



university of
 groningen

faculty of spatial sciences

BOOK OF ABSTRACTS

Graduate Research Day – 27 January 2026

During the Graduate Research Day pictures will be made.
If you have any objections, please send an e-mail to the organization (grd@rug.nl).

Programme

- 09:00 - 09:30 Walk-in with coffee/tea (*Duisenberg Plaza*)
- 09:30 - 09:40 Welcome and opening by **Dr Billie de Haas** (*Blauwe Zaal*)
- 09:40 - 09:55 Keynote by **Meint van Dam** (*Blauwe Zaal*)
- 10:00 - 10:45 Thematic presentation sessions:
- 1. Room 5412.0025: Housing and mobility in the Netherlands**
Merel Morshuis
Inge Jensma
Bram Fidder
 - 2. Room 5412.0028: Urban design for sustainability**
Foeke de Wolf
Lucienne Reinhardt
Jasmijn Harteveld
 - 3. Room 5412.0031: Green paths, social stories**
Matthijs Bouma
Viktorija Gavėnauskaitė
- 10:45 - 11:15 Poster presentations + break with coffee/tea (*Duisenberg Plaza*)
- 11:15 - 11:30 Award ceremony and closing by **Prof. Tialda Haartsen** (*Blauwe Zaal*)

Keynote

Meint van Dam

Towards a balanced allocation of functions: The role of multifunctional land use in Dutch spatial planning

The study is about the effectiveness of multifunctional land use (MLU) in relation to the Dutch criterion of a 'balanced allocation of functions to locations' from the new Dutch environment and planning act. While the study is not finished in this stadium, it found that there is no real steering or guidance on the application of MLU. Based on this finding, the study proactively develops an MLU assessment framework, through which promising combinations of spatial functions are proposed. This theory-based framework can be used in planning practice to have more guidance with MLU-developments.

Thematic presentation sessions

1. Housing and mobility in the Netherlands **Moderated by Dr Mark van Duijn – University of Groningen** **Room 5412.0025**

Merel Morshuis

Building blocks of the future: The limits and opportunities of high-rise modular construction in a Dutch context

The Netherlands faces a housing shortage. Although modular construction (MC) offers substantial advantages, its application in the Dutch context remains low. This research investigates how the limits and opportunities of permanent high-rise MC can be understood, with a review of existing literature and interviews with industry experts. This study identifies three main limits and three main opportunities focused on government support, vertical integration, and demand. This research provides a clarification of the MC process and clear insights for the involved parties.

Inge Jensma

The effect of house price changes on labour supply in the Netherlands

This thesis examines the relationship between house price changes and individual labour supply in the Netherlands, with a focus on gender differences. Using cross-sectional data from the Dutch household survey, housing wealth changes are constructed from purchase prices and self-reported WOZ values, while labour supply is measured using actual hours worked. OLS regressions show a statistically significant but economically modest negative association between housing wealth and hours worked. This effect is more pronounced among women than among men, and is robust across specifications.

Bram Fidder

Perceptual and behavioral drivers of demand responsive transport in rural Netherlands

Demand responsive transport is increasingly applied to improve accessibility in rural areas of the Netherlands, yet user adoption remains uncertain. This thesis explores the perceptual and behavioral drivers influencing rural residents' intention to use DRT. Building on the UTAUT2 framework, the study uses survey data with insights into current travel behavior to examine how expectations and mobility habits shape adoption intentions. The findings provide evidence that various perceptions, together with existing travel routines, play an important role in shaping intention to use DRT.

2. Urban design for sustainability **Moderated by Dr Harm-Jan Rouwendal – University of Groningen** **Room 5412.0028**

Foeke de Wolf

Reconnect to revitalize, where water meets city: Restoring port city identities

This thesis examines how historic Dutch port cities can restore their spatial and cultural connection to the waterfront. Using a research-by-design methodology, it develops design principles through an iterative process of analysis, ideation, and stakeholder engagement. A typological study of cities informs a case study in Delfzijl, which serves as a testing ground. The research proposes transferable spatial strategies that reconnect urban form to the water, balancing safety, heritage, and accessibility to foster more resilient and culturally sensitive post-industrial port city identities.

Lucienne Reinhardt*Design decisions in German playgrounds: Affordances, play value, and sustainability*

Playgrounds are among the few urban spaces dedicated to children's independent play, yet their design is shaped by institutional and budgetary constraints. This paper examines how design decisions influence unstructured play and sustainability, drawing on semi-structured interviews with playground designers in Germany. Qualitative analysis shows that safety regulations and budget primarily shape material choices and play value. Sustainability, though widely acknowledged, remains secondary in practice within these regulatory and economic conditions.

Jasmijn Harteveld*Streets as sponges: Analyzing the integration of sponge city principles in Groningen's Doorwaadbare Stad programme*

This study examines how sponge city principles are integrated into the Friesestraatweg redesign within Groningen's Doorwaadbare Stad programme and how they are balanced with other urban design priorities outlined in the design guideline. Based on interviews and document analysis, the study shows a strong increase in permeable green space and the introduction of a separated rainwater drainage system. More innovative measures were excluded due to maintenance and spatial constraints. The findings stress that sponge city integration is highly context dependent and shaped by budget responsibilities.

3. Green paths, social stories
Moderated by Dr Christian Lamker – University of Groningen
Room 5412.0031

Matthijs Bouma*Measuring accessibility to green spaces in Groningen*

This study examines urban green space accessibility in Groningen city, the Netherlands, critiquing earlier municipal approaches. It provides a multi-stage GIS methodology using QGIS and authoritative Dutch spatial datasets. Green space access is evaluated against a modified interpretation of the "3-30-300" rule. The approach consists of running multiple experimental analyses to refine the final procedure.

Viktorija Gavėnauskaitė*Expendable communities? How narratives of transition shape path dependencies in a post-Soviet industrial city – A case study of Visaginas, Lithuania*

This thesis analyses how residents of Visaginas, a former Soviet mono-industrial city, experience and narrate socio-economic transformations after the closure of the Ignalina nuclear power plant. Using critical environmental justice, path dependence, and lock-in theory, it examines how local discourse shapes perceptions of winners, losers, and place identity, reinforcing structural inequalities. Archival research, media analysis, and interviews show that historical legacies, institutions, and narratives produce persistent feelings of expendability and constrained futures.

Poster presentations

Dieke de Lange

Children's mobility and sense of place on school routes: Everyday streets and lived experience

This thesis explores how children aged 10–12 experience streets along their daily routes between home and school. Drawing on a rights-based perspective and theories of affordances, capabilities, and lived experience, it examines how urban environments shape children's mobility and sense of place. Using participatory methods combining photovoice and mapping, children's spatial practices and perceived restrictions are explored. The findings show that streets function mainly as transitional spaces where mobility, safety, and belonging are negotiated through traffic conditions and parental rules.

Ella Wieffer

Sustainable groundwater management: A case study of the Dutch Wadden Island Terschelling

Groundwater is a vital resource and key source of drinking water in the Netherlands. On the Wadden Islands groundwater presents in a freshwater lens beneath the islands, which is increasingly threatened by extraction and climate change. Sustainable management is needed, but responsibilities are fragmented across multiple organizations with differing priorities. This study aims to identify the current barriers and investigate how integrated groundwater management in addition to landscape management could help to establish sustainable groundwater practices.

Erin Houdijk

Personalities and job satisfaction in an automating world

Eva Broeks

Motility of young adults in rural areas: Navigating limited mobility choices in everyday life

This study investigates the motility of young adults in rural areas, using the dimensions of access, competence and appropriation. A survey was conducted among young adults aged 18 to 25 in Salland, Overijssel, to examine how mobility constraints and opportunities are navigated. The results show that the private car is the primary mode of transport. Despite the limitations in public transport availability, participants are generally satisfied with their mobility. Mobility decisions are primarily guided by considerations of convenience, speed and safety.

Jan-Paul Fieten

Concretizing post-growth planning: An empirical exploration into the relationship between residential mobility and post-growth housing typologies in the light of a local housing shortage

This research explores empirical patterns between post-growth planning and residential mobility in Hogeveen. It builds on the core idea that post-growth planning can be concretized in post-growth housing typologies, and that their relationship with residential mobility reveals local opportunities in an "unintentional" community. Using a digital questionnaire, the study shows that housing market actors hold distinct attitudes toward post-growth housing typologies. These findings can inspire policies that align post-growth planning with residential mobility to address local housing shortages.

Jasper Mekkelholt

Assessing regional competitiveness in the hydrogen economy: Development & application of a regional competitiveness index for Groningen

This thesis assesses the competitiveness of the Groningen region within the emerging Dutch hydrogen economy by developing a Regional Hydrogen Competitiveness Index (RHCI). Being the first Dutch region, which got EU financing to invest in the development of the hydrogen sector, Groningen is an important case study region. Based on infrastructure, market preparedness, innovation potential, and policy support, the index compares Groningen to other Dutch regions. The findings highlight the strengths and improvements for Groningen. In the future, this index can be used to compare EU hydrogen regions.

Jesper Leuwerink

Bridging peaks and valleys: An analysis of collective action in the Dutch electricity system

The Netherlands' rapid expansion of renewable electricity has outpaced distribution grid capacity, leading to transport congestion. Strong growth in solar PV and offshore wind, combined with the intermittent nature of renewables, increases peak-load stress. Grid expansion is slow due to labour shortages, spatial constraints, legal procedures, and high costs. This research examines demand response as a congestion management strategy, focusing on collective action units that coordinate flexible electricity use to flatten peaks and better utilize existing infrastructure.

Jissel Hagedoorn

Sociale voedseltuinen (community gardens) as a tool for building social cohesion

Sociale voedseltuinen are community gardens where residents collectively grow and harvest fresh produce, which is made freely available to households facing financial constraints. This study examines how a sociale voedseltuin in Leeuwarden-Oost influences neighbourhood-level social cohesion using the social capital framework. Based on semi-structured interviews, the research offers initial insights into how shared gardening practices, organized harvesting moments, and collaborations with local organizations foster everyday social contact and neighbourhood engagement.

Koen Kappetijn

Integrating water into spatial planning: The design and governance of water assessment instruments in the Netherlands

With the installment of the Omgevingswet, the watertoets has been replaced, or updated to the 'weighing of the water interests'. These water assessment instruments are supposed to systematically integrate water into spatial planning to make spatial plans more sustainable. Through a combination of policy document review and interviews with regional water authorities, I examine how this renewed instrument is designed and how it is used in practice. My research is focused on addressing governance challenges and finding barriers and opportunities to improve the weighing of the water interests.

Lola Tucker

Regional justice and broad prosperity: A study of the province of Groningen

It has become clear that economic measures alone do not adequately reflect how a place is actually doing. Broad prosperity (brede welvaart) is the Dutch approach to expanding this view by including social and environmental. This thesis examines the relevance of regional dynamics, particularly regarding social justice, for broad prosperity. Using Nancy Fraser's theory of social justice, the study analyzes these dynamics in the case of Groningen through interviews and an indicator analysis, with the aim of identifying blind spots in current broad prosperity frameworks.

Luca Auf der Heyde

Asset pricing in turbulent times: The decoupling of rent fundamentals and yields in the Dutch office market during crises

This thesis examines synchrony between Dutch commercial real estate occupier and investment markets during the COVID-19 pandemic and later interest rate fluctuations. By testing for possible structural breaks, this study challenges the assumption of efficiency during systemic shocks and fragility of transmission mechanisms. Initial results suggest a strengthening of regular inverse rent-yield relationships during the pandemic, but a disruption in vacancy risk pricing. Interest rate shocks seemingly influence yields through macro-economic trends but do not structurally affect market synchrony.

Luuk Haverlag

Implementing car-free neighbourhoods: A comparative study on spatial, policy, temporal, and participatory strategies in the Netherlands

This thesis examines how car-free neighbourhoods can be implemented by analyzing the interaction between spatial measures, push-and-pull strategies, timing, and participation strategies. A holistic conceptual model is applied through a comparative case study of three Dutch neighbourhood redevelopments. Methods include policy document analysis, semi-structured interviews, and a resident questionnaire. The study identifies mechanisms shaping implementation and helping increase public acceptance, offering guidance for municipalities.

Luuk Ogier

The effect of green spaces on different housing classes in Pittsburgh, Pennsylvania

In this thesis, the effect of green spaces on the value of properties is researched. The effect of different distances is measured and the effects are measured using a quantile regression. The results are surprisingly declining, when a green space is closer, housing value tends to go down.

Luuk Veltman

Waar zijn buurtbatterijen haalbaar? Inzicht in ruimtelijke en sociaaleconomische factoren

De energietransitie in Nederland stuit op netcongestie. Tijdelijke oplossingen zoals buurtbatterijen kunnen piekbelasting lokaal verminderen, maar er is weinig bekend over ruimtelijke en sociaaleconomische factoren die hun inzet beïnvloeden. Dit onderzoek verkent deze factoren via een exploratieve mixed-methods aanpak in de gemeente Groningen. Resultaten tonen dat bebouwingsdichtheid, elektriciteitsvraag, PV-potentieel, inkomensniveau en sociale cohesie bepalend zijn voor de haalbaarheid van buurtbatterijen, met hoge potentie in vinex- en villawijken.

Marieke Nieuwenhuizen

Disconnected by design? Assessing the just transition challenges of European aviation climate policy for small island developing states: The case of Mauritius

This thesis analyzes how EU aviation climate policies shape socio-economic outcomes in Mauritius, a tourism-dependent SIDS. Rising aviation costs reduce accessibility and intensify structural vulnerabilities. Interviews reveal limited influence over EU policymaking and highlight distributive, procedural and recognitional injustices. The findings show that external decarbonization measures can deepen dependency, and that a just transition requires differentiated support for island economies.

Marit Assink

Begrijpen van non-participatie aan leefbaarheidssubsidies op het platteland: Een casestudy van Overijssel

De provincie Overijssel faciliteert neo-endogene plattelandontwikkeling via diverse leefbaarheids-subsidies, maar niet alle dorpen maken hiervan gebruik. Deze scriptie onderzoekt welke factoren bijdragen aan deze beperkte deelname. Middels een statistische analyse van subsidiegegevens, aangevuld met interviews in geselecteerde dorpen en participatie observatie bij de provincie Overijssel, zal dit onderzoek inzicht geven in institutionele, sociale en organisatorische factoren die deelname beïnvloeden. Dit onderzoek beoogt bij te dragen aan effectievere beleidsinzet voor plattelandontwikkeling.

Wera Haake

Building agri-cultural bridges: Negotiating rural landscapes and change in Drenthe

Farmers' habitus and cultural capital shape the uptake of agri-environmental policy schemes under the agricultural transition, revealing the social and cultural trade-offs that influence resistance to nature-inclusive practices. With a focus on Drenthe, the combination of discourse analysis of provincial policy texts with semi-structured interviews of farmers, analyzed through thematic coding, the research identifies distinct farmer cultures, uncovers mechanisms linking identity to uptake, and offers insights for designing policies that are culturally legible and support effective adoption.