

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	Caspar Philip Raap
Student number	6083617

Studio		
Name / Theme	Planning Complex Cities	
Main mentor	Dr. Verena Balz	Regional Planning, Planning Theory
Second mentor	Dr. Alex Wandl	Circularity, Transitional Theory
Argumentation of choice of the studio	I am concerned with issues about Societal Transitions, governance, spatial justice, legitimacy building & participation. These Topics are subject in the PCC studio and the people which are part of the PCC team are experts in these fields and sometimes even pioneers.	

Graduation project	
Title of the graduation project	Shifting Values Prioritizing Prosperity
Goal	
Location:	Germany, East Germany, Dessau(-Roßlau)
The posed problem,	There is significant incoherence between the stated goals of spatial planning in Germany and the actual practice. These incoherences lie in the fields of sustainable development, spatial dispersity and the equality in the value of living contexts across Germany. If business as usual continues on these issues a big threat is imposed on questions of sustainability (itself being an issue of large scale intergenerational, spatial justice) as well as the issue of spatial justice in Germany. At the same there is significant spatial disparity in Germany with regards to legitimacy of sustainable transitions. An academic discourse between Federico Savini and

	<p>Ivona Rydin highlights a gap in research consensus on issues of how to solve the root cause of problems achieving sustainable development (which both agree are rooted in indefinite growth). In this discourse a tension is created between immediate action due to the urgency of the situation and radicalism due to the need of effectively addressing the sustainability problems of our time. The discourse highlights legitimacy for substantial societal transitions as a make or break issue. So the problem I will try to solve is twofold: how to address German problems of inequity and sustainability at the same time in a feasible future proof way as well as how to solve the supposed conflict between immediate action and radical solutions. This will involve the challenge of legitimacy building.</p> <p>The incoherence in Germany manifests itself in the goal to build 400.000 new housing units each year in contrast to the former GDR having rates of empty housing south of 10%.</p>
<p>research questions and</p>	<p>Main Research Question:</p> <p>Why is satiation a good core driver of sustainability transitions and how to feasibly introduce it on the example of Germany?</p> <p>Sub research-questions:</p> <ol style="list-style-type: none"> 1.1 What is satiation and why should it be the core driver of sustainability transitions? 1.2 What is feasibility in the context of satiation and substantial societal transitions? 1.3 How can satiation be feasibly introduced? 2.1 What is the german situation of sustainability transition and satiation?

	2.2 What can be an approach to tackle the issues around introducing satiation as the core driver of the German sustainability transitions?
design assignment in which these result.	<p>Pilot design for Dessau „Satiation based upgrading of Soziokultur-infrastructure for increases in livability with the aim of creating housing demand in spare capacity“</p> <ul style="list-style-type: none"> • Designing a pilot project on the issue stated above • trying to apply the theory collected and formed in this thesis and documenting observations during this effort • the designing of the pilot project includes identifying necessary changes to the context, setting up new processes and governance structures, creating a timeline, exploring the possible spatial footprint associated with such a pilot, identifying existing prefigurative practices and possibly more tasks depending on the necessities of the design

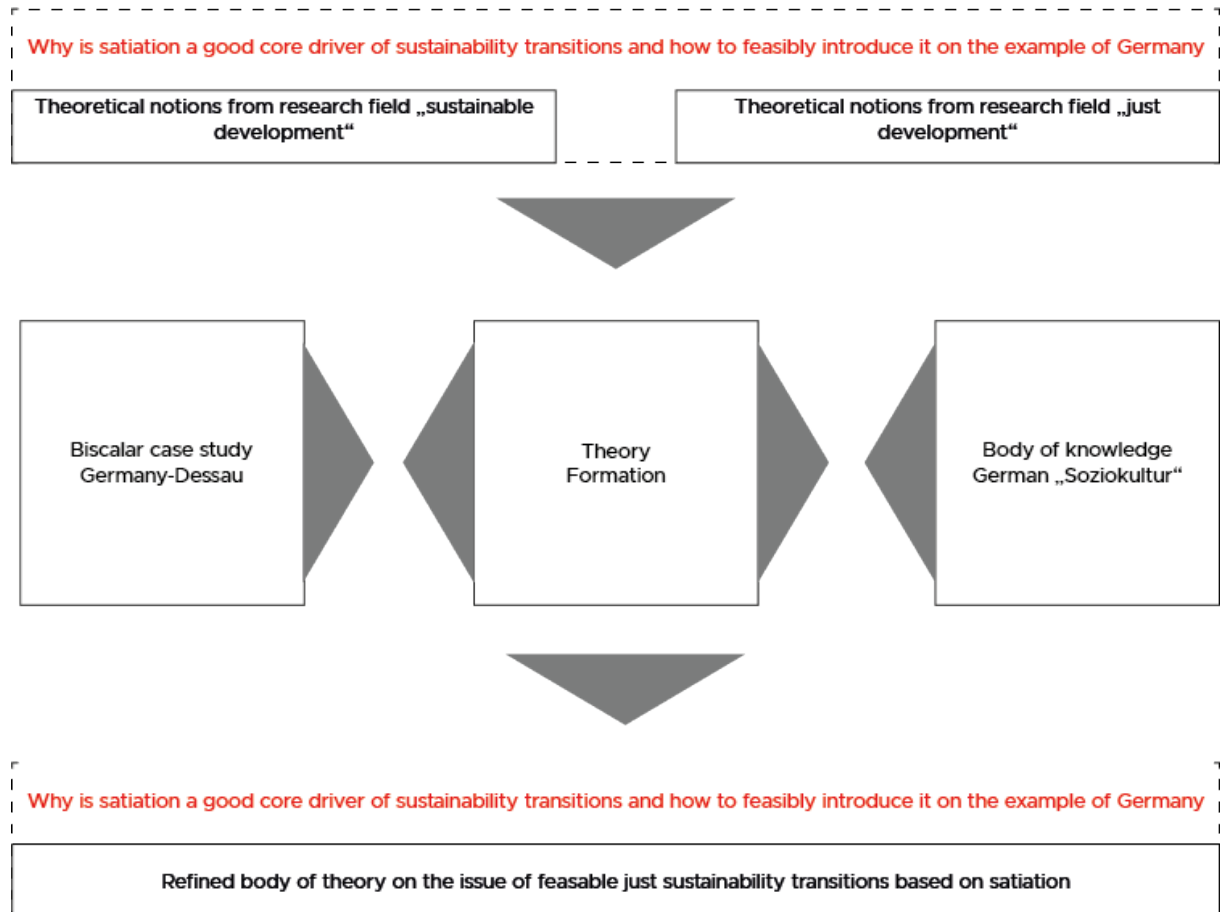
[This should be formulated in such a way that the graduation project can answer these questions.
The definition of the problem has to be significant to a clearly defined area of research and design.]

Process

Method description

The research design of this thesis builds on the process of theory formation as outlined and used by (Balz, 2019) which builds on theory on ground theory research by (Corbin & Strauss, 1990) and theory on the issue of induction in qualitative research by (Bendassolli, 2013). The theory formation starts of from theoretical notions originating from the research fields on sustainable development and from theoretical notions from the research field on just development. It then proceeds in a continuous interplay of induction and grounding with a biscalar case study on Germany (national scale: Germany; municipal scale Dessau) as well as with the body of practice and theoretical notions derived from it

concerning Soziokultur which is a “concept” specific to the German context. Further refining of theory happens through research by design on a design case of a Pilot for „Satiation based upgrading of Soziokultur-infrastructure for increases in livability with the aim of creating housing demand in spare capacity” in Dessau. A last step of refinement happens through expert interviews in an effort to further ground the formed theory.

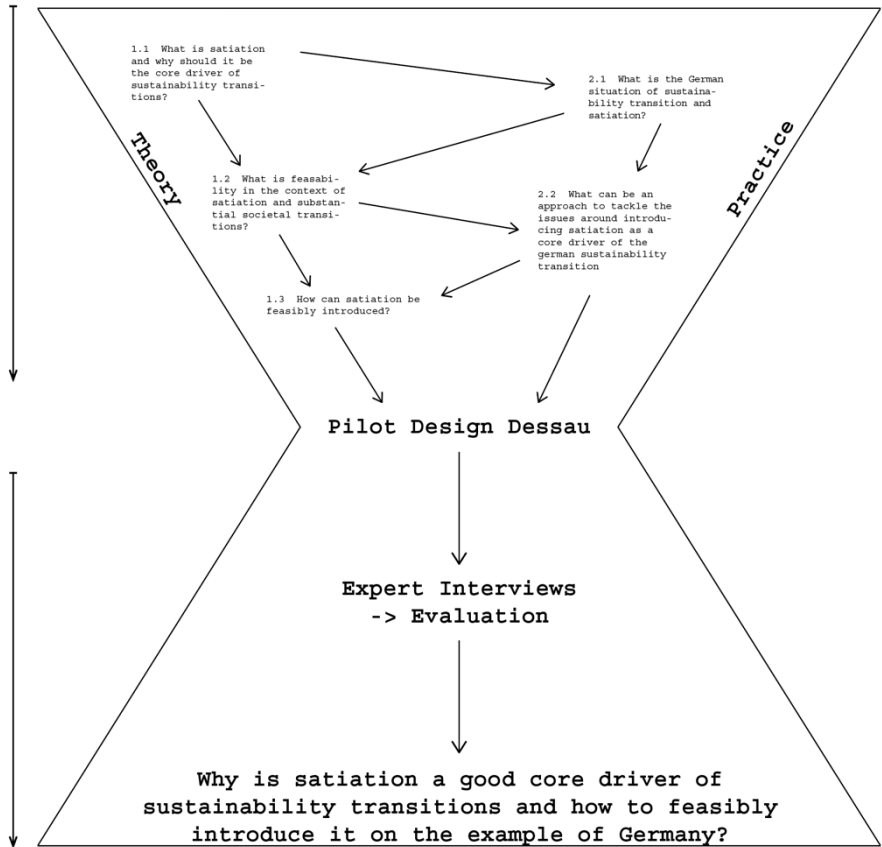


Graphic based on Balz, V. (2019). Regional Design: Discretionary Approaches to Planning in the Netherlands (19 ed.). [Dissertation (TU Delft), Delft University of Technology]. A+BE | Architecture and the Built Environment. Page 45 Fig. 2.1 <https://doi.org/10.7480/abe.2019.7>

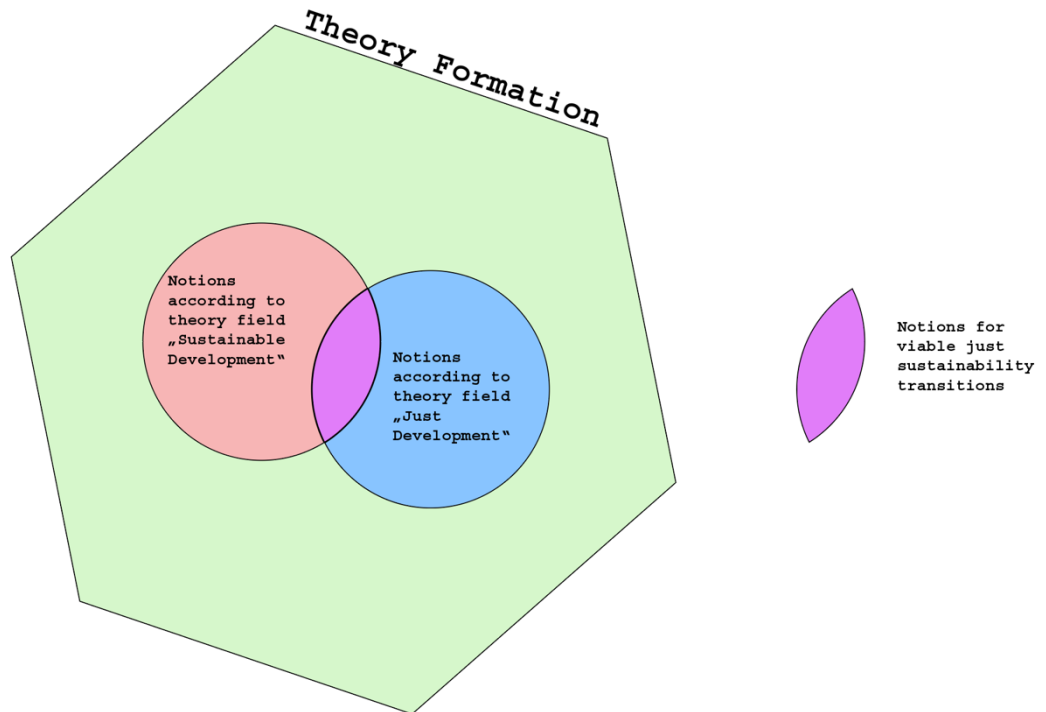
Research Design

Theory formation, specification and refining

Evaluation, abstraction and generalization



Theoretical framework



Methods per Sub-RQ:

1.1 What is satiation and why should it be the core driver of sustainability transitions

As outlined in the research design the research question had to be separated into two parts, the theoretical as well as the practical questions, which are to be researched in parallel as to inform the research in the other "branch" respectively. As a starting point for the theoretic line of research concerning satiation, why and how to introduce it, it is necessary to first find out what satiation is and then to position the concept in the wider context of research on sustainable development. Thus results the first subquestion of this part of research concerning a definition of satiation which will involve literature review on this topic. For the question on why it should be the driver of sustainability transitions one should look into the theory on sustainable development the reason being that many of the important concepts in the field are building on each other. I expect the possibility to trace a line from the older more basic concepts towards the newer and more specific deductions that many scholars before me created. By means of tracing this continuous line I will show that satiation is a well grounded approach on the question of sustainability. One specific reason is that satiation takes into account a wide variety of concepts having a "broad" as well as a "wide" base.

The preliminal trace of concepts starts at the three-pillars conceptualization of sustainability being one of the oldest and most basic concepts. This has been refined by research on planetary boundaries and the subsequent integration of the social dimension with these boundaries in the doughnut model. Further research on the dynamics of current societies that cause overstepping of these boundaries leads into the territory of postgrowth scholarship of which Federico Savini, one of the scholars involved in the academic discussion mentioned earlier that kicked off this research, is a proponent in the more radical subfield of degrowth. The tracing of these concepts and their origins requires substantial literature review. As a starting point for this literature review I take the academic discussion between Savini and Rydin.

Literature review „Notions of research on sustainable development“

- starting of with the Savini-Rydin-Savini discourse
- selecting the key cited literature of these works in the research-field of sustainable development
- explore further from this literature along the key concepts and the conceptual foundation of those focussing primarily on literature of high significance in the field (either with a high amount of citations

of the work or author or appearances in multiple works used for the review)

- derive a red line of key concepts building on each other arriving at satiation

2.1 What is the German situation of sustainability transition and satiation

case study Germany

In order to start the second line of research concerned with the practice and the implications that the theoretical insights have on a real problem in a real context and vice versa, I will research the German context when it comes to issues of sustainable development. I will work with two case studies in this research. The reason is that grounding in reality is necessary across scales as there are different implications associated. The national scale of Germany allows this research to analyse in practice a more general perspective on societal dynamics concerning the issue. As the goal is to ground the theoretical research in reality so that resulting findings, deductions and inductions are not only scientifically sound but also helpful by answering the research question in a way that can indicate a direction for practice, the analysis of the German position on the issue of sustainable development will be an exploratory one. The leading questions are concerning the status, the dynamic as well as specific contextual elements regarding sustainability transitions. The status of sustainability transitions concerns what has already happened in reality or on paper (e.g. legislation) in support of sustainability. The status also concerns missing elements on the path to sustainability. The research on the status is informed by the findings of the previous subquestion concerning issues of the meaning of sustainability. The research on the dynamic of sustainability transitions is concerned with issues of the future development in the dimension of sustainability. This means analysing whether Germany is on the right path, how the political situation is around pushing for sustainability as well as grasping whether public support for sustainability transitions is likely to increase, plateau or decrease. In layman's terms: What's the trend, what's the vibe, are we going or not? With the analysis regarding the specific contextual elements I will try to work out the peculiarities of Germany in the context of sustainability transitions. I have some hunches why Germany is a good case for studying the issues of this thesis as shown in the sketches with

the research structure, but it is very important to not only verify these hunches (or falsify!) but to work out all peculiarities of high significance in order to be able to judge how the results of this thesis can be transferred or if they are transferable at all. The concept of Soziokultur will probably be formally introduced to the research at this point.

Literature Review „Descriptions of German efforts in sustainability transitions“

- collection of recent (target approx. last 5 years, at least written after the paris climate agreement) sources based on publishing by well-known credible organisations concerned with the topic (e.g. Umweltbundesamt Federal Environmental Agency, Club of Rome, German Federal Government, European Union)
- collection of recent (target approx. last 5 years, at least written after the paris climate agreement) sources in academia preferably from notable authors or notable journals.
- cross referencing for derivation of common ground between sources

Literature Review „Conceptualisations of Soziokultur“

- collection of sources from organisations either practicing Soziokultur or being involved in cultural governance concerned with Soziokultur
- cross referencing for derivation of common ground between sources

Policy Review „Legal context of sustainable development in Germany“

- explorative collection of norms translating transition efforts into tangible legislation, preferably based on academic sources discussing the topic
- analysis on sufficiency for reaching the targets of higher level norms (e.g. Bundes-Klimaschutzgesetz „Federal Climate-Protection Law“)
- analysis on presence of satiation based approaches

Discourse Analysis (Press) „Enthusiasm for transition“

- selection of a spectrum of press outlets based on the size of readership as well as on a wide total spread of the selection with regards to political and socioeconomic positioning of the readership.

- analysis on the range and trends of portrayed stances on sustainability transitions

Spatial analysis „socioeconomic context of German sustainability efforts“

- selection of data from official or academic sources (e.g. Federal Bureau of Statistics, BBSR) based on a direct or indirect relation to the issue of societal sustainability transitions
- derivation of spatial disparities in Germany concerning the topic

1.2 What is feasibility in the context of satiation and substantial societal transitions

After defining the direction that societal transitions should be heading and after getting informed on some of the issues blocking sustainability transitions in Germany it is time to move to a core moment of this thesis: What is needed for transitions aiming at satiation? This issue is also very present in the initial paper of Savini and in the resulting discussion in general, where he calls for strategy in the issue of sustainability transitions. A core concept he refers to is legitimacy as a make or break factor for these transitions. Similarly to my rationale in the research about the concept of satiation I also want to start off by researching what it actually is and then proceed to trace the concepts on which it builds and on which the importance of this concept is founded. I preliminarily identified two main fields of research concerning legitimacy: the first is the field of transition theory, how ideas proliferate. This represents the use of legitimacy for the issue of introducing legitimacy. In this field the concept of prefiguration will be formally introduced to this research. The other field is the one of spatial justice which presents normative reasons why spatial planners should be concerned with legitimacy but more practically it also presents issues relevant to the formation of legitimacy. The research in these fields also comes down to literature review.

Literature Review „Notions of research on just development“

- starting off with the Savini-Rydin-Savini discourse
- selecting the key cited literature of these works in the research-field of sustainable development focussing
- explore further from this literature along the key concepts and the conceptual foundation of those focussing primarily on literature of high significance in the field (either with a high amount of citations of the work or author or appearances in multiple works used for the review)

- derive a set of criteria for feasibility in substantial societal transitions (like satiation)

2.2 What can be an approach to tackle the issues around introducing satiation as a core driver of the german sustainability transition

Case study Dessau

After researching direction, the specific german context and the (probable) main issue of sustainability transitions based on satiation that knowledge will be taken and tried to be applied on the case of Germany and specifically the case study Dessau. I will work with two case studies in this research. The reason is that grounding in reality is necessary across scales as there are different implications associated. The municipal scale of the Dessau case allows this study to analyse in practice the granular low scale actions that need to be taken to facilitate a societal shift. It is an atomization of the abstract theory breaking it down to specific directions for what actually can be done. This step is very important for going into the direction of operationalizing the introduction of satiation.

What do these concept mean in reality and what do they imply? What German peculiarities have to be circumnavigated and which can be utilized in what way? Where lies the agency? What seems straightforward but gets especially complicated in practice? This part of the research is important to ground the theory in reality and make the results of the thesis relevant. It is also essential in trying to plug the knowledge gap in which the thesis is positioned. It is at this stage that I will probably explore how Soziokultur can be used as a vehicle for satiation transitions.

Literature Review „Existing practice approaches to legitimacy building, prefiguration“

- Exploratory selection of sources from organisations practicing legitimacy building or prefiguration or from academia concerned with these topics
- Sources preferably with a relation to satiation or sustainability
- Derivation of shared characteristics and significant individual approaches

Best practice review „existing prefiguration instances fit for satiation“

- collection of references preferably from the German context at least from a similar socioeconomic context (e.g. Netherlands, Britain, France)
- Derivation of shared characteristics
- Derivation of shared characteristics of their contexts, especially institutional

Policy Review „Dessau context for Soziokultur, prefiguration“

- Selection of policy touching on the topics or the immediate context of Soziokultur and prefiguration
- Identifying supporting and hindering facets through comparison with previously formed theory as well as the literature review on existing practices and the best practice review

Discourse Analysis (Press) „Problems and frustration with the living context“

- selection of a variety of local press with significant readership ideally with high spread of socioeconomic positioning of the readership
- identification of shared narratives
- characterisation of the spread of narratives on the topic
- selection of narratives touching on the subjects of this research

Spatial analysis „Empty housing and its spatial context“

- collection of data and information from official sources or organisations touching on the specific subject of empty housing
- analysis of the spatial distribution of empty housing in Dessau
- characterisation of the typology of empty housing in Dessau
- Stakeholder analysis „Agency in Soziokultur“
- Collection of actors/stakeholders/institutions relevant for the design task
- categorization in a power-interest-agency-matrix
- derivation of „handling“-advice based on the positions in this matrix

Research by design „Satiation based upgrading of Soziokultur-infrastructure for increases in livability with the aim of creating housing demand in spare capacity“

- Designing a pilot project on the issue stated above
- trying to apply the theory collected and formed in this thesis and documenting observations during this effort

- the designing of the pilot project includes identifying necessary changes to the context, setting up new processes and governance structures, creating a timeline, exploring the possible spatial footprint associated with such a pilot, identifying existing prefigurative practices and possibly more tasks depending on the necessities of the design

1.3 How can satiation be feasibly introduced

The „last“ part of the thesis (which is actually starting in parallel to the Dessau casestudy) is about bringing everything together. The biggest task in this is to make sense of the findings made in the part applying the previous body of theory to reality. The specifics need to be contextualized and position with regards to their abstractability in order to be able to judge their generalizability. The goal is to induce into the theory grounded in the design test. It is here where I intend to further specify existing concepts for use in feasibly introducing satiation based sustainability transitions. For further challenging the body of theory I will compose in this thesis the results are intended to be discussed and evaluated with experts from the research fields I intend to link in this thesis. The feedback will feed back into a last round of refining the theory.

Literature Review „Existing practice approaches to legitimacy building, prefiguration“ [shared with RQ 2.2]

- Exploratory selection of sources from organisations practicing legitimacy building or prefiguration or from academia concerned with these topics
- Sources preferably with a relation to satiation or sustainability
- Derivation of shared characteristics and significant individual approaches

Research by design „Satiation based upgrading of Soziokultur-
infrastructure for increases in livability with the aim of creating housing
demand in spare capacity“ [shared with RQ 2.2]

- Designing a pilot project on the issue stated above
- trying to apply the theory collected and formed in this thesis and documenting observations during this effort
- the designing of the pilot project includes identifying necessary changes to the context, setting up new processes and governance structures, creating a timeline, exploring the possible spatial footprint associated with such a pilot, identifying existing

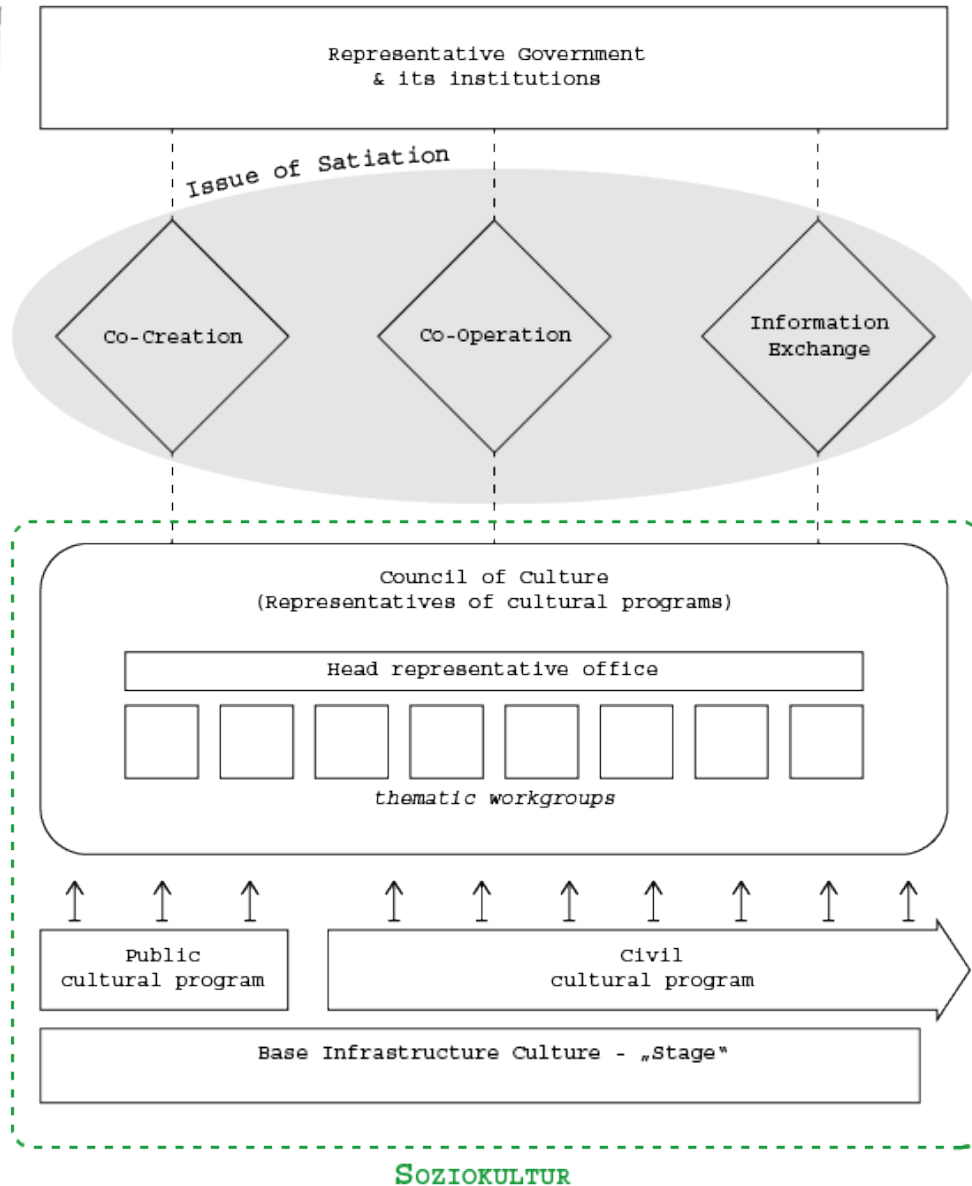
prefigurative practices and possibly more tasks depending on the necessities of the design

Expert interviews feedback loop

- selection of experts with the aim of covering the biggest fields of theory linked in this thesis; minimum two & maximum five
- preferably experts with a mix of experience in academia and practice
- semi-structured interview focussing on the correct use and applications of the concepts the expert is very familiar with as well as perspectives on the pilot design
- if there are findings which are identifying faults in the thesis these will be corrected based on the feedback
- if there are additional findings these will be integrated if possible
- any significant findings will be mentioned in the discussion part of the thesis
- the findings of these interviews are a major part of the research loop

Conceptual Framework so far:

Control representative democracy



Control civil society

Literature and general practical references

[The literature (theories or research data) and general practical experience/precedent you intend to consult.]

Satiation

Satiation refers to a society meeting all its essential needs. The idea that needs can be fully satisfied goes against one of the oldest, least challenged axioms of economy, effectively stating that greater consumption always leads to greater satisfaction. The idea implies that human wellbeing is multidimensional and that economic growth cannot be the one answer on how to improve it. (Pettini & Musikanski, 2023; Savini, 2024b)

Legitimacy

Whether or not something (e.g. a spatial measure) has the backing of the people concerned with it and/or its consequences. Key issue in substantial societal transitions. Issue of spatial justice and feasibility of transitions. May be created through societal discourse, for example through the process of Prefiguration, Popularization & Pressure. (Meissner, 2021; Savini, 2024b, 2024a)

Prefiguration

Prefiguration refers to the process of performing practices that differ from the existing bigger context they are performed in with the goal of proving their viability. In a movement this can mean that its ends are already reflected in its means. The first step of and prerequisite to cultural societal change. Seed (Meissner, 2021)

Spatial Justice

Is social justice through a spatial lens. At TU Delft Bouwkunde it has been conceptualized in three dimensions: distributive justice (concerning the spatial distribution of burdens and benefits of having a society), procedural justice (concerning the systems and processes governing space) & recognitional justice (concerning how to deal with the diversity of humans in all kinds of dimensions connected to identity in a just way) (Rocco, 2023)

Postgrowth (/Degrowth)

Is a perspective on development which acknowledges that economic growth is not sustainable and can never be sustainable long term. It challenges almost all basic assumptions on development in western industrialized societies. It acknowledges satiation as a core principle. degrowth is a postgrowth approach that focusses on issues of downscaling. (Pettini & Musikanski, 2023; Savini, 2024b)

Doughnut

Is for our intents and purposes a general term describing the safe space for human development. It was introduced by Kate Raworth as a model for economics and is constructed of an upper and a lower limit to human activity. The upper limit is the sum of the planetary boundaries introduced by (Rockström et al., 2009) and the lower limits are social minimums (such as basic human needs). (Raworth, 2018)

Soziokultur

Is a German umbrella term, it emerged from practice and is thus a bit of an umbrella term. It is discussed in more detail in the thesis but as an introduction I will cite the federal association Soziokultur: "Soziokultur is a programmatic term referring to discourses, contents, forms of practice and organization which relate societal life and cultural expression onto each other. It opens itself towards diverse perspectives on what culture is, through means of cultural participation empowers civil engagement as well as creative-cultural competence of many - regardless of age, gender and origin - and is in this way searching for answers to the question how we want life."(Bundesverband Soziokultur, 2024)

And more concepts which arise during the two main literature reviews on the topic....

Literature so far:

Balz, V. (2019). Regional Design: Discretionary Approaches to Planning in the Netherlands (19 ed.) [Dissertation (TU Delft), Delft University of Technology] in Welgelegen | Analyse van Hollandse buitenplaatsen in hun landschappen (1630-1730) (A+BE, Architecture And The Built Environment, Ed.). A+BE | Architecture and the Built Environment. <https://doi.org/10.7480/ABE.2019.7>

Bendassolli, P. F. (2013). Theory Building in Qualitative Research: Reconsidering the Problem of Induction. *Forum Qualitative Sozialforschung / Forum: Qualitative Social Research*, Vol 14, No 1 (2013). <https://doi.org/10.17169/FQS-14.1.1851>

Bundesverband Soziokultur. (2024). Leitbild Soziokultur. <https://soziokultur.de/wp-content/uploads/2024/01/Leitbild-Bundesverband-Soziokultur.pdf>

Corbin, J. M., & Strauss, A. (1990). Grounded theory research: Procedures, canons, and evaluative criteria. *Qualitative Sociology*, 13(1), 3–21. <https://doi.org/10.1007/BF00988593>

Meissner, M. (2021). Towards a cultural politics of degrowth: Prefiguration, popularization and pressure. *Journal of Political Ecology*, 28(1). <https://doi.org/10.2458/jpe.2972>

Pettini, A., & Musikanski, L. (2023). Doomed to Consume? Non-satiation as a Flaw in the Current Economic Paradigm and What Communities Can Do About It. *International Journal of Community Well-Being*, 6(1), 63–78. <https://doi.org/10.1007/s42413-022-00182-6>

Raworth, K. (2018). Doughnut economics: Seven ways to think like a 21st-century economist. Penguin Books.

Rocco, R. (2023). What's Spatial Justice? Centre for the Just City. <https://just-city.org/team/spatial-justice/>

Rockström, J., Steffen, W., Noone, K., Persson, Å., Chapin, F. S., Lambin, E. F., Lenton, T. M., Scheffer, M., Folke, C., Schellnhuber, H. J., Nykvist, B., De Wit, C. A., Hughes, T., Van Der Leeuw, S., Rodhe, H., Sörlin, S., Snyder, P. K., Costanza, R., Svedin, U., ... Foley, J. A. (2009). A safe operating space for humanity. *Nature*, 461(7263), 472–475. <https://doi.org/10.1038/461472a>

Savini, F. (2024a). Degrowth, legitimacy, and the foundational economy. *Planning Theory*, 14730952241278056. <https://doi.org/10.1177/14730952241278056>

Savini, F. (2024b). Strategic planning for degrowth: What, who, how. *Planning Theory*, 14730952241258693. <https://doi.org/10.1177/14730952241258693>

There is also already some best practices for prefiguration which I am just going to list:

- Health Kiosks Seltenrain
- Church Reuse ("Aufgeschlossen" Project)
- renovation Ossietzky-Hof Nordhausen
- Rental Dwelling Syndicate ("Mietshäusersyndikat")
- Fablabs (e.g. Fablab Nürnberg e.V.)
- Library of things (e.G. as part of the public library Kassel)

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 relationship to my graduation studio I already explained above, the key make or break issue I will investigate as part of my topic is legitimacy. This is highly entangled in the field of Spatial Justice of which the Delft conceptualisation developed under the lead of Roberto Rocco is very practicable and modern. It also hinges on topics like participation and policy as well as strategy which are all included in the PCC studio. With regards to my master track I frankly think that this thesis is touching on the most impactful issues of the day as sustainable development and spatial justice are to core values we strive for in our studies and in our field in general. With regards to the entire master I can only repeat that I deem the issues of this thesis to be of fundamental importance in the sense that the aim, to introduce satiation as a core driver of sustainability transitions, would result in a fundamental paradigm shift

including how we deal with the built environment in general. Thus it would have ripple effects on all professions included in the master.

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

Social: The question of sustainable development is a question in which fundamental implications for the society are embedded. Introducing satiation as a core driver could fundamentally shake our worldview including challenging capitalism as we know it. It also poses questions on our interpretation and operationalizations of democracy. A lot of people could potentially have their needs met more effectively and Germany could potentially be a lot more just country.

Professional: The results of this thesis could have implications on multiple facets and scales of our profession. At the low scale design level it could change for example how much emphasis is put on commons and culture. At the large scale it could result in following different narratives of what prosperity means and thus what emphasis is put or not put on economic, materialistic growth and thus for example on the importance of enticing industrial development. For planners making policy it would have similar effects with the addition of a lot more emphasis on practices from the field of deliberative democracy, co-creation etc.

Scientific: As I derived the topic of my thesis from an academic discussion in the journal "Planning theory" I deem my topic to be addressing open questions on the bleeding edge of research. In my opinion there is a bit of a gap in academia concerning not where we have to go and what justice means but how to get there and how to get there in a just (and thus legitimate and thus feasible way).