From Ambition to Innovation

A closer look at the physical characteristics of innovation districts

Reflection

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Introduction
Developing this master thesis has been both a challenging and a learning experience. This reflection will elaborate on the different phases throughout the thesis and attempts to shed light on the challenging moments as well as the lessons I have drawn from the process.

Firstly, both the scientific and societal relevance will be discussed. Hereafter, the research design will be elaborated on. Thirdly, the research methods will be reflected on. This section will discuss the role of the different methods used in this research (literature review, case study, interviews, statistical analysis). Finally, the research process will be evaluated.

Research relevance
Scientific relevance
This research has aimed to contribute to research on the link between innovation and the built environment. It specifically focuses on the physical interventions that can be done in innovation districts in order to stimulate the process of innovation by innovative entities. The empirical analysis aims to contribute to research on how steering actors can stimulate innovative entities that are located in innovation districts. The final result of this research could prove useful for researchers that are conducting research on the link between innovation and the built environment, as well as researchers/professionals interested in the development of innovation districts.

Societal relevance
This research has aimed to produce an outcome that will provide a better understanding of how to translate an ambition for creating an innovation district into corresponding physical interventions. This will help create a link between the brand ‘Innovation District’ and the actual built environment, and aims to contribute to higher levels of innovation within the district. By performing an empirical analysis on the preferences of the end-user, the results of this research provide municipalities with a better understanding of how to create an environment that matches the preferences of the users of innovation districts. In the long run, this could improve the competitiveness of the city in which the case is located and help stimulate its economy. Considering the high levels of infrastructural as well as institutional connections between cities within the Randstad, this could potentially prove beneficial for the development for the Randstad as a whole.

Research design
The research design has served as a way of structuring my thesis. Although the design of the research has changed throughout the duration of the research, the main structure has remained the same. This structure has allowed me to maintain focused on the end result, while exploring the vast amount of information during that came up during the case study.
Research methods
Performing both a qualitative and a quantitative research has proven to be a challenging process. The following sections will elaborate on each of the methods that have been used throughout this research and evaluate the challenges that came with them.

Literature review
Performing a literature review has proven to be particularly helpful in the process of generating knowledge regarding the main concepts that comprise this research. Being that my knowledge concerning innovation districts had been seriously limited prior to this thesis, gaining a vast amount of knowledge in a limited period of time proved challenging. Especially finding the main authors and literature in this field of research was difficult at times, although the meetings with my mentors have assisted me significantly in this regard.

An important aspect of the literature review has been that it was defined as an iterative process. It was clear that prior to performing the empirical analysis I was not yet fully aware of all the existing literature in this discipline. Therefore, during the empirical analysis, I have frequently come back to the literature to explore both old research and new developments in the field. Being that innovation districts are a contemporary topic, it has been important to keep up with new research performed in this field throughout the duration of the thesis.

Conducting the literature review in the above mentioned fashion has allowed me to continuously connect literature with new empirical findings. However, because of the time-consuming nature of literature research, it has also proved to be challenging to remain focused on the overall structure and direction of the thesis.

Case studies
Performing a case study in the field of innovation districts appeared to be a logical step to further explore the topic. In the early phases of this research, a consideration had to be made regarding the amount of cases to use. Initially, the idea was to perform a comparative case study, where two cases would be researched and compared. However, taking in mind time limitations and considerations regarding the scope and depth of the research, ultimately a single case study has been chosen. To still be able to draw lessons from another case, the 22@ district in Barcelona has been used as a complementary case. Because of the relative age of this district, a vast amount of literature is available on this topic, which made performing an analysis on this case less challenging.

Statistical data analysis
Considering the large amount of data obtained by means of the questionnaire performed in the case in The Hague, properly analysing this data proved to be a challenging task. Structuring the results of nearly 200 respondents and over 30 questions turned out to be an intense process. The book “Discovering Statistics using IBM SPSS Statistics” by Andy Field (2013) has significantly helped me to perform a scientific analysis of my data and draw conclusions from it.

Interviews
Performing interviews has been helpful from both a research perspective, as well as a personal point of view. In terms of my research, it has helped me get a clear overview of the different types of work being done to improve the district in The Hague and what the ambitions are for the future. From a personal perspective, it has helped me to get more experience in performing interviews. Considering that my experience in performing interviews was close to zero prior to my thesis, the interviews conducted in this thesis helped me become more comfortable in the role of the interviewer.
Research process

The iterative nature of this research has proven helpful in reviewing my empirical observations and maintain a focus in the process. Setting up a framework in the early stages of the research has been particularly helpful in maintaining this focus, especially considering that new literature and news items appear nearly every week around this topic.

Time has also been an important aspect. Because of the challenges in setting up my research framework in the early stages, I ultimately needed some extra time to perform a proper analysis of the data I had obtained. There is, however, always still the thought of possible improvements to the thesis. Further research could possibly go more into depth about the topics that have been relatively underexplored in this research.

Overall, the process of this thesis has been highly educational. Moreover, considering the contemporary nature of the topic, it has been a highly interesting topic to research. It has also allowed me to gain important new contacts from both practice and theory, which might prove helpful in my future career endeavours.