

Graduation Plan

Master of Science Architecture, Urbanism & Building Sciences



Graduation Plan: All tracks

Submit your Graduation Plan to the Board of Examiners (Examencommissie-BK@tudelft.nl), Mentors and Delegate of the Board of Examiners one week before P2 at the latest.

The graduation plan consists of at least the following data/segments:

Personal information		
Name	Matthijs Koch	
Student number	4726391	

Studio		
Name / Theme	Urbanism: Planning Complex Cities	
Main mentor	Rodrigo Ordonhas Viseu Cardoso	Metropolitan governance, urbanization, spatial planning
Second mentor	Reinout Kleinhans	Urban regeneration, neighbourhood governance
Argumentation of choice of the studio	<p>I have long been interested in politics. My motivation to study Urbanism (and previously Human Geography) is the large influence that space has on people's daily lives. In particular how the distribution of spatial resources can create unequal burdens and benefits. Additionally I like how there are many challenges that come together in spatial planning; although problems are wicked, spatial planning can also offer a solution space for wicked problems.</p> <p>I strongly believe in the role that spatial planning can play in inducing societal change, and that institutional change is needed to achieve justice. As can be read on the website of Planning Complex Cities, one of the main drivers for research is similarly "the observation of disparities and conflicts from the distribution of spatial resources across communities and territories." I also appreciate the research-oriented approach that is common in the studio and the institutional dimension of research and design, because I feel like this is the way to deal with the wicked problems I would like to address.</p> <p>Overall, I believe that my interests, both topical and methodological, align very well with the Planning Complex Cities studio and the research that is carried out there.</p>	

Graduation project	
Title of the graduation project	Planning for justice: a justice framework which aims to help spatial planners to integrate housing justice in planning
Goal	
Location:	A framework for the Netherlands and application of the framework to the Stedendriehoek region (area of Apeldoorn, Deventer, Zutphen)
The posed problem,	<p>Currently dominant spatial planning priorities focused on promoting growth-oriented economic thinking perpetuate injustices that vary across different scales. While some injustices remain unresolved, others are exacerbated by contemporary planning practices.</p> <p>Growth-oriented planning is socially and spatially selective and has a short time horizon. The injustices following from this are experienced by the population in various ways in the housing domain.</p> <p>In order to address these injustices in housing, there is a need to scrutinize and challenge the contemporary growth-oriented principles in spatial planning and antecedently incorporate justice values in planning practices.</p>
research questions and	<p>Main research question</p> <p>To what extent can a framework based on justice values help spatial planners design for justice in the housing domain in the context of the Netherlands?</p> <p>Sub-research questions:</p> <ol style="list-style-type: none"> 1. To what extent are socio-spatial injustices in housing a result of contemporary planning practices? 2. What are the values behind different approaches of spatial justice and how can these values be operationalised for spatial planning? 3. How can a framework based on justice values result in a planning and design strategy when applied to a region in the Netherlands?
design assignment in which these result.	The intended outcome of the first research question is an overview of spatial planning

	<p>practices that contributed to the perpetuation or exacerbation of injustices, based on a critical evaluation of planning practices. The goal is also to give an overview of possible ways in which spatial planning can influence development.</p> <p>The first main design product follows from the second research question and is a justice framework which can aid spatial planners in devising planning and design strategies for justice in the Netherlands, with a focus on housing. This framework should help to identify injustices as well as propose strategies to challenge and resolve injustices in the housing domain.</p> <p>The framework should be guiding in the application, which is intended to be done with planning and design principles, which function like a pattern language. The framework offers general directions for strategies, which may have a specific application depending on the context.</p> <p>The second main design assignment is to apply this framework to a case study in the Netherlands (the Stedendriehoek region). This application helps to test and improve the framework and demonstrate its use. The products consist of an analysis of the case location (in the form of a dashboard), strategic maps and accompanying visualisations, based on the principles from the planning framework.</p>
<p>Research aim</p> <p>The aim of this research is to develop a justice framework for spatial planning based on justice values from literature, that helps planners analyse and address injustices in housing. The aim of this is for spatial planning practice to mitigate and reduce injustices, rather than perpetuate or exacerbate them.</p> <p>This framework should be transferable to different locations in the Netherlands and should be appropriate in this context, which means both feasible and acceptable by the population.</p> <p>Testing this framework in a case study location should demonstrate the use of it in developing strategies for justice in housing.</p>	
<p>Process</p>	
<p>Method description</p> <p>The first part of the research, which is focused on developing a justice framework, consists of more traditional research methods: literature review, policy review, data analysis and stakeholder analysis.</p> <p>This theoretical and empirical analysis considers the spatial dimension specifically, because the justice framework should serve as a tool in spatial planning.</p> <p>Although the justice framework is based on normative values which are in a sense non-temporal, the application to a case study in the Netherlands make it more contextual. The theories offer</p>	

possible values, but these values have to be extracted in order to be applied to the Dutch context. Such value extraction is common in methodologies on planning for the long-term future (Government Office for Science, 2016).

The second step in the research, the application to a case study (sub-question 3), is based on the previously developed framework. It is likely that some questions are still unanswered after the literature review in the first research question. Therefore, some additional literature review might be required in this step. Additional analysis of the site as well as of policy is also required.

The design, based on the framework is conveyed through the techniques of 2D mapping and 3D imagery in collages. Patterns/principles serve as a translation between the justice framework and application to context.

The following methods are used.

Literature review

There is an extensive body of literature written about (spatial) justice. This concerns scientific articles, books and grey literature. Literature that is used is both general on the topic of justice, as well as more applied to planning.

The literature helps to understand the existing knowledge on the topic, and connecting the literature helps to create new insights.

Goal: literature on housing injustices is used to identify the problem. Next to this, literature is used to construct the justice planning framework.

Policy review

Planning practice is not often documented in formal literature. Instead, planning is documented in policies and spatial plans. These policies require critical evaluation to understand their goals and values and the effect that they have.

The policies which are evaluated are first of all Dutch national planning policies, which reflect the trend in the whole of the Netherlands. Some historic policy is analysed to understand the contribution of planning to current injustices. Additionally, the underlying values of recent planning policy, such as the NOVI are scrutinised.

A further policy review is done on the case study location.

Goal: understand the current policies that influence justice, and evaluate the contribution of these policies to injustice.

Data analysis

Primary and secondary data

Data analysis helps to understand the location of analysis. Literature is not always place specific. In order to make a framework and a strategy for the Dutch context, it is necessary to understand some basic data.

Analysis of data can also help to identify trends, which should be considered in a design for the future situation. Trends can also hint towards the type of strategies that are required.

Sources for data include CBS and other open data sources.

Goal: gain additional insight in housing and well-being injustices in the Netherlands in general and in the case study site.

Data mapping

Visualising data on the map can help in understanding the spatial dimension of injustices. Combining different data sets in a spatial context can help reveal patterns.

Sources for spatial data include PDOK and Nationaal Georegister.

Goal: understand the spatial dimension of injustices in the analysis phases. In the case study, data mapping is used to reveal vulnerable areas which require intervention.

Stakeholder analysis

It is important to understand the decision-making environment in which spatial planners operate in order to develop proper strategies which they can use.

An analysis of stakeholders, their goals, power and interest is input for how to steer developments.

Goal: provide insight in the role of spatial planners in the development process, to in turn understand their influence in the process.

Value extraction

The literature and policy review provide insight in what the possible values are that could guide a justice framework. However, a next step is to extract and apply the values found in literature. The combined information from justice literature and the housing challenges allow for a translation of abstract values to applied values.

Goal: develop a list of applied values of justice that serve as an input for the justice framework.

Design

Pattern language

The justice framework is not just evaluative, but should also help planners to make strategies. In order to translate the challenges and general strategies and considerations from the framework to a strategic design, patterns which indicate implementation strategies and considerations are used.

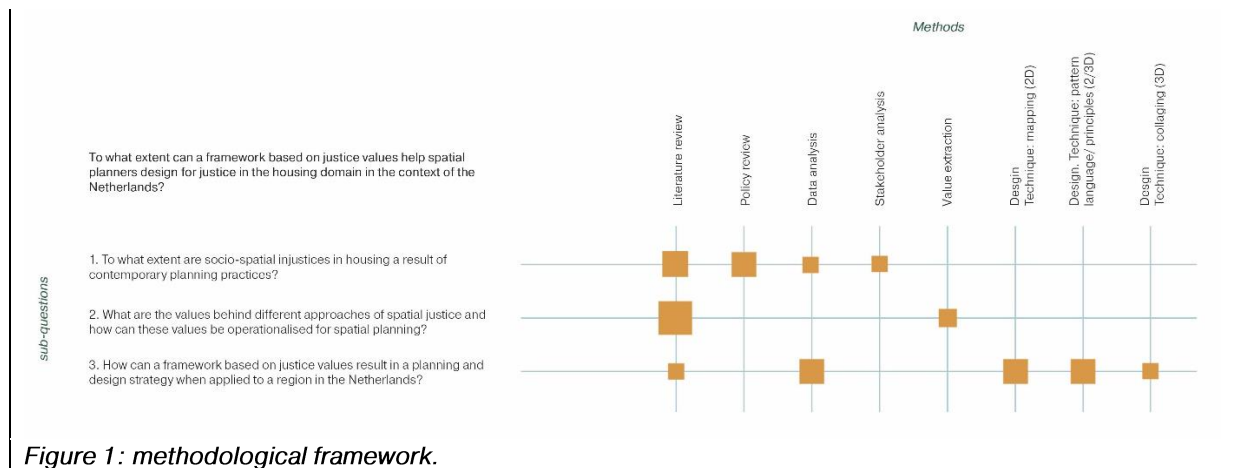
Patterns are used to present design solutions in digestible bits. "On the one hand, the pattern is underpinned with theory, while on the other hand, the pattern is clarified with a design sketch or an example. In one 'simple' overview a pattern presents a bridge between a problem and a solution." (Rooij & Van Dorst, 2020, p. 59).

Goal: connection between literature and design. Transitioning step for application of the framework to the location. Improving the framework based on new information from patterns.

Design mapping & collaging

The principles from the patterns themselves are simplifications of problems and their solutions. The complexity kicks in when patterns are combined. In the design for a case study, patterns are combined and applied to the situation. This is done through mapping as well as 3D visualisations in the form of collages or drawings.

Goal: visualise how possible combinations of patterns can help create strategies for justice. Make interventions more tangible by adding the third dimension.



Literature and general practical preference

In this research, the main focus is on spatial justice, as figure 2 indicates, but theories from post-growth and well-being are used to support the research as well. These three research fields do not exclusively deal with spatial questions. Justice and well-being are mostly discussed in philosophy and post-growth is still emerging as a scientific field, but remains mainly economic and political. In this research, the focus is on the literature from these bodies of research that deal with spatial questions.

These different bodies of research are three separate lenses by which to approach the problem of housing injustices, with justice as the most important lens.

Starting from justice, the ethical lens, the literature deals with issues of distribution and procedure. Several authors have made this applicable to space, which is put to further discussion in the second research question.

On its own, it does not provide enough leads to base a spatial vision on. Justice literature does not often include a perspective on intergenerational justice, nor on application to spatial planning problems.

Post-growth is the economic lens and concerns intergenerational justice and sustainability.

Many advocates of post-growth propose equitable downscaling of production and consumption, while improving human well-being and ecological conditions. However, much of the literature remains vague about what “equitable” and “well-being” entail (Drews & Antal, 2016, p. 185).

Well-being encompasses both satisfaction and objective measures of functioning. Literature on well-being is more applied to planning and policy, with human needs theory and especially Brede Welvaart, which as a concept connects this research to a broader planning discourse in the Netherlands.

Well-being as a lens in itself is insufficient, as it does not declare anything about the distribution of burdens and benefits or about the sustainability impact.

Thus, the ethical lens of justice offers considerable input for a justice planning framework. However, on its own it might be insufficient. With additional literature from post-growth and well-being, it is expected that a planning framework that addresses various housing injustices can be developed.

Additionally, I use literature from spatial planning specifically, as I am dealing with a spatial planning problem and the degree to which the fields of research above deal with spatial planning is limited. They

do deal with spatial questions, but the degree to which they cover governance is limited. Therefore these theories are mainly supplemented with governance literature.

On top of this I use grey literature, like government documents and PBL reports, mainly to understand the Dutch planning context. This is supplemented with some data analysis. Most data on the Netherlands is from Statistics Netherlands (CBS). For spatial data open sources such as PDOK and Nationaal Georegister will be used.

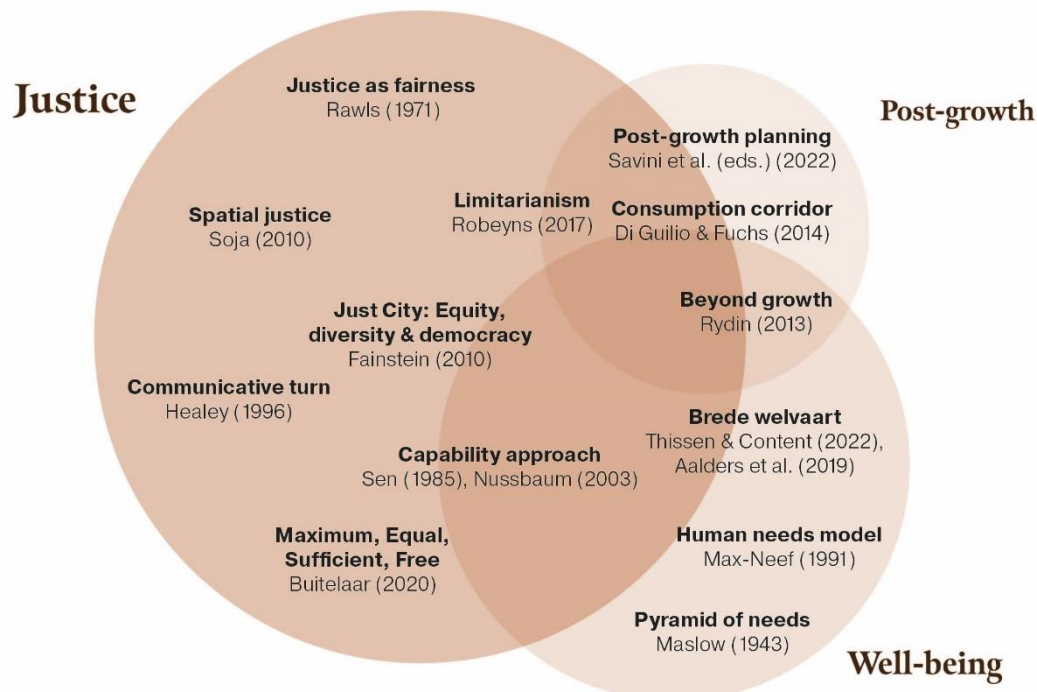


Figure 2: theoretical lenses.

Drews, S., & Antal, M. (2016). Degrowth: A “missile word” that backfires? *Ecological Economics*, 126, 182–187. <https://doi.org/10.1016/j.ecolecon.2016.04.001>

Reflection

1. What is the relation between your graduation (project) topic, the studio topic (if applicable), your master track (A,U,BT,LA,MBE), and your master programme (MSc AUBS)?

The relation between by topic and the studio topic have already largely been outlined above in the studio choice. First of all the scale level that is addressed in my graduation topic is fitting with the studio. This studio deals with the larger scale levels, opposed to other studios, where the focus is more on design on a local scale. Additionally, the type of design assignment in this studio generally relate to governance and the way to influence governance. This is not so much done in the other studio, but is a substantial part of my graduation topic. Lastly, the type of problem that I work with is wicked (solutions will generally reveal more questions), which is also particular for this studio, whereas other studios could offer more concrete design solutions.

My graduation topic has several alignments with the rest of the master track of Urbanism. The type of scale, complexity and topics (governance, spatial justice) and associated products (policy changes,

strategic plans) align with the courses given in Q3 of the Urbanism track. The visualisations I intend to do in the case study have some similarity with the products from the first course of the master track, in terms of level of detail. Also the way of thinking about the far future, to reveal trends and desirable changes, is similar. The improvement of well-being, one of the theory lenses, is central in the second design course of the track.

There is also a relation with the master programme as a whole, in particular a strong relation with MBE. In my graduation topic I have focus on the planning of housing, on which a lot of research is done in the MBE department. I use several papers from researchers from this department (for example Joris Hoekstra and Boram Kimhur). In my graduation I introduce a spatial dimension and application to spatial planning, which is not so much part of the MBE research.

My research does not deal with the design of buildings directly, but in my justice framework I will be making judgements about the type of developments that are desirable in spatial planning. Indirectly this would influence the type of design assignments in the discipline of architecture. Planning for justice and well-being could possibly result in more shared living assignments or private developments. Planning for intergenerational justice could limit the size of new-build housing or could result building with different materials. In this way there is a relation to the disciplines of Architecture and Building Technology.

A critique on the current planning practices shakes the foundation of the disciplines of AUBS a little bit, because the discipline in a way relies on growth. The conclusions of the research might not be appreciated by all disciplines. However, at this point, these conclusions are not drawn yet. In the end, these conclusions should best be seen as constructive feedback, to question the driving forces behind our disciplines.

Finally, there is a relation with other studies, such as Human Geography and Spatial Planning. In particular there is a strong relation with the research on housing inequality and on planning that is carried out in the University of Amsterdam.

2. What is the relevance of your graduation work in the larger social, professional and scientific framework.

Social and professional relevance

The research results can serve as an input for societal debate in the Netherlands, specifically the debate on the housing crisis.

The aim of this research is to provide a positive perspective, of a different but desirable future and how planning can contribute to this desirable future. This can make people see and understand the alternatives that exist in spatial planning and grasp the spatial dimensions of alternatives more clearly. As the general public will be better informed of the effect different planning approaches have on their surroundings, they will be better able to reflect on the trade-offs they favour themselves in space. They might also get an understanding of why planners make certain trade-offs, which contributes to the transparency of planning.

In the end, a more just environment and a planning practice that focusses on sufficient well-being for everyone would be beneficial to the whole of society. Providing spatial planners with the tools to plan for justice contributes to achieving this goal.

The professional relevance of the research is that a strategic framework is developed, which is transferable to other locations and can act as a tool for other planners. It can help make the complexity

of planning for justice more graspable and can create transparency in the process of designing for justice.

Even if planners will not use the tool directly, a contribution of this research might be that planners become more aware of the effect their planning instruments can have on just outcomes. It might make them think twice about their everyday practice and incorporate some of the values proposed in the framework in the future.

Scientific relevance

This research first of all sheds light on the different interpretations of justice and their real-life consequences when applied to spatial planning.

Applying more abstract concepts from philosophy to a practical context of spatial planning can show the robustness of these concepts and can be a method of reflection on the practical usefulness of these principles.

The research also contributes to the critical evaluation of contemporary planning practice and the goals that guide it.

Although there is considerable scientific debate on spatial justice, guidance on the application to spatial planning practice is meagre. There are not many guiding principles or frameworks that help planners understand injustices or plan for achieving justice.

The work of previous authors, such as Fainstein (2011), Buitelaar (2020) and student theses from Urbanism focused primarily on the city-scale. However, much less is written about the regional scale (Raspe et al., 2019), as well about the application to housing, which are contributions of this thesis.

Although the research is focussed on justice, it also has some post-growth components. It therefore also offers a small contribution to the emerging field of post-growth planning, in particular to the spatialisation of post-growth.

As argued by Xue (2022, p. 405), the post-growth debates “have so far not taken seriously the vital role of the spatial aspect in social transformation and its associated planning discipline.” In particular, the degrowth debate has mostly been focused on local initiatives on community or neighbourhood level and has failed to scale up to a larger level. Attention has been limited on the urban/regional scale (Xue, 2022), which is the focus of this research.

Raspe, O., Content, J. & Thissen, M. (2019). *Brede welvaart en regionale ontwikkelingen*. Den Haag: Planbureau voor de Leefomgeving.

Xue, J. (2022) Urban planning and degrowth: a missing dialogue, *Local Environment*, 27(4), 404-422, DOI: 10.1080/13549839.2020.1867840