



university of  
 groningen

faculty of spatial sciences



# Keynotes | Blauwe Zaal

---

**Nicky Theunissen**

*'Who would like to go back to the tribal system? That's like going back to stones and bows.'  
Tribal and national identities of young adults in Oman*

After a palace coup in 1970, Sultan Qaboos of Oman has endeavoured to create a new national identity for Oman's historical tribal society, through a personification of the state. As the Sultan has been fighting illness for several years, the (future) state of Oman's identity is unclear. Therefore, this paper investigates the relationship between tribal and national identity in Oman. Findings show a reciprocal relation that emanates from 1) state suppression, 2) identification with and against other tribes and foreign influences and 3) urban myths.

**Jesse Zwiers**

*The impact of city structure on the amount of Home Based Businesses  
in residential neighbourhoods*

Today you see a tremendous rise in people who start their business from home (HBB). This research has a focus on the largest 30 municipalities (and 450 neighbourhoods) in the Netherlands and questions how the city structure (agglomeration effects and physic location factors) impacts the amount of HBB's. Results show that HBB's do follow specialization and diversification pathways that are in line with other none HBB companies. There are also other relevant location factors that favour the amount of HBB's. This research concludes with some policy implications.

**Vincent de Jonge**

*Migreren of forenzen voor de studie*

Er wordt gekeken naar de rol van afstand en de kwaliteit van de verbinding bij de keuze om te migreren naar de studiestad of om te forenzen. Hierbij wordt gekeken naar verschillende manieren om afstand te meten: hemelsbreed, over de weg en reistijd met het openbaar vervoer/auto. Voor de berekening van reistijd wordt gebruik gemaakt van GIS. Uit de multinomiale logistische regressies blijkt dat naarmate de afstand groter wordt, de kans op verhuizen ook toeneemt. Rekening houden met de kwaliteit van de verbinding in plaats van alleen afstand vergroot de verklarende kracht van het model.

**Antje Bieberstein**

*Moving intentions among natives and immigrants in Australia*

The Australian population is one of the most mobile ones in the world today. Censuses conducted in 2006 and 2011 showed that over 40 percent of the population had changed dwellings within the last five years. But what are the mechanisms behind these decisions? This thesis seeks to understand who and under which conditions the intention to move to another dwelling is formed using Australian GGP data. Since Australia is a diverse population, with 28% of its residents being born overseas, special attention is given to similarities and differences in moving intentions among natives and immigrants.



# Thematic Parallel Presentation Sessions

---

## A. Beyond Borders (English) 14:00-15:00 in 5412.0028

### **Erik Mey**

#### *Local Social Life*

Successful neighborhoods exhibit high levels of social capital - the capacity of individuals and groups to derive benefit from social ties. In areas of concentrated disadvantage (e.g. public housing areas), local social structures are often considered too homogenous to link residents to the social resources from which they might derive benefit. Moreover, local urban social structures are under pressure due to increasing inequality, diversity, exclusive community membership and anonymity associated with urbanization.

### **Christian van der Weide**

#### *Towards a new definition of the international Wadden Sea area*

Due to conflicting human and natural interests, the international Wadden Sea area is a region of importance for researchers and policy makers. However, various spatial demarcations are being used to define the region, causing unclarity about the exact area boundaries. This thesis considers the Wadden Sea area from the perspective of land-use. A GIS-based spatial analysis using CORINE Land Cover data explores the composition and dynamics of land-use in an area of over 46.000 km<sup>2</sup>. Can international land-cover data provide clarity about the boundaries of the international Wadden Sea region?

### **Hilko Oosterhuis**

#### *Framing and blaming: investigating municipal border restructuring through frame analysis*

This investigation is about the frames that are being used in the municipal border restructuring between the municipalities of Groningen, Haren and Ten Boer. The proces of restructuring takes place between different stakeholders, including political parties, governments at municipal, regional and national scale. This thesis investigates the frames used, the effectiveness and the spatial effects.

### **Esther Mulder**

#### *(De homogeniteit van) dé Nederlandse binnenstad*

“Nee, ik breng niet speciaal een bezoek aan een stad om een specifieke winkel, want overall heb je dezelfde winkels toch?!” – Consument

Maakt het winkelaanbod in Nederlandse binnensteden een verschil bij de keuze van de consument voor een winkelgebied? Kan de love of variety van de consument een verschil maken, en zal dit zorgen voor een meer divers winkelaanbod, en dus voor uniekere steden? Of maakt bekend bemind, en kan de consument zelf verantwoordelijk gehouden worden voor de homogeniteit van het winkelaanbod in de Nederlandse binnensteden?

## **B. Migration (English)**

**14:00 – 15:00 in 5412.0031**

### **Lilas Fahham**

#### *Understanding currently living in the Netherlands Syrian refugees' intentions to return to Syria*

Many Syrians would have not left Syria if it were not for the war that had begun in 2011. Returning to Syria is a complex decision and little is known and focused on refugees' intentions to return. This study, using the theory of reasoned action approach, aims to understand the Syrian refugees' intentions to return and how that contributes in their daily lives considerations. A qualitative research is carried out by conducting in-depth interviews. Interviews were held in Arabic, then transcribed, translated to English and now being coded for further analysis. Ethical matters are considered.

### **Winida Albertha**

#### *Internal Return Migration in Indonesia: Who Returns and Why?*

Many Syrians would have not left Syria if it were not for the war that had begun in 2011. Returning to Syria is a complex decision and little is known and focused on refugees' intentions to return. This study, using the theory of reasoned action approach, aims to understand the Syrian refugees' intentions to return and how that contributes in their daily lives considerations. A qualitative research is carried out by conducting in-depth interviews. Interviews were held in Arabic, then transcribed, translated to English and now being coded for further analysis. Ethical matters are considered.

### **Wouter Gaastra**

#### *Return migration of higher educated to the Region of Twente*

Om meer inzicht te verkrijgen in deze groep richt dit onderzoek zich op retourmigratie van hoogopgeleiden opgegroeid in Twente en woonachtig buiten de regio. Er zal worden gekeken in hoeverre deze groep de intentie heeft om terug te verhuizen en welke factoren hierbij een rol spelen. Aansluitend daarop wordt gekeken of het zinvol is om te proberen om deze groep terug te laten verhuizen.

### **Karl Sluiter**

#### *Place attachment and views on migration: mutual influencers?*

The thesis is about the role of current migration flows in experiences with place attachment of Dutch, autochthonous students. Not only is the relationship studied in this way, but also the other way around: how does a certain level of place attachment influence the views on migration. Due to contemporary flows of migrants to Europe, studying the views on migration is especially relevant. The views of students seem to be open-minded, as they find it important for one to choose whatever one thinks is good for them. This influences the way students look at migration and integration.

## **C. Environmental Care (Dutch)**

**14:00 – 15:00 in 5412.0035**

### **Florine Zendijk**

#### *Invloed van stedelijkheid in de woonomgeving op het nemen en implementeren van energiebesparende maatregelen*

Het staat vast dat urbane en rurale gebieden verschillen op klimatologisch gebied; energiebesparende maatregelen kunnen soms in urbane gebieden sterkere of zwakkere effecten hebben dan in rurale gebieden. In deze scriptie wordt onderzocht of de factoren stedelijkheid, milieubewustzijn en milieubewust gedrag het nemen en implementeren van energiebesparende maatregelen onder huishoudens in Nederland kunnen voorspellen. Met de uitkomsten van dit onderzoek kan wijk-specifiek beleid opgesteld worden of bestaand beleid gefinetuned worden op wijkniveau.

### **Koen Bosscha**

#### *Klimaatadaptatie bij Groningse woningcorporaties*

Klimaatverandering lijkt een onontkoombaar proces. Enkele gevolgen hiervan zijn hittestress, droogte en wateroverlast. De openbare ruimte en de bebouwde omgeving zullen rekening moeten houden met deze gevolgen, dit wordt klimaatadaptatie genoemd. Deze thesis kijkt naar de belemmeringen in het toepassen van klimaatadaptatie bij Groningse woningcorporaties. De conclusies zijn dat er geen nood is om klimaatadaptatie toe te passen en dat klimaatadaptatie wordt overrompeld door scherpe doelstelling en duidelijke plannen voor het verduurzamen van woningen.

### **Jan-Willem Schaap**

#### *An inventory on the collaboration during defragmentation projects of nature in the Netherlands*

The Directorate-General for Public Works and Water Management and ProRail are in charge of the Programme for Defragmentation, MJPO. The programme delivers a significant contribution to the Netherlands Nature Network, the Dutch network of wildlife conservation plans. This study focuses on the collaboration during defragmentation projects between all involved public partners from 2004 up to now. Strong and weak points during cooperation between all partners involved were determined. Recommendations are given to improve weaknesses and to maintain the strong aspects in future collaboration.

### **Lydia Wijbenga**

#### *Natuurcompensatie verplichting in Overijssel*

Ruimtelijke ingrepen die een negatieve impact hebben op beschermde natuur zijn alleen mogelijk onder strikte voorwaarden. Deze ruimtelijke ingrepen kunnen verschillen van het bouwen van een recreatiewoning tot een infrastructureel project. Gaat er natuur verloren, dan dien je dit volgens de wet te compenseren. Maar hoe strikt zijn die verplichtingen eigenlijk en worden deze eigenlijk wel nageleefd? Dit onderzoek geeft een inventarisatie en analyse van de compensatieverplichtingen in de provincie Overijssel en laat zien wat de daadwerkelijke impact van ruimtelijke ingrepen op de natuur is.

## **D. Economic Effects of Entrepreneurship (Dutch)**

**14:00 – 15:00 in 5412.0038**

### **Harld Schuldink**

#### *Verankering van de lokale ondernemer in Hardenberg: Ondernemers in een warm bad*

In dit onderzoek is onderzoek gedaan naar de honkvastheid en migratiemotieven van de lokale ondernemer in Hardenberg. Hiervoor is een enquête uitgezet om de locatiespanningsmaat te bepalen voor alle bedrijven, deze locatiespanningsmaat is getracht te verklaren door enkele bedrijfskenmerken. Daarnaast zijn er interviews afgenomen om meer diepgang te creëren. Uit het onderzoek blijkt dat ondernemers in Hardenberg redelijk honkvast zijn, er zijn echter wel enkele verbeterpunten.

### **Sander Leone**

#### *Campus performance and their characteristics in the Netherlands*

The goal of this research is to assess the performance of campuses in the Netherlands in the period 2008-2014. Using data from LISA an analysis can be made regarding different sizes of businesses, businesses in total and employment. A typology of campuses has been made for phases of maturity, and whether campuses are diversified or specialized. By comparing the latter, the goal of this research is to assess which type of campus performs better.

### **Joost Mazier**

#### *The relation between entrepreneurship and sector size in Eindhoven*

This thesis studies the influence of the size of a sector and the size of related sectors on entrepreneurship both in Noord-Brabant in general, and more specific in the city of Eindhoven. After correcting for a city specific effect on entrepreneurship, the results show that both comparatively large sectors at the sbi03 digit level as well as relatedness to a large sector is likely to positively affect entrepreneurship in a sector.

### **Lucas Vaartjes**

#### *De invloed van zzp'ers op de regionale groei van de werkgelegenheid in Nederland*

De toename van het aantal zzp'ers de laatste decennia heeft voor alle betrokken partijen een hoop vragen met zich meegenomen en daarmee veelal geleid tot een gevoel van onbehagen. Met dit onderzoek wordt gepoogd meer duidelijkheid te krijgen over hoe het zzp-schap de Nederlandse arbeidsmarkt de komende jaren zal beïnvloeden.



## **E. Water Planning (English)**

**14:00 – 15:00 in 5412.0039**

### **Naim Laeni**

#### *Dealing with uncertainties: framing resilience in Bangkok flood risk management*

This research analyzes the interpretation and operationalization of resilience concept in Bangkok flood risk management. By using framing approach to critically unpack the concept, resilience has become another policy normative aim to deal with broad urban challenges. The resilience interpretation emphasises on an equilibrium approach in flood resistance instead of adapting new approaches for response to the increasing flood risks. Lastly, the resilience adoption in Bangkok focuses on maintaining economic growth with little attentions to societal flood impacts.

### **Jan Mackenthun**

#### *Risking More Private Involvement in Waterway Infrastructure? Evaluating a Dutch DBFM Contract in Case of German's Navigation Lock in Scharnebeck*

Provision of infrastructure is a contested topic in public discourse. Today more projects are conducted under public-private partnerships. Such a collaboration is considered more efficient in project execution, but is it the better way of managing infrastructure? The upcoming research aims to understand the advantages and disadvantages of such private involvement. Based on expert interviews, distinct points of considerations related to the external environment, risk allocation, control function of authorities as well as the stakeholder complexity are considered in the planning processes.

### **Victoria Renzelmann**

#### *Lock project Terneuzen: A case study about differences in project cultures between the Netherlands and Flanders and the influence on the collaboration.*

In 2014 the EU developed an international infrastructure policy, to create a Trans-European Network. This policy supports the construction of international projects and oblige international collaboration. This thesis focuses on the differences in project culture between the Netherlands and Flanders and the collaboration at the New Lock Terneuzen. Project culture is being operationalized by testing different variables, based on organizational and national culture literature. The main result is that the differences in project cultures influence the collaboration at the New Lock Terneuzen.

### **Jorren Westra**

#### *Salinization in the Northern Netherlands*

My thesis is about the governance strategy on Salinization of the groundwater in the Northern Netherlands. Salinization of the groundwater is not yet a well-researched topic in planning literature and therefore this study want to investigate the match between the issue of salinization and the governance strategy that is used in the Northern Netherlands.

## **F. New Governance (English)**

**14:00 – 15:00 in 5412.0040**

### **Abigail Darkwa**

*Managing complexities associated with planning of rural market infrastructures in the Ashanti region of Ghana.*

The neglect of the impacts of continuous changes in the world and complex nature of planning challenges contribute to ineffective approaches to planning. Consequently, planning interventions are rejected by beneficiaries. The development of unplanned small scale shops serving as trading points while planned markets are abandoned in Ghana, indicates such rejection. This study uses ideas of 'adaptations' and 'co-evolutions' from complexity sciences to propose measures that will incorporate 'change' and 'complexity' into market infrastructural planning.

### **Gerrit Kreffer**

*The support for the Dutch liberal democracy*

The thesis establishes using existing datasets the support for the Dutch democracy. Variation in support comes from differences in income and education. The basic values in the countries of origin are highly associated with the values of citizens in the Netherlands and their preferred system. The third demographic transition means a quickly aging and much more diverse population. Using special projections on base of the official CBS projections and taking into account the compositional changes, ideas are developed on future support.

### **Rachella de Haan**

*Conditions for self-organization in urban development*

Urban developments are not always controllable, and sometimes unfold autonomously. Self-organization complies with the notion of autonomous processes. But how does this fit with spatial planning? By analysing three cases, Seats2Meet, Oude Kijk in 't Jatstraat in Groningen and Meent in Rotterdam, this study tries to get insight in the process of self-organization, how trends are affecting urban development and which conditions enable or constrain the process of self-organization. Then this study also tries to reveal the lessons which can be drawn from the three cases.

### **Ciska Ulug**

*Connecting resourcefulness and social innovation: Examining conditions and processes in rural, peri-urban, and urban community gardens*

While resourcefulness, a community's organizational capacity, is essential in contributing to resilience, its relation to social innovation is yet to be explored. Through in-depth interviews and participant observation, this study researches conditions and processes of resourcefulness in facilitating social innovation in rural, peri-urban, and urban community gardens in the North of the Netherlands. Comparing differing contexts is expected to highlight diverse enablers for altering social relations and community empowerment, while contributing to literature on collective food system practices.



## **G. Innovative Community Engagement (English)**

**16:00 – 17:00 in 5412.0028**

### **Judith Flores**

*Trust-building through community engagement: The challenges of community acceptance in current Peruvian mining developments*

The study aims to analyse how community engagement is implemented in practice by current mining industry operations in Peru. The objectives are to identify the outputs regarding trust-building in the mining companies-communities' relationship and define the main elements of community engagement that contributes to strengthen trust in that relationship. Five elements have been identify through interviews: a deep understanding of the social context in which the relationship is set, corporate buy in, community involvement in decision making, procedural fairness and the contact quality

### **Ariane Rimmel**

*Coastal tourism in Cape Town, South Africa - Integrated Coastal Zone Management as an approach to increase resilience of the coastal zone*

As Cape Town is the leading tourism destination in South Africa, proper coastal management is needed to avoid environmental degradation and increase the coast's resilience to tourism impacts. Therefore, Integrated Coastal Zone Management (ICZM) has been implemented in South Africa which is an approach aiming at minimizing user conflicts while ensuring sustainability of the coastal environment and well-being of the population. Although the theoretical concept offers great opportunities, the practical implementation in Cape Town contains gaps.

### **Allard Roest**

*Soil-Sealing and Climate-Resilience in Groningen*

The climate is changing. For a city like Groningen is means that the weather will become more extreme, resulting in longer periods of drought and extreme rainfall. This could negatively influence the liveability of the city and requires actions to improve climate-resilience. In my research I am focussing on the role that gardens play in climate-resilience,. By analysing why and to what extend soil-sealing is taking place in gardens. Seeking to give insight in the relationship between public and private institutions and the environment in the light of climate change and resilience.

### **Marije Tempel**

*The "Arcticficial community"; a critical interpretation of the liveability discourse*

The role of cultural geography is increasingly recognized in politics and economy. Especially now the activities on a local scale are getting more important in reaching national and global goals. Scholars argued that liveability is a normative concept in the cultural geography. Which, in a political context, is often used in support of neo-liberal and profit-centred agendas. I reflected on the Norwegian policies concerning the future of Spitsbergen. Concluding that: liveability policies are the means through which Norway assures its presence, in a strategically highly valued area.

## H. New Ways of Infrastructure Planning (English) 16:00 – 17:00 in 5412.0031

### **Fedde Ruijl**

*Het vormgeven van institutionele capaciteit voor gebiedsgerichte klimaatadaptatie van het hoofdwegennet*

Het doel van dit onderzoek is inzicht verwerven in hoe het hoofdwegennet in Nederland 'bestendig' kan worden gemaakt tegen het veranderende klimaat door gebruik te maken van een meer gebiedsgerichte aanpak. Daarvoor is gekeken naar de institutionele capaciteit (het ontwikkelingsklimaat) van twee grote wegprojecten. Aan de hand van het IAD framework zijn interviews gehouden met daarbij betrokken stakeholders. Uiteindelijk ontstaat een beeld hoe de institutionele capaciteit kan worden vormgegeven.

### **Peter Schotsman**

*Communication between contractors and clients during the pre-tendering phase in the civil infrastructure industry.*

This study assesses how contractors in the civil infrastructure industry can improve their communication with clients during the pre-tendering phase of public procurements, and therefore improve their relationships with them, through three different perspectives: an institutional perspective, a network perspective, and a marketing perspective. The data shows that the institutional space for communication between contractors and clients phase is very limited. This thesis then provides an overview of which networking and marketing tools can be used within that space.

### **Nienke Voskuilen**

*The effects of increasing obligation on the effectiveness of the Synergy Wheel (Omgevingswijzer)*

The Synergy Wheel is a process-tool aimed at increasing the level of sustainability of infrastructural projects. Developed by Rijkswaterstaat and building on the People-Planet-Profit paradigm, the tool aims to provide a graphical overview of opportunities and threats for sustainability in projects. The tool is currently incorporated in the Duurzaam-GWW toolkit. Plans are made to make the tool mandatory. In practice, the tool is used in many different ways. In my thesis, I present a broad theoretical framework on how changes in the obligatory nature of the tool may influence its effectiveness.

### **Steffen van der Werf**

*A better understanding of the deployment of public charge facilities in urban areas*

Electric Vehicles are starting to get a suitable replacement for the traditional ICE cars. Therefore the need for public charge facilities is getting more urgent. But what are the implications for this new kind of infrastructure and furthermore who should be responsible for it. This research has tried to get a better understanding of the implementation process of public charge facilities in the city of Cardiff.

## I. Innovative Methods in Spatial Planning (English) 16:00 – 17:00 in 5412.0035

### Quinten Dengerink

*Mapping place values and opinions with GIS: filling the gap between public participation and infrastructure planning?*

When new road infrastructure is planned, commotion arises. "You should not harm those trees", "... those hiking routes" or "...those scenic views". But do those opinions or place values have a geographical component that could be mapped? And when you have mapped those values and opinions, could they be structured on a comprehensible map, or will it result in a unreadable map with thousand dots, lines and words? And, finally, how could those mapped values and opinions be implemented in infrastructure planning in a way that it improves public participation? A lot of questions, answers the 29th.

### E.R. Spruijt

*Between efficiency and privacy: How register researchers approach the research ethics of working with human data.*

The aim of this project is to find out how register researchers working in the Netherlands approach the research ethics of working with human data. Population research through analysis of matched register data sources is increasingly more common. However, this type of research finds itself in a grey area when it comes to ethics regulations: should it be considered human subject research, or non-human subject research? And what are the consequences for privacy? A qualitative mixed-method approach, involving content analysis of research ethics documentation and in-depth interviews was employed.

### Tháisa Martins

*Urban Thermal Comfort: an analytical tool for operationalizing urban thermal comfort in urban policies and urban design*

Providing urban thermal comfort (UTC) means creating urban landscapes which cope with the microclimate over time for providing pleasant outdoor temperatures. Studies in Healthy Cities and UTC claim for a guiding framework which assists the creation of healthier and thermally comfortable landscapes. This research proposes a conceptual model as an analytical tool for the development of UTC strategies. The model approaches key dimensions and criteria for urban policies and design towards UTC, being perceived as a potential tool for promoting space use and urban quality. In the city of Groningen, however, UTC is not yet a priority in urban design.

### Jesse van der Laan

*Een thermometer voor de werklocaties in Groningen. Een onderzoek naar de mate van veroudering en het effect van de sectorstructuur op de werkgelegenheidsontwikkeling op werklocaties in Groningen.*

In het kader van een monitor voor de gemeente Groningen wordt er onderzocht in hoeverre de werklocaties in Groningen verouderd zijn. Op basis van een data analyse wordt de economische relevantie van de werklocaties in beeld gebracht. Een speciale focus ligt hierbij op de sectorstructuur en bijbehorende agglomeratievoordelen. Een diversiteits- en specialisatiemaat worden berekend om zo dit effect te kunnen meten. Daarnaast worden de fysieke aspecten van werklocaties door middel van een enquête geanalyseerd, met als doel een totaalbeeld van de werklocaties te geven.



## **J. Housing (Dutch)**

**16:00 – 17:00 in 5412.0038**

### **Maaïke Hofstra**

#### *Externe effecten van herontwikkeling van erfgoedlocaties op woningprijzen*

Door verschillende maatschappelijke ontwikkelingen hebben veel erfgoed locaties hun functie verloren en is er leegstand. Aannames van beleidsmakers dat herontwikkelen van erfgoed een positief effect op de leefbaarheid en economie heeft is gebaseerd op weinig empirisch bewijs. In dit onderzoek worden herontwikkelingsprojecten met verschillende typen cultureel erfgoed onderzocht. Met een difference-in-difference analyse wordt inzicht verkregen in externe effecten voor, tijdens en na herontwikkeling op de woningprijzen. Daarnaast worden verschillen in effecten onderzocht tussen de typen erfgoed.

### **Rian van Kempen**

#### *Paradox op de nieuwbouwwoningmarkt*

Na de financiële crisis neemt de druk op de woningmarkt weer toe. De woningprijzen stijgen en de roep om nieuwbouwwoningen wordt steeds harder. Tegelijkertijd stijgt aantal vergunningen niet hard, dus de productie van nieuwbouwwoningen zal in de nabije toekomst niet hard stijgen. Nederland kan niet worden gezien als één woningmarkt. Er zijn grote verschillen tussen groei- en krimpgebieden. In dit onderzoek is ruimtelijke statistiek gebruikt om statistische significantie op het gebied van transactieprijs en verkooptijd inzichtelijk te maken.

### **Yaniek Schuring**

#### *Finding a New Home*

Search is an important aspect in the allocation of housing, as the housing market is characterized by a chronic disequilibrium. Only 60% of students in Groningen, who are at the begin of their housing pathway, experienced search time before acquiring their current housing. Many students stated that their search duration was affected by the lack of housing and the shortage of affordable and, qualitative housing. A linear and logit model showed a positive effect for those who used a broker, inspected more housing and a negative effect for rent.

### **Pieter Meijer**

#### *Vestiging asielzoekerscentrum: wel of geen invloed op huizenprijzen?*

In deze thesis wordt met behulp van een hedonische prijsstudie onderzocht of de vestiging van een asielzoekerscentrum invloed heeft op de huizenprijzen in de omgeving. Hiervoor is gebruik gemaakt van 20 jaar aan data van de Nederlandse Vereniging voor Makelaars.



## **K. Retail Development (Dutch)**

**16:00 – 17:00 in 5412.0039**

### **Jordi Grolleman**

#### *De invloed van detailhandel op bedrijventerreinen op de hoofdwinkelstructuur in de gemeente Emmen*

Deze thesis onderzoekt in hoeverre detailhandelsvormen op bedrijventerreinen een negatieve invloed hebben op de detailhandel in de hoofdwinkelstructuur in de gemeente Emmen. Dit onderzoek helpt de gemeente bij het ontwikkelen van goed beleid, dat rekening houdt met ontwikkelingen. Detailhandelsvormen op bedrijventerreinen verschillen met detailhandelsvormen in de hoofdwinkelstructuur, maar er zijn aspecten waarop de detailhandel op bedrijventerreinen concurreert met de detailhandel in de hoofdwinkelstructuur.

### **Justin Arnolli**

#### *The effect of local central retail area characteristics on the consumer transaction decision; Determinants of physical and online shopping behaviour*

This paper focuses on characteristics of the retail area in relation to offline/online consumer shopping behaviour. Characteristics such as size of the area and quality of the area are considered. The paper combines literature on consumer behaviour and the effect of E-commerce on Retail demand and makes examines different product groups. A discrete choice logistic model is used to examine the likelihood that a specific consumer will either purchase a product online or physically. Results indicate a significant effect of demographic variables and limited effects of the size of the area.

### **Arjan Aalbers**

#### *Is 'meer' voetgangerszone ook altijd beter?*

Binnen dit onderzoek staat de vraag centraal wat het effect van een grotere voetgangerszone is op de leegstand van commercieel vastgoed in stedelijke centra. Uitbreiding of implementatie van voetgangerszones roept vaak maatschappelijke weerstand op, terwijl de effecten hiervan in de Nederlandse situatie slechts zeer beperkt bekend zijn. Het overgrote deel van de theorieën wijst op voornamelijk positieve effecten, maar gevonden resultaten liggen meer in lijn met het theorie van Hajdu (1988) waarin gewezen wordt op mogelijke economische keerzijdes van relatief grotere voetgangerszones.

### **Niels Kuiper**

#### *Sales, Rents and Externalities in Shopping Centers*

The agglomeration of tenants within a shopping centres is one of the main reasons they are successful. A cluster of stores attracts more customers who want to minimize travel costs or search costs. From theory, especially the presence of so called 'anchor' stores and 'secondary competitors' generates large externalities in shopping malls, influencing both sales and rents of other tenants in the centre. This thesis estimates the effects of both the presence of anchors and secondary competitors by estimating a model on a unique data set including turnover and rental information of 1.487 tenants.



## **L. Making Places (English)**

**16:00 – 17:00 in 5412.0040**

### **Yannick Rudolph**

*Qualitative research about home-making processes and home perceptions of Syrian refugees in the Netherlands*

The war in Syria does already last for more than half a decade. Since then, Syrians are forced to flee their homes and take the risk of traveling thousands of miles to seek shelter in European countries, such as the Netherlands. But what is it like to be forced to flee from home and start a new life in another country? What steps do refugees take after leaving the initial shelter, the Dutch refugee camp? By means of qualitative research, this study explores how Syrian refugees perceive home and identify important aspects of making a new home.

### **Martijn Bentum**

*Youth owns the future - A research on the role that youth wants to play in building their spatial environment*

This research is about involving youth in planning processes. Prior research has shown that youth is able to form valuable opinions about their environment and want to bring these opinions to the planning process of their environment. However, youth is mostly not directly involved in current planning processes, sometimes via their parents. This research shows in what planning processes youth wants to be involved and in what way they would like to participate. That knowledge can be useful in organizing more valuable participation processes resulting in more highly valued spatial environments.

### **Hans Dekker**

*What role do emotions play in the collective local's memory of a dark and holocaust monument and its surrounding neighbourhood in Leeuwarden, northern Netherlands?*

-

### **Ioannis Papisilekas**

*Towards a Sense of Belonging: Gender and Social Identities of Zimbabwean migrants in the Netherlands*

One's identity and sense of belonging are interconnected concepts. This research explores how gender and social identities shape the experiences of Zimbabwean migrants in the context of the Netherlands towards a sense of belonging. The study adopts an exploratory qualitative approach; in-depth interviews were conducted with 19 Zimbabweans who live in the Netherlands. Their complex experiences are examined through the lens of 'Intersectionality', a framework suggesting that multiple identities operate simultaneously to create a sense of privilege and/or disadvantage.

# Poster Presentations

---

## Citizens' Involvement

### **Bart Bouwman**

*Hoe stenen anno 2016 nog steeds sociaal kunnen zijn. De consequenties van de nieuwe Woningwet voor de omgang van woningcorporaties met burgerinitiatieven.*

In 2015 is het wettelijke mandaat van de woningcorporaties om de leefbaarheid in de wijk te verbeteren aanzienlijk beperkt. In deze scriptie wordt onderzocht wat de consequenties van de Woningwet 2015 zijn in termen van de kansen en beperkingen voor coalities van woningcorporaties en burgerinitiatieven. De kansen en beperkingen worden vooral bepaald door de (on)mogelijkheden van woningcorporaties om met hun discretionaire bevoegdheden de aanwezige hulpbronnen en doelstellingen van woningcorporaties en burgerinitiatieven te convergeren.

### **Fokke van Kammen**

*The role of facilitation in living labs*

Research regarding the topic of living labs is starting to gain traction across multiple scientific research areas. Research regarding the role of facilitation and the activities of managers of living labs is however still scarce and can provide insight into a successful living lab approach. To gain knowledge of this aspect of living labs this research is gathering data from managers of living labs as well as the other actors within the living labs. The results will show actor network configurations and data regarding approaches in facilitation.

### **Gerhardus Wijbenga**

*Coöperatief Groningen: Mogelijkheden voor nieuwe vormen van samenwerking, sociaal ondernemerschap en een langetermijnperspectief voor ontwikkeling in kwetsbare gebieden*

Veelal worden krimpregio's geassocieerd met vergrijzing en het verdwijnen van voorzieningen, waardoor het leefbaarheidsniveau wordt aangetast. Om het leefbaarheidsniveau in krimpregio's op peil te kunnen houden, dient gezocht te worden naar strategieën om duurzame groei te genereren. In theorie lenen sociaal, en specifiek coöperatief ondernemerschap zich goed om zowel duurzame maatschappelijke als economische winst te genereren. Dit onderzoek richt zich op de mogelijke bijdrage die deze ondernemingsvormen kunnen hebben in krimpregio's.

### **Matia Kusters**

*Een exploratief onderzoek naar de aanpak van woningcorporaties om huurdersinitiatieven te faciliteren in het beheer van vastgoed*

Woningcorporaties moeten en willen steeds meer en beter samenwerken met huurders. Echter moet deze groep geactiveerd en gestimuleerd worden om het initiatief te gaan nemen. Door in het beheer van vastgoed samen tot een verbeterde aanpak te komen, kan er een win-win situatie ontstaan. De vraag is daarom hoe kunnen corporaties dit faciliteren zodat dit leidt tot succesvolle huurdersinitiatieven.



## Firm Dynamics

### Luuk Bos

#### *Robotisering en werkgelegenheid*

One's identity and sense of belonging are interconnected concepts. This research explores how gender and social identities shape the experiences of Zimbabwean migrants in the context of the Netherlands towards a sense of belonging. The study adopts an exploratory qualitative approach; in-depth interviews were conducted with 19 Zimbabweans who live in the Netherlands. Their complex experiences are examined through the lens of 'Intersectionality', a framework suggesting that multiple identities operate simultaneously to create a sense of privilege and/or disadvantage.

### Ryon Dijkstra

#### *Groningse ZZP'ers en de waardering van hun Home Based Businesses*

In this explorative qualitative research, the motivation of Groninger freelancers to start their own business will be examined, was it necessary to start their own business or was it opportunistic? I will also examine the appreciation of the freelancers physical workspace and the location of it in two different sectors and neighbourhoods to see if there's a relationship between or within the sectors or neighbourhoods. There is no literature touching upon the freelance sector and the motivation to start a company for their self in Groningen: this research will fill in that empty space.

### Thomas Eefting

#### *De veerkracht van de regio Roden op de sluiting van Cordis*

In oktober 2007 kreeg de economie van Noord-Nederland een klap te verwerken. Een vestiging van katheter producent Cordis wat in Roden gevestigd was zou in december 2008 gaan sluiten. De vestiging van Cordis is verplaatst naar Mexico en de Verenigde Staten om zo de loonkosten te drukken. Deze sluiting zorgde voor een vermindering in het aantal arbeidsplaatsen in Roden en omliggende regio. Cordis was in hoogtijdagen goed voor ruim 15% van de totale werkgelegenheid in Roden. Verschillende media meldden in 2007 dat er door de sluiting een direct gevolg is van 700-800 verdwenen arbeidsplaatsen.

### Wouter Heres

#### *Bedrijfsverplaatsing in de gemeente Groningen*

Aan de hand van het verplaatsingsgedrag van (bedrijfs)vestigingen binnen de gemeente Groningen wordt het gemeentelijk beleid ten aanzien van werklocaties beoordeeld.

## Healthy Ageing

### Gabriela Centeno Armijo

#### *Determinants of contraceptive use in Nicaragua*

Nicaragua has the highest teenage pregnancy rate in the Americas. High teenage pregnancy rates have been linked with low contraceptive use. The research aims to study the determinants of contraceptive use in Nicaraguan teenagers. The country has traditional gender and social norms that influence sexual behaviour and contraceptive choices made by teenagers. In order to capture social norms and behavioural control that surrounds contraceptive use of Nicaraguan

teenagers, the analysis uses Reasoned Action Approach to outline and operationalized the determinants with the latest DHS data.

### **Marleen Fluit**

*Older Hindustani Surinamese migrants in the Netherlands and home-making : The role of ageing, place making and cultural schemas*

In the Netherlands the share of older migrants in the population is increasing. The aim of this thesis is to examine the sense of home of older Hindustani Surinamese migrants living in the Netherlands in relation to migration, ageing, place making and cultural schemas. In-depth interviews and photographs from the project Ageing in Institutional Settings which is part of a larger project Ageing and Well-being in a Globalising World (NWO-ESRC-ICSSR) are analysed. The in-depth interviews were conducted at four co-housing communities for older Hindustani Surinamese in the Netherlands.

### **Marike Fowler**

*Aspects of an age-friendly environment that contribute to the subjective wellbeing of older adults who live in Vledder*

In this research the focus lies on the rural village of Vledder, which has a large growing older population. As older adults might experience more restrictions in movement and tend to spend more time at home the close environment becomes more important. Adaptations to their environment might be necessary to improve their wellbeing. To find out what is important to the older adults in Vledder to make their environment age-friendly, semi-structured interviews and walking interviews were conducted.

### **Nikki Kerkhof**

*De implementatie van Corporate Real Estate Management in het zorgvastgoed bestemd voor dagbesteding.*

De verantwoordelijkheid voor de financiering van het vastgoed komt bij zorginstellingen te liggen. Hierdoor worden zij gedwongen bewuster om te gaan met het vastgoed. In dit onderzoek is onderzocht hoe verschillende indicatoren van vastgoed (bestemd voor dagbesteding) de primaire organisatie-doelstellingen van een zorginstelling kan ondersteunen en hierdoor waarde kan toevoegen aan de organisatie. Dit is gedaan door het afnemen van een enquête onder werknemers op dagbestedingslocaties. Gebruikerstevredenheid wordt als belangrijkste toegevoegde waarde gezien van het vastgoed aan de organisatie.

### **Sari Seftiani**

*The Health of Older People in Indonesia: An Analysis Based on Access to Health Insurance*

Ageing population generates many challenges and concerns including the operation of health care. This research aims to identify the access to health care and health among older people in Indonesia. The research question that formulated is to what extent do the access to health insurance affect the health of older people in Indonesia. Using the 5th wave of IFLS data, four health measurements are analysed using four binary logistic models. The results show that health insurance have been found to be a key variable of access to health care that affect the health of older people.

# Resilience

## **Christian van Urk**

### *Samenwerkende sportverenigingen in krimpgebieden*

Om in te spelen op actuele ontwikkelingen, gaan voetbalverenigingen in krimpgebieden in hogere mate met elkaar samenwerken. Dit onderzoek biedt inzicht in hoe cultuur- en identiteitsverschillen een rol spelen in het succes van samenwerking tussen voetbalverenigingen. Uit de voorlopige resultaten blijkt dat cultuur en identiteit bepalende factoren zijn voor het succes van een samenwerkingsverband. Goede interne communicatie en procesbegeleiding zijn echter belangrijke succesfactoren die ervoor kunnen zorgen dat cultuur- en identiteitsverschillen niet het succes van de samenwerking belemmeren.

## **Esra van der Zaag**

### *Noord-Groningen: een regio met opgaven óf met kansen?*

Op het gebied van locatiekeuzes van bedrijven is al volop kennis beschikbaar. Echter, de ontwikkelingen die nu in Noord Groningen gaande zijn (aardbevingen, krimp en vergrijzing), zullen naar verwachting direct dan wel indirect invloed hebben op het vestigingsklimaat van Noord-Groningen. Dit onderzoek tracht aan te tonen of dit daadwerkelijk het geval is en op welke manier dit gebeurt. Daarom wordt in mijn thesis eerst inzichtelijk gemaakt wat de locatievoordelen zijn van Noord-Groningen en vervolgens wordt onderzocht of de aardbevingen effect hebben op de regio als vestigingslocatie.

## **Ingelou Sybrandij**

### *Onderzoek op welke wijze de factor maatschappelijke waarde meegenomen kan worden in een prioritering methodiek voor het aardbevingsgebied*

De huidige prioritering methodiek van VIIA is gebaseerd op de factor veiligheid. Het doel van deze scriptie is om te onderzoeken op welke wijze de factor maatschappelijke waarde meegenomen kan worden in de prioritering.

## **Peter Heeres**

### *Migratie of evacuatie; een verkennend onderzoek naar een vertrekvens in het aardbevingsgebied*

Het noorden van Nederland wordt de afgelopen decennia in haar greep gehouden door aardbevingen als gevolg van de gaswinning. Door langlopende contracten met het buitenland is het niet mogelijk om de gaskraan dicht te draaien en daarmee de aardbevingen te laten stoppen. De inwoners moeten daarom leven met de aardbevingen en leven in onzekerheid. Uit eerdere onderzoeken blijkt dat sommige huishoudens wegens de slechte reputatie van het gebied hun huis niet meer verkocht krijgen voor een juiste prijs en blijven zitten met een vertrekvens. In mijn afstudeerproject ga ik dit onderzoeken.

## **Pieter Brouwer**

### *Learning from the resilience of others: A comparison between The Netherlands and Chile in dealing with earthquakes*

This research looks whether there are lessons to be learnt by The Netherlands from the Chilean method that can be used to improve the resilience against earthquakes. The experience of Chile on dealing with earthquakes is useful for the Netherlands, because earthquakes in Groningen are a relatively new phenomenon. With help of the research, it is checked whether



the Adaptive Capacity Wheel is useful for comparing two countries and whether policy learning can be used to improve resilience.

## Sense of Place

### **Elina Coerts**

*Social integration of Syrian status holders in the Netherlands and the role of personality & locus of control*

Integration of refugees is a topic with a lot of attention towards learning the language, getting an education and finding a job. Less attention has been paid to their social life within this new society. Who are their friends, what helps and prevents them from making contact with people and are social relations the key to successful integration? To answer these questions in depth interviews have been conducted with Syrian status holders to see how they experience social life in the Netherlands. Attention is also given to the role of their locus of control and their personality.

### **Jana Tabbara**

*Exploring young adults' sense of place: a case study of the Massaad staircase in the neighborhood of Mar Mikhael, Beirut.*

This thesis explores young Lebanese adults' sense of place in relationship to the Massaad stairs located in one of Beirut's 'hip' neighbourhoods, Mar Mikhael. The data collection consists of on-site walk-along interviews with young adults and visual data to observe the users' dynamics. Cognitively, young adults think of the stairs as a social arena, as a way to connect to the city, and as an 'escape'. Emotionally, they feel the space is a safe platform for self-expression. Behaviourally, the seating pattern on the stairs plays a role in the performed activities such as drinking practices.

### **Simone Barends**

*Experiencing integration; Helpful factors and barriers to integrate in Dutch society experienced by refugees from the Middle-East. A study examining the role of social connections in integration in urban and rural regions*

This research explores integration experiences of refugees in Dutch society and the role of social connections and place, based on qualitative research. The study examines interviewees' constructions of integration and compares these for people living in a rural or an urban area. Particular emphasis is placed on the role of social bonds, social bridges and social links (Ager & Strang, 2008). The interviewees all come from a country in the Middle-East because of their large share in the current refugee stream. The method that is applied in this study is semi-structured in-depth interviews.

## Sustainable Development

### **Arno Kastein**

*Smart Grid in the Netherlands: A scenario study towards different possible futures and their spatial implications*

Smart Grid is a concept which allows a smoother integration of environmental friendly technologies into the electricity grid compared to the current electricity grid. However the concept of Smart Grid is still in its infancy. Due to many uncertainties about the development of Smart Grid scenarios are described to outline several possible futures and their spatial implications. The (1) mix of renewables and conventional energy sources, (2) Plug-in electric vehicles and (3) several ways of matching supply and demand are taken as variables in these scenarios.

#### **Daan Haanstra**

##### *Securing social interests in the new Environment and Planning Act (Omgevingswet); opportunities for Social Impact Assessment?*

The traditionally restrictive Dutch planning system faces a great change: it is into a system of facilitative governance. The new Environment and Planning Act (Omgevingswet), in effect in 2019, aims to simplify procedures, in order to provide opportunities for entrepreneurship in the spatial arena. However, these procedures exist to protect the interests of those influenced by spatial planning. This research investigates the effects of the new Act on the safeguarding of social interests, and argues why a form of Social Impact Assessment may be able to mitigate possible negative effects.

#### **Hester Verbeek**

##### *Sustainability in Programme management*

Sustainability is still a hot topic, but more importantly an urgent theme these days. Organisations and governments at the local and global levels find it hard to implement sustainability objectives. In the planning field, project management is the most readily used approach to implementing plans. In this research, two different approaches will be examined in relation to how they can support the implementation of sustainability objectives - the traditional project oriented approach and more recently developed programme oriented approach.

#### **Niels van der Goot**

##### *Charging Groningen*

This exploratory study has the aim to discover the possibilities for energy storage in the province of Groningen within the near future. Six different techniques of energy storage are discussed and compared on the basis of seven criteria. One of the main results is that one way of energy storage is not going to take care of all the (future) problems of the grid when renewable energy becomes the dominant form of generation. Multiple techniques will have to be implemented. Techniques with a large capacity are less attractive and thus preference is given to techniques with a smaller capacity.

#### **Vera van den Bemt**

##### *De verduurzaming van maatschappelijk vastgoed: een schoolvoorbeeld*

De adoptie van duurzame energie is een belangrijk onderdeel van de energietransitie. Zonnepanelen zijn populair bij bedrijven en huishoudens, maar worden op scholen nog beperkt toegepast, terwijl dit een type maatschappelijk vastgoed is waar veel vooruitgang te behalen is. De voorbeeldfunctie van scholen is bovendien een extra reden om hier aandacht aan te besteden. De vraag 'Welke invloed hebben beleid en gedrag op de keuze van basisscholen om te investeren in zonnepanelen, en welke belemmeringen en kansen spelen hier een rol' staat hier centraal.

# Transport and Infrastructure Planning

## Daniël Jonkhout

*Ontsnippering bij MIRT infrastructuurprojecten: Hoe kan het werk van het MJPO voortgezet worden na 2018?*

Het Meerjarenprogramma Ontsnippering (MJPO) is in 2004 opgezet om bestaande barrières die infrastructuur vormt voor de natuur op te lossen. Gedurende de jaren zijn bijna alle knelpunten opgelost. Het programma loopt in 2018 af, waardoor er kans is dat er minder aandacht voor ontsnippering komt. Het onderzoek gaat na hoe ontsnippering als doel kan worden meegenomen in een MIRT infrastructuurproject nadat het MJPO programma afgelopen is.

## Malcolm Simpson

*A New Paradigm for New York: Using Complexity Planning to Investigate Path Dependency and Potential Innovation in New York's Public Transit*

Using complexity planning, this research uses the public transit networks of New York City to explore adaptive potential and the restrictions of path dependency in the slow and expensive world of transportation infrastructure.

## Joachim Wiegman

*Is de implementatie van Shared Space evidence-based?*

In deze Masterthesis wordt er gekeken naar het belang van evidence-based beleid tijdens de implementatie van Shared Space. De maatschappelijke relevantie van deze thesis is het achterhalen of het invoeren van Shared Space evidence-based beleid is. Uit de resultaten blijkt dat er twijfel is in het belang van evidence-based beleid. Aan de ene kant vinden ze het belangrijk dat er bewijzen zijn dat het werkt en men dat ook kan laten zien, vooral voor gemeenten die nog niet met Shared Space te maken hebben gehad. Aan de andere kant is dit lastig omdat niet elk project hetzelfde is.

## Marc Schultink

*Effect A2 Traverse op omliggende huisprijzen*

Dit onderzoek analyseert wat het effect is van het ondergronds aanleggen van de A2 bij Maastricht op de omliggende huisprijzen. De analyse zal gebaseerd zijn op data van het NVM over huisprijzen in Maastricht ten tijde van aankondigen, constructie en oplevering van de ondergrondse aanlegging van de A2 bij Maastricht over de periode 1997 tot maart 1997. Voor de beantwoording van de centrale onderzoeksvraag zal een hedonistische regressie analyse worden uitgevoerd. De resultaten suggereren dat het ondergronds aanleggen van de A2 een positief effect hebben.

## Mervin Rozema

*The ex post evaluation of area-oriented infrastructure projects*

Road infrastructure becomes more and more integrated with other spatial functions, such as housing, water storage and nature protection. This area-oriented approach is a sustainable way of planning. Some road infrastructure projects claim that they are sustainable by following this area-oriented approach. However, after realization this has never been evaluated. In this research three road infrastructure projects in the province of Fryslan have been evaluated

ex-post. The Sustainability Check (NL: Omgevingswijzer) is the guidance within this research to evaluate the sustainability.

### **Renno Hokwerda**

#### *Tunnel Vision - the impact of sub-sea tunnels on the Faroe Islands*

Social impact assessment, nor infrastructure planning, have taken a long-term perspective on the social impacts generated by 'missing link' pieces of infrastructure. It is challenging to analyse this, for in our complex world, one element of change (a tunnel) will slowly merge with other elements of change and co-produce the 'normal' course of life. In the Faroe Islands, two sub-sea tunnels have been built, connecting two outer islands to the main centre islands. How did this impact local society? A qualitative methodology is to deliver an insight in the tunnel's practical and symbolic aspects

### **Thales Kolsteren**

#### *Planning for new (Air)planes: Using a multiplanar approach to assess uncertainties in regional airports of the Netherlands*

In the dynamic aviation industry regional airports are becoming larger and more important. Because of this, new actors enter the planning arena thus creating a new kind of 'intersubjective uncertainties'. In the Netherlands, the government has decided to instate a consultative body 'The Alderstable' to guide expansion of regional airports. In my thesis, I use Hiller's Multiplanar approach to assess which uncertainties influence the decision making process in regional airports and how actors deal with these uncertainties within the Alderstable.

## **Urbanization**

### **Leon van der Meulen**

#### *Analysing the urbanisation of the Northern Netherlands between 1950 and now*

Since the second world war the Northern Netherlands has developed rapidly. Population Growth and urbanisation took place. This period shaped the Northern landscape as we know it today. We don't have a lot of information however about this development yet. This thesis dives into the spatial analysis component of analysing urbanisation. Based on current and historical data (GIS) analysis is performed and information is gained. The end product is a comprehensive visualisation of the urbanization of the past 60 years.

### **Ruud Broeks**

#### *Grenzen van de verstedelijking*

Aan de basis van de grens van een stad of dorp staat de bebouwde kom. Op de grens staan komborden, welke het gebied afbakenen. Maar waarom ligt de grens daar? Zijn er alternatieve grenzen of bebouwd gebied af te bakenen die wellicht beter of logischer zijn?

### **Sebastiaan Outshoorn**

#### *Urbanization and self-organization: analysing self-organizing urban development in emerging mega-cities*

With cities growing bigger it becomes more and more difficult for governmental institutions to deal with the problems associated with mega-cities. Where governments fail, new solutions

must be found. This research aims to show how forces of self-organization within cities can be beneficial for sustainable urban development. By analysing various self-organization initiatives in New Delhi, Cape Town and Mexico City this research intends to provide an outline of the conditions that need to be met to successfully use self-organization as a tool for sustainable urban development.

## Water Planning

### **Anna Kuhlmann**

#### *Sustainable Urban Water Management in Germany - Evaluation of micro-transitions and discussion of their upscaling*

Cities depend on intact water bodies, are affected by storm water and yet have a deteriorating impact on water bodies. Sustainable Urban Water Management (SUWM) is an approach aiming at improving the urban-environment-relationship by incorporating diverse forms of water (e.g. rain or waste water), thereby increasing the variability of water sources and decreasing waste efflux. Thus, it can potentially enhance water security, also regarding climate change. In Germany, small-scale projects of SUWM exist. Institutional and infrastructural lock-in effects are barriers to an upscaling of SUWM.

### **Elsa Stetinger**

#### *Environmental, Economic, Social Impacts of Agriculture on the Groundwater Quality in Lower Saxony – Germany*

Groundwater is contaminated with nitrates, in Lower Saxony. Research explores interdependencies between the agriculture- and water sector through actor mapping method and the different perceptions, conflict of interests, etc. of both sector to prevent further groundwater contamination. Research sheds light on the challenges and opportunities that both sectors face with regards to groundwater related issues. Research aim is to reach mutual gains in multi-actor setting and build consensus between both water sector to decrease pressure on groundwater quality and improve livelihood of farmers.

### **Jana Brinkmann**

#### *What a Waste. Using the Potential of a Circular Economy to Reduce Marine Plastic Pollution in Germany*

Marine plastic pollution threatens marine wildlife and human health. While this threat is widely recognized, success in effectively reducing the pollution levels is still lacking. Approaches such as circular economy (CE), which aims at transforming the economic production system into a system that constantly reuses its resources, offer a promising point of departure, but still need further development to prevent marine plastic waste generation. This thesis builds upon this need to refine how CE is operationalized in to reduce marine plastic waste in the case of Germany.

### **Jesse Bouma**

#### *Role of Citizens in Decreasing Chances of Pluvial Flooding*

The increase in short but intense rainfall and the increase in the use of impermeable surface cause excessive runoff in the form of pluvial flooding. Pluvial flooding causes hindrance and nuisance through water on the streets, flooded tunnels and basements, which leads to discomfort and material, economic and health impacts. By decreasing the use of impermeable surface in private gardens, citizens can contribute to decrease the chances of pluvial flooding,

and therefor create a more resilient community. However, citizens are not always aware of the problem and solutions or willing to act.