



**university of
 groningen**

faculty of spatial sciences

BOOK OF ABSTRACTS

Graduate Research Day – 23 January 2020

Programme

- 12:00 - 12:30 Walk-in with coffee/tea
- 12:00 - 12:30 Poster Market (*Plaza*)
- 12:30 - 13:25 Plenary Opening Session (*Blauwe Zaal*):
- Welcome by Lecturer of the year 2019: Martin Boisen
 - Keynote by **Eva Witteveen**
 - Keynote by **Niek Bebelaar**
- 13:30 - 14:30 Thematic Presentation Sessions:
- A. The Value of Real Estate Studies (5412.0025)**
Gijs Keizer / Joost Jellesma / Jurriaan Postema
- B. Work in progress: The energy transition (5412.0028)**
Marko Jansen / Jelmer Miedema / Rutger Bijlsma /
Gert Jan van der Veen
- C. Perspectives on regional development (5412.0031)**
Miesje Oliemans / Arnoud Damen / Dani Grevelink /
Lynn Möhlmann
- D. Managing the built environment (5412.0035)**
Jeppe de Vries / Boeli Boelens / Ben Wielenga / Kim Poelsema
- E. What about the people? (5412.0039)**
Frank Spitzen / Frederieke Kolthof / Marijke Hoekstra /
Daniëlle Eleveld
- 14:30 - 15:15 Poster Market and coffee/tea (*Plaza*)
- 15:15 - 15:55 Plenary Keynote Session (*Blauwe Zaal*):
- Keynote by **Stefano Blezer**
 - Keynote by **Margreet Wiersma**
- 16:00 - 16:15 Award Ceremony and Closure by prof. dr. Oscar Couwenberg
- 16:15 - 17:30 Festive Closure with drinks (*Plaza*)

During the entire day the following companies are present to inform you about their work and to answer all your questions about the working field and vacancies:

- Deloitte
- Kadaster
- PonderaConsult
- Province of Groningen
- Witteveen+Bos

The Career Services of the University of Groningen is also present for checking your CV.

Keynotes | Blauwe zaal

Eva Witteveen

The association between physical environmental conditions and different groups of congenital anomalies in the northern Netherlands

The association between physical environmental conditions and different congenital anomaly groups in the northern Netherlands is investigated since the causal and mechanistic origins of most congenital anomalies are unknown and there is only a small number of studies that examine the association. Associations are found between higher percentages agricultural land and limb anomalies, intermediate concentrations nitrogen oxides and anomalies of the digestive system, higher concentrations nitrogen oxides and eye and limb anomalies, and high liveability situations and genital and limb anomalies.

Niek Beelaar

Finding routes for Hyperloop transportation infrastructure in the Netherlands using the GIS-MCDA approach

The GIS-MCDA approach for exploring possible Hyperloop infrastructure routes between Lelystad Airport and Schiphol Airport is demonstrated. A heuristic selection procedure is used for choosing 17 criteria that represent the current configuration of the study area. With Least Cost Path Analysis 10 possible routes are calculated. It was found that most routes cover the same area, had similar scores for evaluation statistics (accumulated cost, length, sinuosity) and crossed four identified bottlenecks at the same locations. Integration of the method with the Dutch Tracéwet procedure is discussed.

Stefano Blezer

Urban Living Labs and Transformative Changes

ULLs have become a popular way for cities to search for urban sustainability, i.e. to combine economic prosperity, social cohesion, and environmental sustainability. While the normalisation of ULLs in cities is well evident, a lack of understanding in the nature and purpose of ULLs leaves open many challenges yet to be overcome. One particular challenge is about the triadic relationship between funding, stakeholder roles and outcomes of ULLs and their potential to contribute to transformative changes. The study explores 3 ULLs in Groningen and shows that opportunity lies within trust building.

Margreet Wiersma

Singles in the City: The association between single-person households and property transaction prices

In the past years, the share of single-person households in Europe has been increasing and is expected to keep growing in the coming years. This thesis examines the association between single-person households and property prices by using an instrument variable approach within a two-stage least square regression, using 67565 observations of property transactions in Paris. Results show a positive association between the share of single-person households and property prices, as well as a stronger association between single-person households and apartment prices, compared to house prices.

Thematic Presentation Sessions

A. The Value of Real Estate Studies **5412.0025, 13:30-14:30**

Gijs Keizer

Measuring a housing bubble: a case study on Amsterdam

This research aims to identify which bubble detection method is best suited to identify a housing bubble in Amsterdam. To answer this question a mixed methods approach is used to better understand housing bubbles and the drivers of housing bubbles. By using existing quantitative methods to identify a housing bubble in Amsterdam and a qualitative approach to pinpoint the drivers of a housing bubble it became clear that the price-income ratio is the most suited bubble detection method for Amsterdam.

Joost Jellesma

Buy-to-let investors on the Dutch residential market: a study on pricing and capitalization rates

The advent of the 'buy-to-let' (BTL) phenomenon in the Netherlands, apart from producing a new wave of individualized rental market investment, has been widely judged to be a speculative and destabilizing force in the housing market. This paper provides a detailed empirical investigation of investment in the Dutch residential market in order to assess the nature, scale and impact of BTL on the private housing market. The evidence suggests that in the Netherlands overall there is no case of structural premium paid by investors, it does however largely occur in Amsterdam and The Hague.

Jurriaan Postema

Real estate fund returns: closed-end versus open-end funds

Globally, the vast majority of real estate AUM are incorporated in non-listed funds. Funds have either a closed-end (finite) or open-end (infinite) structure. The liquidity is fundamentally different between the two since open-end funds provide investors with more liquidity. This research covers a gap in the academic literature by researching the ways the fundamental distinction between fund structures influences fund returns. The INREV panel dataset, which covers 20 years of quarterly returns of 563 funds, is deployed. A significant effect has been found with the Hausman-Taylor estimator.

B. Work in progress: The energy transition

5412.0028, 13:30-14:30

Marko Jansen

Making district heating more sustainable: an institutional analysis

This thesis addresses the question how to add sustainable heat sources to district heating. This is answered using a case study. 12 stakeholders are interviewed in order to identify what are current possibilities to create a more sustainable district heating network, what are barriers and how these barriers can be overcome. Main results:

1. legal framework is already updated to a more fitting institution.
2. participants have to create more trust towards each other.
3. the political system is often appointed as actors to overcome barriers.

Jelmer Miedema

Off the Gas

In 1959, one of the biggest gasfields in the world has been discovered in Groningen. However, since 2014 due to the Paris agreement and primarily due to earthquake damage claims the government decided to stop the production of gas out of this field by 2022 at latest. This means that the jobs in this sector are at stake. The main results are that there are approximately 4000 jobs in the gas sector. Moreover, the downscaling has led to a reduction of 755 jobs since 2014. At the other hand, investments in the energy sector has led to more job vacancies and a higher pressure on the labor market.

Rutger Bijlsma

How to get a social licence to operate for renewable energy projects

Developments of renewable energy projects are increasing, as are the protests from communities against them. So how can these projects handle these protests and obtain social licences to operate (SLO) from these communities? Theory of SLO was applied to the case of Zonnepark Ameland to explore this question. This case shows that local embeddedness is important in obtaining SLOs. Additionally a lack of public participation, even within the early stage of the projects, and inadequate mitigation of impacts can strengthen resistance from the communities against projects.

Gert Jan van der Veen

Business Parks First: opportunities and obstacles in business parks for speeding up the local energy transition

Municipalities in The Netherlands have great ambition when it comes to the energy transition, but have little insight into the current situation in their local business parks. Examples of entrepreneurs who have already incorporated renewable energy in their businesses are vital in creating successful transition management (Rotmans, 2012). This thesis doesn't only focus in finding these successful front runners, but also shows the obstacles for both front runners as "laggards", companies and entrepreneurs who have not yet incorporated the energy transition in their businesses.

C. Perspectives on regional development

5412.0031, 13:30 – 14:30

Miesja Oliemans

Revitalization of shopping areas: Alkmaar en Veendam

Shopping areas are changing. Online shopping and the economic crisis are only two of the causes. Shopping areas have to deal with a high degree of store vacancy and deterioration of the physical environment. This thesis focuses on the question under which circumstances particular interventions to revitalize shopping areas do or do not work. Revitalization of shopping areas is highly relevant because the problems intervene in people's daily lives and up to now no comparative research was done concerning several interventions.

Arnoud Damen

The Influence of Economic, Demographic and Political Characteristics of U.S. Cities on the Prevalence of Migrant Entrepreneurs

While migrant entrepreneurship rates in the U.S. are higher than that of native-born entrepreneurs, revenue and profit gaps between the groups are still present. This research studies the effect of economic and demographic characteristics of metropolitan areas in the U.S. on migrant entrepreneurship rates. Interviews were conducted with migrant entrepreneurs and experts to gain insight into the effectiveness of entrepreneurial-related policy measures. Migrant entrepreneurship rates are correlated with distance to the border and the presence of major ethnic communities, among other variables.

Dani Grevelink

Who is the entrepreneur?

The aim of this thesis is to find out whether there are differences in the personality traits between entrepreneurs across regions. To research this, entrepreneurs in Leeuwarden and Amsterdam are surveyed on their personality traits. Do the strong Frysian identity in Leeuwarden and the metropolitan culture in Amsterdam lead to different personalities among entrepreneurs? This thesis makes use of the Big-5 personality framework to find this out.

Lynn Möhlmann

Social infrastructure of community food initiatives in Berlin

There has been a rise of citizens initiatives in Western Europe, including community food initiatives. Berlin is a city with a lot community food initiatives, but without a clear policy regarding these initiatives. Furthermore, an extensive body of literature shows that there is a lot known about the motives people have to set up initiatives, but little is known on how they perform.

D. Managing the built environment

5412.0035, 13:30 – 14:30

Jeppe de Vries

When the public private partnership is just right: Exploring critical success factors in Dutch DBFM-projects

Parliamentary letters and trade journals point to difficulties with the application of DBFM-contracts in Dutch infrastructure projects. DBFM is an extensive form of public private partnership, as designing, building, financing and maintaining are all contracted out by the public entity. Scientific journals indicate that which factors influence their success or failure may contextually vary, and is often not fully understood. A lack of understanding may lead to friction. The aim of this thesis is to find critical success factors for Dutch DBFM-infrastructure projects.

Boeli Boelens

Boundary Spanning in Dutch Planning Practice

The engagement of stakeholders in Dutch planning projects has become enormously important. Often, this is done by Omgevingsmanagers. They are considered to be boundary spanners, broadening the vision of projects. This study aims to reveal the strategies managers use in dealing with tensions between the project team and external stakeholders. In interviews with managers, two main approaches for dealing with tensions are found: through values and through interests. Also, omgevingsmanagement is project-led. This separates it from boundary spanning, which sees collaboration as an open process.

Ben Wielenga

Merging architecture and nature into build objects in natural environments: architectural bird hides as a catalyst for tourist destination development and management in natural areas? A case study towards understanding the construction, utilization and management of the Tij bird hide in Stellendam, Goeree-Overflakkee, and its potential for tourist destination development

Globally, the implementation of architectural objects in natural environments is increasingly being touched upon, usually by a multi-actor network, in order to open up nature areas to humans in order to satisfy several human and nature motives. Objects generally follow the principles of nature in design values and have a potential important role in local and/or regional tourism destination development and management. Bird Observatory Tij, situated in the Haringvliet delta area, is one of those facilities. Using qualitative case studying, the object has been entirely scrutinized from its idea phase towards its implementation phase in order to see what role the object entails for tourism development and management in the Haringvliet delta area.

Kim Poelsema

The Environment and Planning Act & Sustainable Mobility: The perfect combination?

In July 2011, the minister of Infrastructure and Environment announced a bill for a new Environmental and Planning Act. The minister described this change as the '*largest legislative operation since the Second World War*'. On the other hand, the impact of transport- and mobility processes on the environment has gained more and more attention in recent years. Therefore, the question rises how the Environment and Planning interacts with and influences the operationalization and installation of sustainable mobility.

E. What about the people?

5412.0039, 13:30 – 14:30

Frank Spitzen

The role of sports organizations in retaining young people in rural areas. A case study of the North Netherlands

This research looks at the role sports organizations play in retaining young people in rural areas. The aim of the research is to link existing theories on sports organizations, social capital and place attachment with each other, in order to describe their potential influence on moving behaviour. For future policy interventions regarding population shrinkage, this information could be useful. The data is being derived from semi-structured interviews with either members or board members from sports organizations in rural areas.

Frederieke Kolthof

Exploring Ecovillages in Rural Areas

This research studies ecovillages in the Netherlands situated in rural areas. In particular it focuses on the motivations and current experiences and practices of ecovillage inhabitants. The results show that the main aim for inhabitants to move to an ecovillage is to live in a close community. The inhabitants are very much aware that the creation of an ecovillage is a difficult process. However they are very committed to creating a community that encourages sustainability in multiple ways.

Marijke Hoekstra

Church buildings as determinants for the Frisian landscape: Heritage and cultural landscapes analysed from a culture economy and common good perspective

Religious affiliation in the Netherlands has decreased. This leaves an increasing amount of church buildings unused. Conservation focusses on reuse. In this debate, church buildings are labelled as landscape determinants and common goods. This thesis analyses the process behind and the purpose of this labelling in the case of Friesland by means of expert interviews. A typology of the church building is created: the building is an object of heritage, a spatial element and a cultural phenomenon. The culture economy approach and an analysis of stakeholders and interests are applied.

Daniëlle Eleveld

Mortality patterns of the New Zealand Maori and New Zealand non-Maori population

There is a large health gap between the New Zealand Maori and New Zealand non-Maori population. Therefore, this research investigates the mortality patterns and existing gaps between both population groups by decomposing the gaps in life expectancy and lifespan variability by age and cause of death. These analyses show that the lower life expectancy for the Maori population is mainly due to child mortality and older-age mortality, with cancers and circulatory diseases being the largest contributors. Lifespan variability is over 20% higher for the Maori population.

Poster presentations | Plaza

Albert Vos

Steering solar field developments in the province of Groningen - Benefits of the governance turn

This study sketches the playfield of the development of solar fields in the province of Groningen. Within the turn from 'government to governance', this study provides empirical insights in the benefits and constraints of this turn and parallel related trends as; New Public Management, privatization, decentralization and the use of Market-Based instruments. By using a 'governance spectrum', a degree of self-governance is determined, based on empirical input of semi-structured interviews with regional- and local governments, solar field developers and adjacent citizens of a solar field

Ane Niels Walinga

Self-employment and training participation in the European regions

The labour market is changing. Because of these changes and the vulnerable position of the self-employed, is it important to invest in their human capital. One way of doing this is by participating in training. This research focuses on the relationship between self-employment and training participation. So, what are the participation rates of the self-employed in the European regions and does this for instance differ by gender, education level or industry? Also the determinants of training participation have been investigated with a special attention to the contextual characteristics.

Anke van de Gevel

The impact of the lease term on office rents in the Netherlands

In the past years, flexibility has become an important need for office space users, due to changes in organizations, workforce and work styles and changed IFRS-rules. Not much research has been done into the impact of financial flexibility (break options and short lease terms) on office rents. This research shows that the lease term has a positive impact on office rents in the Netherlands, implying tenants requiring longer lease terms, pay higher rents than those asking shorter lease terms. This impact does not vary much over time.

Anna Margareta Keijer

How to stimulate activity of adolescents by using the public space

In the Netherlands there is increasing attention for a healthy lifestyle. This is because there is a visible decrease in the amount of exercise that the population receives, as well as the reduced eating of healthy food. One of the population groups where a large decrease can be seen is the group of adolescents. The main question is how this decrease comes about. This research looks for motives for adolescents to move or not to move, with a focus on the spatial environment and its design. This may help in promoting a healthy lifestyle for this population group so that this social problem can be remedied, whether or not improved.

Danielle Heijligers

Increasing child-friendliness in urban areas by implementing rainproof measures

With the emergence of climate change, more intense precipitation is occurring in urban areas. Besides collecting rainwater in the sewerage system, rainwater needs to be absorbed by alternative measures in urban areas. The combination of playful measures to increase child-friendliness is a great opportunity to improve children's health. Both a land-use issue and management issue in which interdisciplinary cooperation is needed. It is a comparative case study between four different medium-sized municipalities that investigates how these two disciplines work together for multiple use of space.

Dolunay Olgun*Do Residents Appreciate Green Labels? A Quantitative Approach into the Relationship between Energy Labels and Residential Satisfaction in the Netherlands*

An Ordered Logistic Regression pursuant to the assumptions of the Proportional Odds Model is performed to find which relations exist between energy labels and residential satisfaction. The results of this study show that homeowners, public tenants and low incomes are more likely to be satisfied with their dwellings at higher energy label rates. Private tenants, high incomes and middle incomes are less likely to be satisfied with their dwellings at higher energy label rates.

Gavin Neuenheim*Education-job mismatches among international graduates in Dutch higher vocational education*

This study aims to investigate the education-job mismatches among international graduates in Dutch higher vocational education. There are three types of mismatch that are being discussed: vertical, horizontal and double. It examines whether the graduates' background which influences the chance to experience these mismatches. Other factors that could determine a mismatch are also being explored in the empirical analysis. Moreover, the effect of a mismatch and graduates' background on their wage and job satisfaction is investigated.

Jorrit Kootstra*Social cohesion in Dutch high-rises*

High-rise construction in the Netherlands is booming. Because of the rising demand in urban living and the densification of cities, more and more cities are building upwards. Research tells us that living in a high-rise negatively influences social cohesion and interaction among residents. This research studies how and which design features can be used to create socially sustainable high-rises. These design features are drawn from best and worst practices constructed in various countries and times. Additionally, a design studio is organized to explore a socially sustainable high-rise design.

Robert Bekker*Visualizing and Analysing Spatial and Temporal patterns of Tourism in Venice using Flickr Photography*

Within this thesis insights of the whereabouts of tourists within the urban environment of Venice is gained by extracting metadata through Application Programming Interfaces from social media site Flickr, which results in times, dates and coordinates. By analysing and visualizing photographs from social media greater insights can be gained by creating spatial patterns and temporal distributions of tourism. This can ultimately be important for planners and decision-makers to improve the urban environment.

Luuk Schaafsma*Reinventing the traditional commute, a thesis on Intermodal travel via Multimodal Hubs*

The dominant form of car-use around cities causes high CO2 emissions, congestion and air pollution. These problems will exacerbate when our cities continue to attract more activity. Stimulating intermodal travel to combat these issues has become an important policy objective. Yet, there is still much to learn about intermodality. In this study the aim is to gain more insight in the factors that drive intermodal commuting behaviour. This is achieved through quantitative inquiry of intermodal commuters in Groningen. Who are they? What drives them? And how can hubs facilitate intermodality?

JW van der Kam***Do the Looks of Your Neighbor Matter? Estimating the Effect of the Aesthetic Appeal of the Urban Environment on Nearby House Prices Using Crowdsourced Image Data: A Case Study for Two French Cities***

By means of hedonic pricing models, the effect of the aesthetic appeal of the urban environment on nearby house prices is estimated for two French cities: Lyon and Toulouse. Geolocation data of user-generated public images uploaded on Flickr is used to generate a proxy urban aesthetics. The findings show that the aesthetic appeal of the urban environment does have a significant positive impact on nearby house prices. The findings of this study help policy makers in making decisions that involve the regulation of aesthetics in the urban environment, maximizing utility for urban citizens.

Joost van Bergeijk***Determinants of yields on Dutch residential healthcare real estate.***

Due to the double aging population - where the number of elderly people is growing relative to the labor force and people are generally getting older, the real estate market remains young. The aging population brings new needs and issues with it. By creating supply, developers and donors are trying to respond to the demand for facilities for healthcare real estate (Saft, 2004). Earlier research by Poterba (2004) showed a strong effect between an aging population and the market for financial assets.

Joost Mulders***Relocation behaviour in greater Amsterdam***

A quantitative approach to understand relocation behaviour in the Amsterdam housing market; households leaving greater Amsterdam.

Thomas van Balen***Regional Innovation Systems for Water Technology***

Only 0,4% of the total amount of water is available for usage. Yet, water is a vital product for communities and economies. Therefore, many regions in the EU are focused on innovative ideas in water technology to solve this scarcity.

Tijmen Schoonderbeek***Industrial Parks Real Estate Funds: Investors benefit***

In logistics real estate the benefits for firms located on a logistics park is far-fetched. However, the benefits to investing in logistics parks or stand-alone units from an investors perspective of clustering is not yet covered in literature and relate to diversification strategies and increasing returns to scale. This conducted thesis discovers different benefits according to various performance parameters. The key findings reveal when controlling for location and physical characteristics, the benefits are cancelled out revealing no out performance of parks over stand-alone units.

Cas Ruiken***IT Adoption in Europe: are Real Estate and Construction Industries Lagging Behind?***

This thesis concerns an empirical analysis of the divergence in IT adoption rates at industry and country level in Europe, with a specific focus on Real estate and Construction industries. Summary statistics show a wide variability in IT adoption across Real estate and Construction industries in Europe. Multivariate regression results show that fixed country, industry and time effects explain most variation. However, results of a Chow test show that the effect of IT adoption drivers on the Real estate and Construction industry is different compared to the effect on the aggregate of industries.

Emma de la Hayze*The success of a bid-auction with a starting price as sales method*

This study investigates the success of the residential sales method with a starting price. This is done by investigating whether a starting price causes a price premium, and whether this differs between market segments. Sales prices of corresponding house transactions with starting and asking prices are matched by means of CEM. Direct price differences have been looked at and a regression analysis was performed. There is found a significant positive effect within the market segment with prices between 100.000 and 180.000 euro, and a significant negative effect for prices above 500.000 euro.

Max Ponds*How do external effects of mosques relate to transaction prices in the proximity? A case study in the city of Amsterdam*

The social effects of religion in society is widely discussed in scientific literature. Economic impacts are rarely discussed. In this thesis the external effects of mosques are measured by examining the transaction prices in the proximity of mosques. While using a difference-in-difference method, results show negative relations between mosques and transaction prices. However, it is unclear whether mosques are the main driver of this negative relation or there possibly are other drivers that cause this negative pattern between mosques and transaction prices.

Sandor van Moort*The willingness to pay for the remaining contractual duration of the lease*

The purpose of this study is to investigate to what extent the remaining contractual duration of the lease has an impact on the investment value of office real estate in the Netherlands. The contractual lease term is an important part of the lease conditions, which are currently dominated by flexibility. This research makes a link between the increasing flexibility of commercial lease conditions and the value-determining power of the remaining duration of the lease. Unique data was collected from 749 office property transactions in the Netherlands for the period 2001-2019.

Sven van Beek*The ideal retail mix for regional and neighbourhood shopping centres: The introduction of a new method on a lower scale*

Real estate managers of regional shopping centres in the Netherlands are increasingly struggling to fill vacant shops. The Retail mix of these centres is under pressure. However, previous studies have shown that this mix is significantly important for the rent performances of the entire shopping centre. Previous studies have looked at the effects of Retail diversity on shop rents in the entire shopping centre. In this research however, we have found that shop diversity on the lower scale around a particular shop has a different influence between different Retail types.

Teun Bakker*Demographic differences in tenure choice before and after the financial crisis in the Netherlands*

In this thesis I tried to find how the GFC can be seen in the context of changing association of demographic characteristics with tenure choice in the Netherlands? Did the way the independent variables: age, income, couple and migration status that are associated with predicting tenure choice change after the GFC as compared to the situation before? The first findings suggest that the differences in tenure choice between age and income groups have become bigger while differences between couples and non couples and natives and non-natives become smaller.

Paola Lievano Cruz

Farming as a driver for Sustainable Development

This thesis aims to examine how place-based approach can enhance urban farming's potential to contribute to the sustainable development of cities. The research will also focus on the social, economic, environment, and governance challenges that can be encounter in this process. The research concludes that the drivers for a place-based approach for sustainability are not present. Better performance of the bottom-up urban farming initiatives can be achieved if the initiatives were to be better informed of the possibilities of place-based approach.

Tienke Ellens

Living in a single mother household and childhood obesity 'the mechanisms behind'

Rates of childhood obesity are increasing as well as the number of single mother households. At the same time literature shows that children living in single mother households are more likely to obese. In order to understand how single motherhood affects childhood obesity this study aims to explore the mechanisms behind the relationship. Results show that it is not single motherhood itself, but more likely the low level of education and income of single mothers that cause a higher obesity risk for children living in single mother households.