### Reflection

Learning international lessons: Dutch spatial planning in transition

8.1 General reflection

8.2 Methodological reflection

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#### 8.1 | General reflection

### RELATIONSHIP BETWEEN RESEARCH AIM, QUESTIONS AND METHODOLOGY

#### Sub-research questions

Comparative study

 Which planning strategies from other locations are suitable for a comparative study?

For the choice of the locations, I formulated three criteria: The main criterion was that the spatial strategy needed to contain innovations related to NOVI's content, process and product objectives . The other two criteria were a global spread, and the locations required a certain similarity with the Netherlands in the context, aims or challenges. Through an extensive literature study in which I researched spatial planning documents, literature concerning national spatial strategies and news, blogs, etc on innovative concepts within spatial strategies, I chose the following six locations: California, Denmark, England, Japan, New Zealand and Oregon. See Figure 3.2 for a visualisation of the chosen locations and their main relationship to NOVI's objectives.

 How do the Dutch context and spatial strategy compare in general to the other locations?

This question is largely answered in chapter 3, the general comparison. In this chapter, I compare the context and the spatial strategy of the Netherlands, California, Denmark, England, Japan, New Zealand and Oregon. For the context, I compare several spatial and demographical aspects, political and institutional aspects, and cultural and transitional aspects. Together, they form an overview of the different contexts of the spatial strategies. This is essential to understand the large dependence of the spatial strategy on its context and supports the overall understanding of the spatial strategies. The current spatial strategy of the Netherlands (SVIR) is compared to the current spatial strategies of the other locations in the categories of content, process and product, to grasp the differentiation and offer an understanding of the spatial strategies.

The question is further answered throughout the rest of the project; each step considers the Dutch context and spatial strategy.  What are the key variables to measure the variation in (national) spatial strategies?

Chapter 4.1 recognizes that a general overview of elements concerning the spatial strategies does not offer a real understanding of the variation that occurs within (national) spatial strategies. Based on the general comparison, I formulated six key variables:

- 1. Scope of content
- 2. Specificity of content
- 3. Openness of the planning process
- 4. Collaboration in the strategy-making process
- 5. Adaptivity of the product
- 6. Interactivity of the product

Each of the variables show the variation within the spatial strategies of the locations. It also specifically relates back to the Dutch context and highlights a few specifics to explain how the variation was measured.

 What location-specific innovations can be found in content, process and product based on NOVI's objectives?

This research question is answered in chapter 4.2, in which I created a matrix of innovations based on the six chosen locations and on content, process and product innovations. The innovations were extracted from an extensive literature study, in which the spatial strategy documents proved the most useful. A full overview of the innovations is found in appendix A. Each innovation is explained with a title, a short text, an illustration, its relationship to NOVI's obectives, and a conclusive lesson.

Demonstration of transferability:

To what degree are the innovations of the spatial strategies of other locations dependent on the context?

To answer this question, I tested the applicability of the innovations of the strategies by replicating them onto the Netherlands. This exercise allowed me to understand to which degree innovations can be replicated onto the Netherlands. This exercise revealed that, in general, the product-related innovations are the least dependent on the context, while the content-related innovations with spatial implications are the most dependent on the context. Therefore, in chapter 6.1 I chose five spatial content-innovations to dive deeper into understanding its relationship with the context and what that could mean for the Netherlands. The content-innovations are always created from a context-related urgency and developed through existing potential in its locationspecific spatial structure and are therefore applicable within the right consideration of the specific context.

 What are general principles and concepts that can be filtered from the spatial strategies?

To discover general principles and concepts I performed a literature study from which I categorized criteria for the content, process and product of a strategy. Taking the criteria as a starting point, I started an iterative process with the strategy replications made in chapter 5, by filtering recurring aspects between the strategies within the categories of content, process and product. This led to the following list of general principles and concepts:

- Environmental quality
- · Sustainable urban development
- Accessibility
- Climate adaptation
- Sustainable energy
- · Economic development
- · Cultural heritage
- Land preservation
- Sustainable communities
- Safety and risks
- Knowledge and innovation
- Tourism and recreation
- Housing
- Networks
- · Natural capital
- International context
- · System responsibility
- Public participation
- Co-production
- Subsidiarity
- · Providing clear framework
- Trust in key actors
- Offering space for initiative
- · Clear role division
- · Vertical coordination
- Horizontal coordination
- Transparency
- Efficiency
- Accountability
- Legitimacy
- Inviting
- Adaptive
- Digital
- Urgent
- Suitable for public
- Inspiring
- Clear summary
- · Separation of short-and long term
- · Mix of images and text
- · Clear vision

- · Guiding principles
- · Clear national actions
- Foreword
- · Clear framework
- What could NOVI look like if the filtered principles and concepts are applied on the Dutch context?

I developed a proposed NOVI in 6.2, based on my interpretation of the theory, the Dutch context, the analysis of the comparative study and the replication and application exercise. According to this proposed NOVI, the NOVI would focus on getting a grip on the societal and spatial transitions taking place. The changing role of the government is made explicit by a clear division in types of roles and the related actions. The three main urgencies of migration, energy transition and climate adaptation all occur within a context of globalisation. The Netherlands uses the potential of an extended European high speed train network to develop a spatial vision for the future development of the Netherlands, along which the urgencies can be solved.

#### Research aim

The research aim is to learn lessons from other (national) spatial strategies based on the content, process and product objectives of the Dutch national government for the NOVI.

After answering the above research questions, I reach the aim of this graudation project by giving a threefold of recommendations for the NOVI, based on the lessons learned from the different sections of the methodology. The first recommendation is to get inspired by examples with open considerations of the constraints of the context by offering a set of lessons learned from the location-specific innovations. The second recommendation is to recognize the critical issues within NOVI's objectives and offer them the time, effort and research needed. Based on the proposed NOVI, I extract a few crucial bottlenecks, explain why they form bottlenecks and offer a range of solutions given by the other locations. The third recommendation is to be aware of the purpose of the strategy in relation to the transforming role of the government; and design the NOVI accordingly. This final recommendation relates the key variables back to the purpose of the strategy and explains how it can inhibit or enable a specific purpose, and how it relates to the role of the government.

#### RELATIONSHIP BETWEEN RESEARCH

#### AND DESIGN

In this project, the research and design form a symbiotic relationship. A theoretical foundation formed the stepping stones of this project, to create a basic understanding of national and regional spatial planning, comparative studies, and the history of Dutch spatial planning. Design is used as a working method more than an actual final output of design. 'Design thinking' is a methodology of finding innovative solutions to complex problems. Within the complexity of the chosen graduation topic, it proved useful to think of large systems with logic, creativity, intuition, imagination, systemic reasoning and exploration. This attitude of critical and explorable thinking was used as a constant next to the scientific and theoretical research for the project. In general, the project consisted of a few divergent movements, broadly exploring theory and design, followed by a converging movement towards synthesis.

Using the theoretical foundation, I was able to perform a general comparison in which the context and the spatial strategy of six locations are compared. It relies both on a 'classic' form of research and the use of design thinking to show a variation of important aspects when looking at spatial strategies. Because of the limitations of the comparative study, I required creativity in gathering information, processing the data and visualizing it. The same counts for the analysis of the general comparison. After the divergence of the general comparison, convergence took place by filtering six main variables in measuring variation in spatial strategies. For the location-specific analysis,

In the demonstration phase, I tested the replicability through an iterative process to filter out general concepts and principles. I had researched some theories on what content, process and product should contain, and had created visualisations to offer an overview of what the Netherlands would look like if the national strategies of the other locations were applied. An interaction of inductive and deductive methods caused for constant adaptations and alterations in the visualisations of the exercise and of the general principles and concepts.

The design output, which is part of the demonstration phase, is a visualization of a proposed NOVI within content, process and product design. I did a full theoretical and spatial analysis of several spatial implementations of strategies to understand its relationship with the context. Also, a spatial analysis of the Dutch context was essential to generate which opportunities and challenges exist in its spatial

structure. This was needed to form the main content used in NOVI. The spatial design is a part of the content design, in which a vision is drawn out for the Netherlands on how it should transform its spatial structure towards the future.

The main output is not a spatial design but general recommendations for the NOVI. The design and research output together form an equal input to the final conclusions where synthesis takes place, which signifies the balanced relationship between research and design throughout the project.

### RELATIONSHIP BETWEEN THEME OF

#### GRADUATION LAB AND SUBJECT CHOSEN

The keywords of this research are international national comparison, planning systems. complex strategies. spatial structure. (multi-level) governance, spatial planning concepts. planning culture planning transition, adaptive planning, globalization, competitiveness, livability, and planning & design tools, instruments and methods. These keywords relate to the graduation lab 'STRATEGIC SPATIAL PLANNING AND DESIGN', which consists of three sub research groups 'METROPOLITAN SPATIAL STRUCTURE'. 'REGIONAL GOVERNANCE, PLANNING AND DESIGN' and 'INTERNATIONAL PLANNING AND DEVELOPING REGIONS', which are each related differently to this graduation project.

The 'metropolitan spatial structure' is concerned with linking planning strategy and practice and the performance positively with improved knowledge of spatial structure and performance. Three main terms are economic competitiveness, environmental sustainability and social well-being. These three terms form an essential part of the spatial strategies that I have compared. They often find their way back into the aims or missions of the national spatial strategies (see p. X of comparison chapter X). The spatial exercise of chapter X also links the planning strategy with practice by looking at the spatial implications and the context in which it was created.

'Regional governance, planning and design' is concerned with governance of metropolitan regions in the context of the increasing complexity and fragmentation of spatial relationships. The role of spatial planning and design in managing regions is investigated. It also concerns itself specifically with the paradoxical situation of the Netherlands, in which spatial planning loses political influence but design methods on regional scale are increasing. This relates closely to my

personal investigation on the role of spatial planning on a national level, and the transition which the Netherlands is currently in from a governance point of view. For this reason, I offered more than a comparison of strategies and how to implement them in the NOVI, but also linked back to the purpose of a strategy and the role of different governance systems, and the power it exerts through the strategy. New governance concepts are examined and translated back to the national spatial strategies. In the recommendations, I make a careful consideration of the possible purpose of NOVI within the context of the changing government.

The sub research group 'INTERNATIONAL PLANNING AND DEVELOPING REGIONS' is the most relevant. This theme 'undertakes comparative analysis of varying forms of intervention through spatial planning and territorial management in Europe and developing regions in the world. There is an emphasis on building valid methodology for international case studies, comparison and policy transfer'(SPS editor, 2011). It recognizes the urgency of international comparison within the context of increasing global integration, which was my personal starting point for an international comparison as well. My developed methodology for comparing spatial strategies is extremely relevant for this research group as it underpins the importance of the context in policy transferability and offers a method of filtering the level of applicability for any given aspect within a spatial strategy.

In general, the scientific relevance of this project is found in the link between design and research within the methodology, and the link

between comparison and application. Also, the filtered general principles and concepts are a useful framework in the general research of spatial planning strategies.

## RELATIONSHIP BETWEEN PROJECT AND WIDER SOCIAL CONTEXT

This project is done in collaboration with the ministry of infrastructure and environment, where I am participating as a full member of the NOVI project team. This has allowed me to adapt to changing circumstances throughout the project which has added to its relevance. At several moment throughout my graduation I have presented my interim findings with the NOVI project team and offered my insight to the position of NOVI and the Dutch situation in general compared to others.

Within the general social context, the government seeks to reinvent its role in how it interacts with citizens. As mentioned in the project, the transition which is taking place in the society is manifesting itself in movements like the 'energetic society' mentioned by Hajer (2011) which requires new methods of partnership and collaborations between the government and citizens, this is a part of my final recommendations for the NOVI.

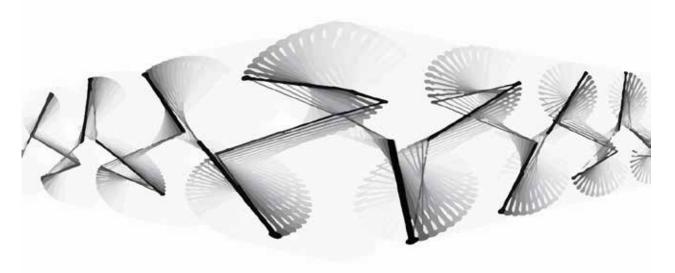


Figure 8.1 an abstract visualisation of the process

### 8.2 | Methodological reflection

In this reflection I discuss the three most important aspects which influenced my methodology as a whole, how my chosen methodology managed to give answer to my research questions, and how it relates to my personal challenges for this project mentioned in my motivation. I end with recommendations for further research based on the reflection.

for further research based on the reflection. Reflecting on the methodology as a whole, there were a few important aspects which have influenced the project at large. The first is the manageability of the project. Creating a manageable project within the given timeframe of graduation was in conflict with my personal ambitions and interests. At the start of graduation, I had already been part of the project team of NOVI for six months, and had a lot of ideas on how the NOVI could be enriched, improved and complemented. The term 'international' was an important term from the start, though I was not sure which role an international perspective could have. Choosing a comparative study to 'learn lessons' meant two things for the manageability: The focus stayed on the Netherlands, instead of an equal comparison between all seven locations; and I could compartmentalize the comparison by searching for specific innovations in content. process and product. This three-fold of content, process and product has proven to be a solid structure to fall back on, and has pushed me to consider all aspects of strategy-making equivalently. At the P2, the largest criticism received concerned the manageability as well. There was a concern with choosing six different locations to use for the comparative study. However, showing the variation of spatial strategies was important to me, which is why I chose to continue with all six locations, but to manage it by being selective in the demonstration of the transferability. By creating visual overviews when testing the replicability of the spatial strategies for the Netherlands, I was able to highlight the most important aspects of each strategy and show its dependence on the context and the same time. Also, I stayed selective by choosing the five spatial examples which were the most dependent on the context to dive into to discover the deeper layers of the importance of the context. While testing through replication, I made sure to show the cohesion between the content, process and product and how they influence each other. This interconnection between content, process and product becomes especially important in the conclusions (chapter 6.3), when I relate the NOVI to its larger purpose and the role of the

national government.

The second aspect is the limitations within my comparative study. The comparative study is based mostly on desk research, which comes with several restrictions. First, it is extremely difficult to understand how the strategy works in practice. Within the three objectives of NOVI in content, process and product, especially the process was difficult to measure since I relied mostly on the description of the process in the strategy itself, or supporting documents from the governments. This affects the reliability of my general comparison and the analyses of the strategies. I make several assumptions in the indicators used in chapter 4.1 when I measure the variation between the national strategies. This has its effect on the conclusions of chapter 7.3 as well, where I use the purpose of the strategy to identify enablers and inhibitors in reaching a specific purpose.

Also, I started this graduation thesis under

the impression that spatial strategies would

be spatial and visionary. However, most spatial strategies do not contain the spatial implementations or implications of the given content. This is partly due to decentralisation but also a difference in planning culture; the Dutch spatial planning system has a long tradition of spatializing its content, whereas other nations do not. Also, even though 'visions' are often seen as a main requirement for a spatial strategy (explained in chapter 1.7) the visions often stay within 'the vision as a mission statement', where only Japan seems to define a desired future on what Japan should develop towards from a spatial point of view. Another limitation of the comparative study was the main languages of the spatial strategies. Four of the six chosen locations have spatial strategies and all other information available in English (California, England, New Zealand and Oregon) but Japan and Denmark proved to be more difficult to research due to the language barrier. The Japanese government offers a summary of the National spatial strategy in English and uses a lot of different types of visual communications, which softens the language barrier. It also offered several documents with overviews of spatial planning in Japan in general and the before last spatial strategy of 2008 had a full translation, which was useful to understand the structure of the spatial strategy document as a whole, and to understand the changes with the current strategy. The Danish government has not translated any spatial strategies since its reforms in 2007, except for the Finger plan of Copenhagen. It offers several elaborate document on the history of Danish spatial planning up until 2007, but in analyzing the current main spatial strategy I had to rely on the Danish version.

I also did not visit the chosen locations of my comparative study except for Denmark, which limited my ability to assess the dependence of the innovations with the context. I tested this during my graduation year by taking a field trip to Copenhagen, Denmark. This trip confronted me by showing large differences between my expectations and the reality. This field trip was an important reality check, and emphasized the importance of being able to look through the context and find the general principles and concepts that could be applied in the Netherlands.

In choosing the starting point of 'innovations' for my comparative study, there is a possibility of 'glorifying' certain aspects of the strategies. This mostly happened in the location-specific analysis, in which I specifically review the strategies in search for these innovations. That's why it's important to note that these innovations are meant to inspire, and even though there is an uncertainty in their implementation, it can challenge the NOVI project team in considering new methods or tools for content, process and product which they hadn't previously considered.

The third aspect is that this project is about spatial planning and policy making, which is a part of urbanism that I haven't been confronted with often during my studies. This meant that I had to deliver extra work to understand a lot of the basics of spatial planning and strategy-making. Within the few months of graduation, I have extended my knowledge of spatial planning and strategies immensely. Unfortunately, I feel like I have not learned as much as was necessary to receive the depth I wanted to achieve when giving a complete answer for my research questions. First, I did not dive as much into the theories of the product-related innovations due to the fact that it was difficult to find literature on the product within spatial planning. I relied on some general theories of communication, concerning interactivity and the purpose of different types of communications. Also, I put too much emphasis on a theoretical analysis of the Dutch context at the beginning of my graduation while later, the theory on comparability and especially policy transferability became much more important. Within the manageability of the project, I have balanced researching as many aspects of spatial planning as possible, within the time-frame of graduation. The collaboration with the ministry proved to be very helpful in understanding the practicality of spatial strategies

In general, this project at large is a study on international transferability of spatial strategies to learn lessons for the NOVI. The enormous influence of the context in general on the spatial strategies was something that I was constantly confronted with. I overcame this limitation as much as possible by methodologically applying filters of applicability, peeling away the layers of the context to reach the general principles and concepts, and constantly reflecting it back to the Dutch situation. Moving through the filters of applicability is an innovative method to generate general principles and concepts, and demonstrating the applicability of the concepts back to the Dutch context brings it together and makes it tangible again.

At times, I had given too much weight to individual parts of my graduation instead of placing it in the larger frame of transferability. For example, the location-specific innovations analysis was a very useful exercise to get inspired by the other locations but forms the basis for only one of the three chapters of my final recommendations, and is the least applied to the Dutch context. My two other chapters in the final recommendations are based on the proposed NOVI and on general aspects of the larger framework in which the NOVI is created, e.g. the purpose of the strategy and the role of the government. The large framework in which I give recommendations demonstrates the comprehensiveness of the graduation project as a whole. It moves between different levels of abstraction and is able to create connections between several layers of applicability.

This method of filtering layers of applicability and demonstrating it within the comparative study to end in specific recommendations has proven to be more than a 'juxtapositioning of data' but to move towards a deeper understanding of the spatial strategies as a whole and how they could be applied within a specific context. It has led to a a research which moves through layers of abstraction and offers insight to the transferability of content, process and product innovations.

The method as a whole has been applied systematically, allowing for a graduation project which is methodologically sound research which is justified through each step.

#### PERSONAL CHALLENGES

I named three personal challenges in my motivation (chapter 1.2) to reflect on within this graduation project: Combining the work of the NOVI project team with my graduation, finding a strong method for designing and visualizing the end product, and developing a network of experts for reflection through testing and validation.

# The combination of working within the NOVI project team and graduation

This combination is rare within the faculty of architecture at TU Delft. Especially at the beginning it was difficult to reinvent my role within the project team as a student researcher within a specific aspect of NOVI. In the last phase, I found it difficult to academically distantiate myself from the project team at times when it came to creating a proposed NOVI and offering recommendations. I needed to make a very conscious switch to being able to make a proposal for the NOVI, which my mentors thankfully helped with In the end, the proposed NOVI is a methodologicallysound, justified proposal based on the theory, the comparative study and the replication exercises. However, doing this work within the NOVI project team has made the project extremely relevant, and it is very rewarding to have seen how my research (in progress) has been able (and continues) to contribute to the NOVI as a whole. The framework would not have developed the same way without the reflection from practice. It also makes me experience the everyday complexities when working on a project like this, and has helped in creating awareness of the many factors that influence strategy-making on national level. This collaboration also made me aware of the gap between academic research and practice. At TU Delft, the interest was in the creation of a framework and methodology and justification of each step, while the ministry's interest was how to produce results in such a manner that the NOVI can benefit from it. Having both points of view in my tutoring sessions has made this project comprehensive and complete.

## Method of visualization and designing the end product

In going towards a proposed strategy design and communicating the end product, I was confronted by a few aspects. One mentioned earlier is the fact that I need to be able to present my work to non-urbanists as well within the NOVI project team. Another is that this graduation project is quite unique which means there were not a lot of references on how to work towards an end product. Also, I was confronted by the fact that the chosen spatial strategies were not very spatial in general. For example, Adams (2008) mentioned 'polycentric development' when discussing policy transfer as a reoccurring spatial theme. However, this does not seem to resonate in the content of chosen strategies, except for the Japanese national strategy. In general, there are not many references to actual space, which made it difficult to compare the content. Also, the structure of content-process-product automatically meant that I needed to search for different methods of visualisations for the end product. This struggle has caused me to delay working on the design product several times. The visualisations of the strategies in the replication and application chapters are sketched by hand and mixed with digital elements: they are a collection of content, process and product elements fitted into one poster. This is to show the subjectivity of the chosen elements, the comprehensiveness and interrelations between content, process and product, and the testing nature of the chapters where it is used as an exercise to discover the transferability. In the proposed NOVI, the sketched nature of the visualisations emphasize that the choices made for the implementation are my personal choices, though methodologically justified based on the theory, the Dutch context and the replication exercise. It is a 'demonstration' and not a final design in any way.

#### Network of experts

Within the complexities of this graduation project, I happily relied on the knowledge of experts as much as possible. In my methodology (chapter 2), I mention the use of experts to test and validate my observations, analyses and conclusions. I mention three types of experts I wish to involve: International experts (experts of the chosen locations), national experts (have insight in the Dutch context and planning history), and the expertise of the NOVI project team at the ministry. Unfortunately, I have not manage to set up a strong network of international experts, which has affected the reliability of my comparative study, also explained above as a limitation of my desk research. However, my network of national experts and the NOVI project-team have been extremely helpful in adding depth to the research, especially concerning the Dutch context and perspective. I made use of the network of TU Delft and the Ministry of Infrastructure and the Environment to test and validate my observations, analyses and conclusions several times.

#### Further recommendations for research:

The NOVI should go into effect in 2018, this graduation project took place in an orientation phase of the project, where they are still searching for the answers of some basic questions like which purpose should it have, how it should communicate a sense of urgency and what the content should be. I have made a first proposal based purely on the objectives of the NOVI project team but once the content and the purpose becomes more clear, specific research into examples can be made to understand the specific transferability better. I also suggest an in depth research on the proposed urgencies of migration, energy transition and climate adaptation. This includes research for the possible design solutions for the content instead of using the other locations as a starting point, but researching it from scratch from the urgencies that occur in the Dutch context.

I also recommend a specific research for the general comparison, specifically to develop a methodological research on the (planning) culture.

As mentioned earlier, an extensive literature review of product innovation and of understanding spatial planning as a whole would add more depth to the final recommendations.

Also, this method of filtering general principles and concepts provides a starting point towards further research on what a spatial strategy could contain. These general principles and concepts are partly based on NOVI's objectives in content, process and product and therefore relate to a specific type of strategy with a specific purpose. I would recommend a more objective research towards principles and concepts which can be related to different types of purposes, as I demonstrate with the influence of the key variables on the purpose. This would offer a catalogue for governments to make balanced decisions in creating a national strategy.