the local level (V. Balz, personal communication, September 20, 2019; J.F. Gerber, personal communication, September 23, 2019). Gerber stated that degrowth receives this critique more often, that it is a localist project, which corresponds with findings from the theoretical framework. However, Gerber does not see it as something that could prevent degrowth from being effective, merely a point that needs consideration (J.F. Gerber, personal communication, September 23, 2019). Verena Balz fears that degrowth could lead to less international or global cooperation (V. Balz, personal communication, September 20, 2019). If this is the case, then this could potentially also work against sustainability goals as international pressure and treaties can have a global effect, and avoid free rider problems and capital flight as mentioned by Corjan Brink during the interview (C. Brink, personal communication, October 14, 2019). On the other hand, the required progress regarding climate change has not been reached by far despite decades of global summits and conferences.

2. a negative spiral downwards & reduced quality of life

Corjan Brink questioned whether degrowth might not lead to a negative spiral downwards, especially when other cities or countries would keep up business as usual. In that case he questioned if a form of stagnation would not be perceived as a regression (C. Brink, personal communication, October 14, 2019). This relates the argument that degrowth is not the same as austerity as described in the theoretical framework. Degrowth is not reducing growth in a growth-based society but something else completely (Kallis, 2018; Latouche, 2009). And degrowth has a strong focus on ensuring well-being (as opposed to material welfare). However, currently it is not clear what would happen after or during a transition as there is no real example of a degrowth society. Perhaps there is a period where things turn rough before they get better, perhaps there is indeed some sort of loss of quality of life, a potential downside mentioned by Julien François Gerber that could be a consequence of for example not being easy to visit family far away or having to consume less goods and resources (personal communication, September 23, 2019). Maybe people adapt quickly to this situation, as illustrated by Gerber with examples of cities in crisis like Puerto Rico during the Hurricane (personal communication, September 23, 2019). Poças Ribeiro also mentioned initial financialization issues as a downside, but she figured these would not last it just takes time to adapt the system (personal communication, September 2, 2019). However, the reduced quality of life could also endure, which poses the risk of discouraging other cities or countries to degrow their own economies. Likely degrowth scholars and proponents would reframe the question; even if degrowth does reduce the quality of life then the question becomes, do people endure a little discomfort now or do people continue along the current route potentially headed towards an outright societal collapse later?

3. need for more work

A final point that was mentioned by Gerber as a potential downside to degrowth in urban planning is the issue of work. He mentioned that many degrowth scholars state that in a degrowth society there works should be reduced (J.F. Gerber, personal communication, September 23, 2019). This also came up in the theoretical research, both Kallis and Latouche mention that in a Degrowth society there would be less work in general, work would be shared more and working hours would be reduced in order to provide employment in the absence of economic growth (Kallis, 2018; Latouche, 2009). However, Geber states that it is kind of unlikely, as for example organic agriculture actually needs more work than conventional agriculture (personal communication, September 23, 2019). And as mentioned in the theoretical frame the abandonment of cheap fossil fuels and policies for more energy extensive goods and services seem to require more work (Sorman & Giampietro, 2013).

As examples of degrowth practices Giorgos Kallis mentioned things like DIY repair and recycling shops, community currencies, not-for-profit cooperatives, self-organized networks for child rearing, healthcare and education, open software and digital commons, co-housing and eco communes (2018). These non-commodified services serve to provide affordable required amenities that do not stimulate growth, but they could also be labor intensive. Besides, the proposal analysis mentioned that the degrowth planning process should be much more participative (Alexander & Gleeson, 2019; Lehtinen, 2018; Wächter, 2013; Xue, 2014). However, Carla Huisman warned in the interview about the limits of participation; people have a lot of things to do already, and many people are not well trained in meetings and assemblies nor in practical home improvement work (personal communication, September 25, 2019).

A universal basic income as proposed by several degrowth proponents might help to give people time for non-commodified work, but if there is going to be more work required for a degrowth society in an absolute sense a basic income will not help. A part of this extra work could

be taken up by people currently unable to find work of any sort. The question that remains is one of quantity, will the idea of less work be realizable for a good quality life in a degrowth society. It could be a fundamental problem, certainly when the argument for working less is also used to seduce people to degrowth since it frees up time for more leisure activities.

F. implications of the findings

The findings regarding the influence of the growth paradigm on (sustainable) urban planning reinforces what is already stated in literature by authors such as Yvonne Rydin (2013, 2014) and Federico Savini (2019). Additionally, the interviews affirm that several of the consequences of growth-based planning such as the high dependency on market action, land speculation and an agglomeration mindset are all relevant in the setting of Amsterdam. The findings support the idea that a degrowth approach can improve the sustainability of urban planning. Degrowth points to systemic issues that sustainable urban planning currently does not address sufficiently like the role of the monetary system on the (un)sustainable development of urban areas, the role of different ideas on land ownership and the power of big corporations on shaping the countryside. Furthermore, the focus of degrowth on the local scale can be a fertile soil to make sustainable urban planning truly more sustainable and the prefigurative approach of degrowth can inspire actors in the planning field.

The research adds to the ongoing discussion of degrowth and urban planning by providing an overview of proposals for degrowth in (sustainable) urban planning. Such an overview had not been made before, and though this overview is not exhaustive it offers a starting point to those interested a degrowth approach in urban planning, clarifying the measures with categories and strategies. This is an outline that others can take up, improve and elaborate. Besides, while most of the proposals for degrowth in urban planning that were mentioned in the

interviews repeat and reinforce those already found in the analysis of proposals some of them have, to the knowledge of the author, not yet been proposed before. For example, it is interesting what can be learned from urban planning in the Netherlands several decades ago when social housing was more common and broadly accessible and when there was a national policy of regional economic redistribution as opposed to the current agglomeration approach. This might lead to promising policy proposals to stimulate degrowth in urban planning today. Additionally, the findings provide a glimpse into degrowth proposals related to urban planning that already take place in Amsterdam such as several co-housing and regional farming initiatives.

Furthermore, several parallels between current degrowth proposals for urban planning and historical proposals from the field of urban planning have been made. These connections have not been made often in degrowth literature and might offer interesting insights and lessons when explored further (see recommendations section). Finally, apart from the historical arguments most risks that could prevent degrowth from taking hold in urban planning and the potential downsides of a degrowth approach have been explored before in degrowth literature. Despite that, the fact that practitioners from the field of sustainable urban planning are discussing them gives some insight to how the idea of degrowth is received by planning professionals.

Taken together, the thesis contributes to answering to the knowledge gaps in degrowth literature regarding (sustainable) urban planning. As (sustainable) urban planning is a topic that has not often been taken up explicitly in degrowth publications the overview of degrowth proposals and the opinions of the planning related practitioners give more insight into the relations, applications and obstacles of a degrowth approach in (sustainable) urban planning. Regarding sustainable urban planning the most urgent knowledge gap was to address the tensions surrounding sustainability and growth and explore non growth-based alternatives. By researching the question how the growth paradigm shapes urban

planning insight is offered into how these tensions manifest themselves. By exploring what degrowth could contribute to topics not sufficiently addressed by conventional sustainable urban planning, it becomes clear what non growth-based alternatives have to offer.

Too much and for too long, we seemed to have surrendered personal excellence and community values in the mere accumulation of material things. Our Gross National Product, now, is over \$800 billion dollars a year, but that Gross National Product - if we judge the United States of America by that - that Gross National Product counts air pollution and cigarette advertising, and ambulances to clear our highways of carnage.

It counts special locks for our doors and the jails for the people who break them. It counts the destruction of the redwood and the loss of our natural wonder in chaotic sprawl. It counts napalm and counts nuclear warheads and armoured cars for the police to fight the riots in our cities. It counts Whitman's rifle and Speck's knife, and the television programs which glorify violence in order to sell toys to our children. Yet the gross national product does not allow for the health of our children, the quality of their education or the joy of their play. It does not include the beauty of our poetry or the strength of our marriages, the intelligence of our public debate or the integrity of our public officials. It measures neither our wit nor our courage, neither our wisdom nor our learning, neither our compassion nor our devotion to our country, it measures everything in short, except that which makes life worthwhile.

(Robert F. Kennedy, remarks at the university of Kansas, 1968)

2.

CONCLUSION

Urban planning has played a marginal role in degrowth literature so far. Yet urban areas are places of innovation on the one hand and space of huge environmental impact on social challenges on the other hand. Degrowth can no longer ignore urban planning and needs to find ways to respond to large urban areas and questions of urban development. Present sustainable urban planning claims to make urban areas future proof and lasting but it barely reflects on biophysical limits to growth while recent research puts these limits back in the center of attention. There is a need in sustainable urban planning to rethink the influence of the growth paradigm and explore alternatives to growth-based urban planning.

The main goal of this study was to explore what a degrowth approach could mean to sustainable urban planning considering current social and environmental challenges. Next to this major goal, there were several minor or sub goals, these are repeated in the overview above.

research sub-goals

1. To determine how the growth paradigm currently shapes urban planning in Amsterdam.
2. To explore what is already happening in terms of degrowth in urban planning in Amsterdam.
3. To give an overview of existing proposals for a degrowth approach in urban planning.
4. To investigate how in the field of urban planning practitioners are guided by the growth paradigm and how they respond to the idea of degrowth in urban planning.
5. To determine possible risks for and downsides of a degrowth approach in urban planning.

Different methods were combined to answer to these goals. A document analysis was employed to explore the existing proposals from degrowth for (sustainable) urban planning. A historical analysis was performed to see whether the growth paradigm had been challenged before in urban planning history. And finally, interviews were undertaken to elicit expert advice and find out how current planning and degrowth professionals consider this topic. As the discussion showed, based on the different methods of analysis, answers were given to all sub questions. Thus, the minor goals have been met. However, the main question of this research project can only be answered by combining these separate conclusions. To this end the main question will be repeated once more, after which it will be answered in three parts.

'Is there a need and potential for degrowth in sustainable urban planning in Amsterdam?'

A. the necessity

The results show that there is indeed an urgent need for a degrowth approach in sustainable urban planning in Amsterdam. Here, sustainable urban planning does not sufficiently address urgent issues of global and long-term social and environmental impact. Therefore the idea that current Dutch cities are sustainable was found to be naïve, showing an incomplete understanding of the urban metabolism. Furthermore, the dominant growth paradigm underlying sustainable urban planning and conventional urban planning has negative effects on the field that further inhibit a powerful response. The study shows that on the one hand the growth paradigm shifts power to market actors, increasing the dependency on market activity. However, these actors cannot be expected to think in the broad and long-term manner that is required for current issues. On the other hand, the growth paradigm tends to concentrate power and wealth through urban planning and thus stimulate inequality. Finally, the growth paradigm stimulates a belief in false or impartial solutions such as densification and decoupling, while precious time is wasted to create real impact.

B. the proposal

Degrowth can address these issues in urban planning with a broad pallet of proposals focusing on many different themes within sustainable urban planning, from the planning process itself to public space and tax

reform. This study has provided an overview of the many proposals for degrowth in urban planning, grouped per theme. The results also show that degrowth proposals can and should intervene through various strategies. First of all activism, presentations and discussion can stimulate the inner transformation and paradigm shift. Practices like energy and food cooperatives, community land trusts and co-housing can offer concrete alternatives today. And finally working towards large changes in policy like tax reform and local food procurement can support a real transition towards a more equitable society with a sustainable ecological footprint in the long run.

Important aspects of a degrowth approach for sustainable urban planning are a focus on systemic drivers of unsustainable behaviour, strict limits to combat inequality and environmental degradation, working towards a regional economy and finally its prefigurative nature. Finally, this study uncovered several interesting lessons from recent and past planning history that can provide inspiration for current degrowth proposals including the former policy of regional economic redistribution as an alternative to agglomeration thinking and the high quality social rental housing that was the norm until quite recently in the Netherlands which could reduce the need for credit and consequently reduce the growth imperative.

C. the potential

On the other side, the results also indicate that there are many challenges to a degrowth approach in urban planning in Amsterdam such as the well-known free rider problem and capital flight, dominant power structures, existing neoliberal regulations and the false idea that real progress is being made and that Dutch cities are already sustainable. Despite offering a narrative for a sustainable and good life, degrowth also challenges conventional and deeply rooted ideas of progress that might lead people to see it as a deterioration of their quality of life. These are serious challenges that decrease the chance of degrowth

being taken up by sustainable urban planning actors whether from civil society, the public sphere or private practice. Furthermore the historical perspective showed that 'degrowth like' measures have been proposed before in urban planning yet they failed to gain real momentum in part because of an underestimation of the interests and power of private commercial parties.

However, the interviews revealed several measures that have not been mentioned before in relation to sustainable urban planning and degrowth such as aiming for regional economic redistribution or re-focusing on broadening the target group of social housing. These proposals require large policy shifts, but they also answer to the urgent call of finding ways to work towards degrowth within existing urban areas as opposed to looking for solutions in suburbs or outside of urban areas. They could also connect to current popular demands in Amsterdam and thus generate support and goodwill.

The interviews also showed that certain proposals are more promising than others. The regionalization of the economy was something that a lot of urban planning respondents reacted quite favorably towards, whether from civil society, the public or the private sector. Especially a re-localization of the food system, though not without major challenges, was received positively by almost all respondents. Furthermore, of the current degrowth related practices already taking place in Amsterdam, many were food related. It seems transitioning towards a regional food system is one of the more feasible degrowth ideas for urban planning and could be a good carrier for other degrowth ideas such as a general re-localization of the economy, green tax reform and stimulating active and public mobility. It also requires addressing systemic underlying impulses of a growth-based urban planning that block sustainability such as land ownership and speculation and the power and influence of large corporations.

Taken together a choice for a specific topic like the food system contains the entire struggle of a degrowth versus a growth-based economy and planning system and therefore it can serve as a proof of concept and can be a case study

that offers exciting lessons for a broader application degrowth in urban planning.

Finally the literature and historical research showed that as a consequence of the neoliberal approach of the last decades, urban planning has receded to a more facilitating role and diminished its future oriented and prescriptive role. Given a diverse and representative group of planners is nominated, degrowth can offer the critical yet hopeful perspective to stimulate a renewed engagement with this important aspect of planning. The historical analysis showed that the history of urban planning is full of critical and subversive thinkers and those are exactly the people needed today in these times of unprecedented ecological and social challenges.



figure 4.4. A tunnel greenhouse at the urban farm of Michel Kegels in the area known as 'Tuinen van West' in Amsterdam



3.

LIMITATIONS OF THE RESEARCH

Any particular strengths of the research project are for the reader to decide, below potential limitations of the study are discussed. These are ordered into four categories, general limitations that concern the project as a whole, followed by limitations per research method; regarding the interviews; pertaining to the historical analysis; and finally, the limitations regarding the document analysis.

general limitations

- The employed research model is a qualitative design. Because of the novel character of the topic an explorative approach was deemed useful, leading to qualitative methods. However, it does not help to provide answers to relevant questions regarding the impact of the growth paradigm on urban planning in a quantitative way or how well sustainable urban planning is currently doing in a city like Amsterdam in terms of social and environmental impact.
- In the first outline of the research a spatial analysis was part of the report. This had to be dropped due to time constraints. Such an analysis could have

given specific knowledge on the spatial effects of the growth paradigm and perhaps on the implementation of certain degrowth alternatives and can be recommended for further research. Possible topics of a spatial analysis could be: modes of transport, ownership (owner occupied, social rent, co-housing, private rent etc.), a functional analysis related to the topic of self-sufficiency of urban areas, green space and the relation between urban areas and their hinterland or energy use and greenhouse gas emissions.

- This study focused specifically on Amsterdam in the Netherlands, other cities and countries could provide interesting other views. The Netherlands has a distinct planning tradition and its own balance of power between public, private and civil actors. Therefore, what works here might work less well in other places. At the same time, in certain aspects Netherlands might already be a good example for other places in the positive or negative sense.

limitations regarding the interviews

- The number of respondents was limited to four related to the field of degrowth and four related to the field of sustainable urban planning. More respondents would have provided more relevant information and a better picture. Moreover, the interviewees were selected from the 4 quadrants of the quadruple helix to get a broad picture from actors in sustainable urban planning. But despite that there are still important voices missing that are involved in the urban planning process such as politicians, (groups of) inhabitants, real estate investors or developers and more.
- The coding for the interviews only happened by the single author of this research. Coding with several people can offer more complete insights and more diverse selections.
- The semi-structured interview method sometimes led to the author abandoning some parts of the topic or question list. This meant that different

actors have not all answered the same questions. Sticking to a more formal rigid interview method could have prevented this which could have helped to get more opinions on the same topics. However, it deserves to be noted that this might have come at the cost of the explorative character of the research.

- There is inherently a bias in the selection of respondents due to the choices of the researcher and because of constraints in time which meant not everyone first selected for an interview was available. By providing the selection criteria in the methodology and providing information on the background of the respondents an attempt is made at making this bias explicit for readers to take it into account when reading the results.

limitations regarding the historical analysis

- Due to the limited time for the research project, the historical analysis only looked at western urban planning and only at recent history from the industrial revolution onwards. However, certainly interesting lessons can be learned from other parts of the world, different cultures and other periods in time.
- Moreover, this historical analysis had two goals, one goal was to understand urban planning better while the other was to find precedents for critique on the growth paradigm and examples of degrowth thinking. Because of this double objective the historical analyses had to be quite general, this limited the depth especially for the second question.

limitations regarding the document analysis

- Due to the limited time for the research project, the document analysis only explored ten documents, but in the process of furthering the research several other papers and books came by that contained content on degrowth and urban planning which would have been good additions to this list. A more complete and more extensive list of degrowth

proposals for urban planning can be generated if this scope is extended.

- Like with the interviews, the coding for the document analysis only happened by the single author of this research. Coding with several people can offer more complete insights and more diverse selections.

4.

RECOM- MENDATIONS FOR FUTURE RESEARCH

Based in part on the previous section on the limitations, this section proposes several recommendations for future research which can help to further develop the topic of degrowth and (sustainable) urban planning.

research on modeling and measuring (de)growth

- The respondent who works at the PBL, Corjan Brink, stated that they use general-equilibrium models to calculate the effects of certain policy instruments on the economy. This allows for macro-economic analysis that also looks at the effects that follow through on other aspects like employment, international trade etcetera. When asked about whether this could be used for calculating degrowth proposals he replied positively. This could be an interesting avenue for further research. Perhaps for exploring the consequences of degrowth policies or research into whether or how the growth paradigm is embedded in such models.
- The employed research model is a qualitative design. However, it can be useful to ask questions regarding

the impact of the growth paradigm on urban planning in a quantitative way as well. This can also be interesting for the question how sustainable urban planning is currently doing in a city like Amsterdam in terms of social and environmental impact. This could improve similar research projects and help in identifying strengths and weaknesses of sustainable urban planning.

further historical research

- The historical analysis also provided interesting avenues for further research. For example, further research could be done on the relation between the 'social agenda' of Ebenezer Howard with his Garden City concept and degrowth proposals. Another idea is to do more research on degrowth planning and the teachings of Lewis Mumford, Patrick Geddes and the Regional Planning Agency of America. This might also involve a research project into the anarchist roots of urban planning, exploring the work of Proudhon, Bakunin, Kropotkin and Élisée Reclus and comparing that to degrowth related urban planning ideas.
- Another possibility would be to dive deeper into the Dutch planning history of managing urban growth, perhaps in comparison with strategies found in other countries. Or research into the comparison of current agglomeration thinking versus thoughts about economic redistribution that were popular in the Netherlands several decades ago.
- In general, looking at the urban planning history of before the industrial revolution and exploring the planning histories of other cultures than just the western culture in relation to degrowth or growth critique, seem like interesting avenues for further historical research.

additional interviews

- Another recommendation is to do similar interviews as those of this research project with other respondents from other profession related

to urban planning such as politicians, inhabitants, real estate investors or developers and more. Their perspectives can offer interesting insights to complement or criticize these findings.

other topics for further research

- Near the end of writing this thesis a conference was attended in Amsterdam called 'De Stad van Morgen'. One of the speakers was Ted Howard who gave a presentation on Municipalism and 'community wealth building'. This also relates to theories on communalism by Murray Bookchin. There was no more time to integrate this but there is a big and interesting overlap between these ideas and the re-localization agenda of degrowth, further research can strengthen this connection.
- Apart from what was mentioned in the interviews, quite some degrowth related practices of Amsterdam were encountered during the research project, mapping all these projects and researching what connections exist between them can be another interesting avenue for further research.

5

This chapter brings all the results together. By synthesizing the various analyses and the theoretical framework the discussion answers the sub-questions. The discussion ends with a section on the implications of the findings considering the existing research. Consequently, the conclusion summarizes the entire research project briefly and answers the main question posed in the introduction. This is followed by an overview of the limitations of the study and recommendations for further research.

literature & appendices

figure 3.46. The former haarlemmermeerpolder and schiphol in 1943, currently the businesspark Schiphol-rijk (adapted from: Dienst Publieke Werken, 1943).

1.

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“The primary threat to nature and people today comes from centralising and monopolising power and control. Not until diversity is made the logic of production will there be a chance for sustainability, justice and peace. Cultivating and conserving diversity is no luxury in our times: it is a survival imperative.”

(Vandana Shiva in 'Earth Democracy, Justice, Sustainability and Peace', 2005)

2.

APPENDICES

Consent for participation in thesis research interview

Thesis project name: Degrowth and urban planning

Thesis investigator: Laurens van der Wal

I want to thank you for taking the time to meet with me today. The interview should take about an hour. I will be taping the session because I do not want to miss any of your comments.

The recording will be kept confidential. After the interview I will make a summary of the relevant parts that will be send back to you for your correction of factual errors. This summary will be the basis for the analysis used in the thesis. Your name will not be mentioned but in broad terms your organization and function will (f.e. researcher A active in the academic field with a focus on sustainable consumption).

The interview is voluntary, you do not have to talk about anything you do not want to, and you may end the interview at any time. Any variation of the conditions above will only occur with your further explicit approval.

By signing below, I agree that I have read the above and permit the full use of the information from the interview and authorize Laurens van der Wal to publish this information.

Interviewee name

Date

Location

Example interview protocol (the first interview with Ana Poças Ribeiro)

Start

1. Explain goal and background of the research project
2. Present consent form and request permission to record
3. Start the recording

Background questions

1. Can you tell a bit more about your background in terms of education and work experience?
2. Can you elaborate on your most recent occupation, your PhD into sustainable consumption?

Questions regarding knowledge of degrowth and urban planning

1. How did you get acquainted with the concept of degrowth?
2. How do you view degrowth?
3. Does your own work / research relate to degrowth? If so how?
4. To what extent are you familiar with urban planning?
5. To what extent are you familiar with (sustainable) urban planning?
6. What is your view on (sustainable) urban planning?

Questions regarding relation between degrowth, sustainable consumption and urban planning

1. Do you think there is a relation between urban planning and sustainable consumption? How do you perceive this relationship?
2. Do you think urban planning can be used to achieve a downscaling of consumption, and thus degrowth? And if so, how? What degrowth principles and concepts could urban planning employ?
3. Do you think a degrowth approach is necessary / unavoidable to achieve sustainable urban planning?
4. What might prevent Urban Planning from implementing a degrowth approach?
5. What could be downsides from implementing a degrowth approach in urban planning?
6. Are you familiar with any examples of degrowth relating to urban planning (in Amsterdam)?

Other topics / questions + possible reflection

Wrap up, closing and thanks

planning degrowth

An explorative study into the value of a degrowth approach for sustainable urban planning in Amsterdam

Master thesis, 4th of March 2020



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