



rijksuniversiteit  
groningen

# Science Shops today

Annual review 2022

## About the cover

This cover addresses the role that the Science Shops play in their social and academic environment. With its eight arms, the octopus is involved in many different activities just like we are. We want to do research with people, not just about people. However, it is sometimes difficult to balance objectivity and involvement. The octopus visualizes this duality. We like to place ourselves in the middle of society, but what are the consequences of this? And how do we ensure that we can give something useful back to the people we work with?

On this cover you will find various science shop projects from the past year. For example, we had a student who researched the sustainability of surgical sets and we supervised students who, together with Museum Nienoord, developed a plan for an exhibition about the various carriages and their stories.

Kim Dumoré



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## Colofon

The Science Shop Annual Review is a joint publication of the Science Shops at the University of Groningen.

For a free subscription, send an email to [wewi@rug.nl](mailto:wewi@rug.nl)

Editorial board: Karin Ree, Yorick Karseboom, Eline Huizing, Kim Dumoré and Lars Jansen

Cover design: Kim Dumoré, Instagram: [@kim\\_dumore](https://www.instagram.com/kim_dumore)

Design and layout: Harry Kasemir, Bauburo Visuele Communicatie

Print: Zalsman Groningen B.V.

ISSN: 1389-8612

Reports and articles have been published about most of the projects discussed in this review. These can be downloaded for free at [www.rug.nl/wewi](http://www.rug.nl/wewi). If you are interested in any of the subjects discussed, you can contact the relevant Science Shop.

## Science Shops

## Science Shop Bèta

Nijenborgh 6, 9747 AG Groningen

Niels Alberts: [n.alberts@rug.nl](mailto:n.alberts@rug.nl) / 06 - 3192 1788

Karin de Boer: [m.k.de.boer@rug.nl](mailto:m.k.de.boer@rug.nl) / 050 - 36 34686

Henk Mulder: [h.a.j.mulder@rug.nl](mailto:h.a.j.mulder@rug.nl) / 050 - 36 34436

Karin Ree: [c.m.ree@rug.nl](mailto:c.m.ree@rug.nl) / 050 - 36 34132

[science-shop-fse@rug.nl](mailto:science-shop-fse@rug.nl)

## Science Shop Medicine &amp; Public Health

Mailing address: UMCG, Sector F, Wetenschapswinkel

G&V, Postbus 30.001, HPC FA12, 9700 RB Groningen

Visiting Address: Hanzeplein 1, Gebouw de Brug

Vera Verhage, [wetenschapswinkel@umcg.nl](mailto:wetenschapswinkel@umcg.nl)

## Science Shop Education

Grote Rozenstraat 3, 9712 TG Groningen

Denise Leidelmeijer: [d.f.m.leidelmeijer@rug.nl](mailto:d.f.m.leidelmeijer@rug.nl) / 050 -

36 32373

## Science Shop Language, Culture &amp; Communication

Mailing address: Postbus 716, 9700 AS Groningen

Visiting address: Oude Kijk in 't Jatstraat 26, 9712 EK

Groningen

Vincent Hazelhoff: [tawi@rug.nl](mailto:tawi@rug.nl) / 050 - 36 37370

Lars Jansen: [lars.jansen@rug.nl](mailto:lars.jansen@rug.nl) / 050 - 36 37365

## Knowledge Centre Philosophy

Oude Boteringestraat 52, 9712 GL Groningen

Marc Pauly: [m.pauly@rug.nl](mailto:m.pauly@rug.nl) / 050 - 36 36948

Yorick Karseboom: [kcf@rug.nl](mailto:kcf@rug.nl)

The Science Shops on the web:

[www.rug.nl/wewi](http://www.rug.nl/wewi)

The Science Shops on Twitter:

[@ScienceShopsRUG](https://twitter.com/ScienceShopsRUG)

Linked-in: [www.linkedin.com/company/wetenschapswinkelsrug/](https://www.linkedin.com/company/wetenschapswinkelsrug/)

[wetenschapswinkelsrug/](http://wetenschapswinkelsrug/)

The Science Shops collaborate with:

**Green Office Groningen**

Visserstraat 47/49, 9712 CT Groningen

Irene Maltagliati: [greenoffice@rug.nl](mailto:greenoffice@rug.nl) / 050 - 36 35358

**Wijk Inzet Jongeren Studenten (WIJS),**

Bij Van Houten, Oliemuldersweg 47

9713 VA Groningen

[info@wijsgroningen.nl](mailto:info@wijsgroningen.nl)

## A new world

Lately, I often hear people saying that they feel like the world has changed and that everything is different now. It is easy to understand that feeling. COVID-19 has brought us to a standstill and has made us think about the status quo.

Now that the epidemic is over, at least for now, we apply these newly acquired perspectives to our daily lives, which have resumed their unequivocal rhythm. Sometimes, however, it still seems as if we are in the middle of an enormous universal change.

It is up to us, as academics, as concerned citizens or simply as human beings, to decide what this change will be like. The Science Shops also contribute to a new world. Hopefully, this will be a better world than the previous one. The main thing is that we aim for positive change. How? You can read that in this annual journal.

Read how Beta students care about the future of the Wadden Sea. Explore how Philosophy students go beyond the walls of academia to answer philosophical questions raised in society and

find out how Arts students have set up a consultancy agency for societal issues. You can also read about the importance of mutual self-reliance, about better ways to display invisible poverty in Groningen and about options for green travel for UG students and staff members. The common theme is: how to contribute together to a new and better world.

I hope you will enjoy this journal.

Yorick Karseboom



The Science Shopkeepers. From left to right: Kim Dumoré, Yorick Karseboom, Marc Pauly, Karin Ree, Henk Mulder, Vera Verhage, Karin de Boer (absent: Niels Alberts, Vincent Hazelhoff, Lars Jansen, Denise Leidelmeijer)

# The Living Knowledge Network came to Groningen and brought with it...

## Wetenschapswinkel, Science Shop, Bazar de las Ciencias of Forskningstorg...

Many different names for organizations with the same goal: creating research opportunities with citizens and their organizations to find solutions, in order to create a positive impact on world problems.

All these organizations gathered between 29 June and 1 July 2022 at the 9th International Conference of the Living Knowledge Network, the international Science Shop network. No less than 280 participants from 25 countries came to Groningen! All of them are involved in or support research with and for community associations.

By Kim Dumoré

In 2000, the Science Shops of the University of Groningen were among the founders of the Living Knowledge Network as a social movement. Every two years, the members of the network organize an international conference. We are proud that we were now able to organize the conference in our beautiful city of Groningen, after conferences in, for example, Copenhagen, Dublin, and Budapest.

On the first morning, all participants of the conference gathered in the Academy Building. Living Knowledge coryfee Henk Mulder introduced the theme of this conference: 'To meet, to learn, to collaborate'. The aim of the first day was to meet and get to know each other.

After the opening session, participants spread out over various seminars in the Harmonie Building. These seminars discussed subjects such as eco-cultural recovery, art as an accessible form to reach out to people, and the power of illustrations in research projects.

We concluded this first sunny day with a welcome reception in the Akerk. Jouke de Vries, chair of the University of Groningen, welcomed the international

guests and encouraged us to inspiring collaborations. Some participants enjoyed a tour of the exhibition Bittersweet Heritage by artist Aimée ter Burg, others caught up with each other or listened to music by the band Anamesa.

The parallel sessions in the morning of the second day were serious and instructive. We learned about inclusivity and diversity, about preparing students for the future, about empowering vulnerable groups of people, and about the use of platforms in citizen science. After lunch, participants could attend more relaxing parallel sessions. During the poster exhibition, there were

lots of opportunities to talk. Artistic workshops on music and making collages were offered. This afternoon also gave room for a special discussion on 'failures'. We hardly ever talk about things that go wrong, even though we can learn a lot from our mistakes.

After a long day of talks and interaction, the participants enjoyed the conference dinner at De Rietschans, a restaurant on the banks of lake Paterswolde. What is a conference in the Netherlands without activities on the water? There were short and long boat trips on the menu, and of course delicious food!

The atmosphere on the last day of the 9th Living Knowledge Conference was relaxed. Inclusion, citizen science, public engagement, and conspiracy theories were some of the subjects covered in the parallel sessions. In the afternoon, there were trips to the University Museum and Forum Groningen, or people simply prepared for their long trip home...



We look back on a successful conference where old and new friends could meet and learn from each other. All of this with the goal to advance the work that everyone is doing in their own region, with and for their own communities!



Photo's: Kim Dumoré

### Introducing Lars Jansen

"Scientific knowledge should go beyond the walls of academia. But how do we do this? That is one of the questions I work on within my job at the Science Shops. I studied English Language & Culture at the UG and during my Master in Writing, Editing and Mediating, I learned how to translate academic knowledge about literature for a broader target audience. After having worked on several festival productions in the north of the Netherlands, I started in January as project leader at the Science Shop Language, Culture

and Communication. In addition, I like everything cultural and I love a sweaty, obscure punk concert in the basement bar at Vera, or dreaming away at a mind-boggling art installation. Every now and then I might pick up a guitar myself. What I love most about my job at the Science Shop? The diversity of the projects and the students' enthusiasm. There are many ways in which Arts students can apply their knowledge outside the university. I am looking forward to making this even more visible!"



# Is the coast clear?

## Three projects about the present, past and the future of the coastal area

By Karin Ree

### Living in a sandpit

'The beach is one of the most turbulent habitats on earth', according to Ruben Smit in his recent documentary *Strand* (Beach). The dynamics of storms and tides reveal a rich and uncompromising ecosystem. Many visitors and beach managers treat the beach like yellow asphalt, or a large sandpit they can play in. Blowcarting, driving 4x4 offroad vehicles, organizing events, building cabins: everything is possible on the beach. After all the fun, the Super Beachcleaner rakes and sifts the sand to remove all the waste that has been left behind or washed ashore. And the beach is pristine again for the next day.

Pristine? Stichting ANEMOON, the most important foundation for volunteers who research the coastal flora and fauna, has a different view. The foundation works together with beach and coastal managers in the Groene Strand (Green Beach) project. What are the consequences of all these human activities for the natural environment of the beach? How can we manage the beach

in a way that profits both humans and nature?

Michiel Merckx, a Master student in Marine Biology, is working on a research project for Stichting ANEMOON in which he maps out the disruptions and other human influences, including potential solutions for the beach. He is developing the Groene Ladder (Green Ladder), a tool to measure how nature-friendly beach areas are. The Groene Ladder offers insight into what makes sense and why.

The Beachcleaner is the most extreme example. The mechanical removal of natural flotsam disrupts the whole food web on the beach. Natural flotsam is a source of food and provides a habitat for sand fleas and insects, such as kelp flies, which in turn are on the menu of beach birds. Mechanical cleaning of higher parts of the beach destroys the formation of new dunes and breeding grounds for birds. Animals that dig themselves into the sand, such as insects and crabs, are disturbed by the heavy vehicles.

The Groene Ladder brings the beach to life and shows which other choices beach managers can make to create a balance between humans and nature

on the beach.

### What was swimming there?

The Wadden Sea is not what it used to be. Dams and dikes, fishery and pollution, all sorts of influences have radically changed the ecosystem. Even so, the Wadden Sea is a unique wildlife area and a UNESCO World Heritage Site. Recovery of nature is one of the pillars of the UNESCO policy. But how do we measure recovery? What do we really know about the quality of the Wadden Sea in the past? Systematic data about, for example, fish stock is only available since the 1960s, when there was already plenty of human intervention. What kind of wildlife used to live in the 'undisturbed' Wadden Sea?

This question is a phenomenal challenge on the interface between biology and history. A challenge that is pre-eminently interesting for so-called 'citizen science'. Old data about fish stock can be found in the (often analogue) archives of local museums, coastal towns, fish auctions, and other similarly diffused sources. An added challenge when it comes to the Wadden Sea is the tri-



Foto: Andrew Dawes on Unsplash

lateral character of the area: it is part of Denmark, Germany, and the Netherlands. The non-profit research institute Thetys has plenty of experience in citizen science with regards to the marine environment. Nils Jansen, a student of Marine Biology, is working on a Master research project for Thetys to unlock the (local) knowledge about fish stock in the trilateral Wadden Sea between 1500 and 1970.

This task requires solid systematics to save you from drowning. How can you classify around 150 fish species? Some species use the Wadden Sea as a breeding ground, others use it as a passage to migrate or commute from open sea to a river, while yet other species spend their whole lives in brackish water or in the mud flats. For each group

of fish, one characteristic species, or flagship species, can be identified. The European sand eel, for example, is a typical commuter, while the thornback is a typical elasmobranch.

Searching for local knowledge led Nils and his German and Danish fellow students to the most remote areas in the Wadden Sea, from Moddergat to Skærbæk. That is what makes citizen science so interesting: you visit the most unusual places and learn unexpected facts. In addition, Nils has compiled a unique database, which has been published and presented to the Ministries of the three countries.

### Industrial ecology in the North Sea?

The North Sea is an industrial area. The last few coastal fishermen roam bet-

ween shipping routes, offshore extraction of natural gas and wind farms, as the last hunter-gatherers threatened with extinction. The production of hydrogen and CO<sub>2</sub> storage are future solutions to save the climate, but 'sustainable use of the North Sea' is really an audacious claim. Even so, the Stichting de Noordzee is looking for several combinations of industry and nature recovery. One possibility is the culture of mussels and flat oysters in offshore wind farms.

During her apprenticeship with the Stichting de Noordzee, Sarah Paulson researched the possibilities and conditions for this combination for her Master in Science, Business and Policy. The culture of shellfish can contribute to the forming of solid substrate, which can also accommodate wild shellfish that cannot survive on the barren sand bottom. A lot is still unknown though, both with regards to the technology and the ecology of the culture and with regards to safety and economy. Shellfish culture is currently mainly conducted close to the coast. How will its investments and income be affected if it goes offshore?



Photo: Memories on 35mm on Unsplash

i see the sea  
the sea sees me  
hello sea  
how are you?  
i ebb, says the sea  
you have what?, i say  
i have ebb.  
does it hurt?  
no, says the sea  
seas sense no sore

Frank Eerhart

## Four questions for Stichting Anemoon

### What was your question for the Beta Science Shop?

'Stichting ANEMOON ([www.anemoon.org](http://www.anemoon.org)) is a partner in the Het Groene Strand project ([www.hetgroenestrand.nl](http://www.hetgroenestrand.nl)). Within this project, the foundation focuses mainly on research and citizen science monitoring of the Dutch North Sea beaches. The aim of the Het Groene Strand project is to create more space for nature and experiencing nature on the beach. Beach managers are, for example, motivated to manage their beaches as nature-friendly, or as "green", as possible. But what does this mean?'

### What did the student(s) do exactly?

'The student has conducted literature research to provide a scientific (ecological) foundation for green(er) beach management. The ecology, the animals, and the plants of the beach were studied first, followed by the human disruptions that have an impact on the beach ecosystem. Finally, research was done into how the beach can be managed taking into account natural processes and nature on the beach. A Multi Criteria Analysis (MCA) was used to quantify the degree



Julia van Beinum on the beach



of impact of human disruption on the beach ecosystem. All of this resulted in a "green ladder" that clarifies potential steps for greener beach management for beach managers.'

### How was the project carried out?

'The student project was carried out online. The student worked independently and we had weekly online meetings to discuss results, questions and progress. Even though work onsite is usually preferred, we could still carry out the project

remotely according to plan. The student's enthusiasm and motivation made this student project a huge success. Collaborating with students brought the project Het Groene Strand very useful insights that we can further build on.'

### What is the added value of these kinds of student projects?

'The student's work can be applied in real life and the client can use the products and results of student projects like these. This way, as a student, you can offer a useful contribution to a project that works towards more space for nature and experiencing nature on Dutch beaches.'



Photo: Nicholas Doherty on Unsplash

# Citizen science and philosophy

Philosophy is not a science. The beautiful Dutch term *wijsbegeerte* shows that philosophy is about the philosophical *begeerte* (desire) for *wijsheid* (wisdom). But how is this wisdom different from scientific wisdom? That is an interesting philosophical question. Philosophy has its own field of philosophy of science, which reflects on what exactly scientific knowledge is and what its characteristics are. What would philosophy of science say about citizen science?

By Marc Pauly

In citizen science, citizens help to collect scientific data. The Latin 'data' means 'gift' or 'present', implying that it is given, and therefore definite. But it is not as simple as that. We often forget the person who 'gave' the data. Data are made or constructed; they already contain a certain world view. For example, when citizens collaborate on a project about noise in their living environment and they use sound level meters, a subjective experience of noise pollution is translated into specific, measurable data. This translation of an experience into objective science makes it easier to communicate about the problem and to verify it, but it also reduces the original experience to statistics.

There is a second reason why data are not absolute: who decides which data are collected? The real question is: who has the power to frame the problem? While the earlier aspect was all about the science of citizen science, this aspect is about the citizen. As a citizen in a democratic system, you have a voice in politics and policies. In the same way, citizens should have a voice in the objectives and methods of research. Why does the municipality want to measure noise pollution? And what is the best way to do this? If citizens do not have a voice, it would be better to speak of science using laymen to collect data. This



Marc Pauly. Foto: Henk Veenstra

is actually a characteristic of much of what is called 'citizen science': concerned citizens are not given a voice.

Finally, citizen science poses an interesting philosophical question: if science welcomes citizen science, could there be such a thing as 'citizen philosophy' as well? And what would such a thing look like? Most philosophers do not collect data the way empirical scientists do. What could citizen philosophers collect? Valid or invalid argumentations? Ethical intuitions? Reactions to philosophical thought experiments? There does not seem to be a clear parallel. Maybe the role of philosophy in citizen science is to critically research what citizen science is and could be. Or, as the Danish philosopher Søren Kierkegaard wrote in his *Concluding Unscientific Postscript*: if you are unable to make things easier, you have to use the same enthusiasm to make it

more difficult. This too can be part of the desire for wisdom.

Further reading:

• **Miriam Rasch**, *Friction and Ethics of the Smooth (translation)*, Eurozine, 2020. <https://www.eurozine.com/friction-and-the-aesthetics-of-the-smooth/>

• **Lisa Herzog & Robert Lepenis**, "Citizen Science in Deliberative Systems: Participation, Epistemic Injustice, and Civic Empowerment", *Minerva* 60:489-508, 2022.

<https://link.springer.com/article/10.1007/s11024-022-09467-8>

• **Søren Kierkegaard**, *Concluding Unscientific Postscript*. Damon, 2021.

# Invisible poverty in the city of Groningen

## Students tackle local 'wicked problems' in the Learning Community

There is a huge difference between learning about poverty at university and actually understanding what poverty means for people who are affected by it on a daily basis. We need a connection with real life to realize the lived experience of poverty. An example of this is the Learning Community (LC) 'Dealing with wicked problems and uncertainty', which the Faculty of Economics and Business (FEB) organizes in collaboration with local community organizations WIJS and GoeieBuurt. In this LC, an international group of students specifically looks at financial problems in the city of Groningen. They also investigate better ways for GoeieBuurt to reach their target audience, and, most importantly, its more invisible members.

By Denise Leidelmeijer and Mette Bekius

### From financial problems to financial health

GoeieBuurt is a local residents' cooperation in the Korrewegwijk and De Hoogte neighbourhoods in Groningen that organizes and executes activities and projects for and with local residents. One current project is 'Warm Winter', which offers a warm place in community centres in the Korrewegwijk and De Hoogte where people can study, work or just spend time now that energy prices have soared. Another initiative is 'GoeieBuurt Financieel Gezond' (GoeieBuurt Financially Healthy), which focuses on helping residents of the Indische Buurt (part of the Korrewegwijk) to solve their financial problems. This initiative, and the collaboration with experts by experience, offers an accessible link between local residents and 'the authorities'. One way in which they try to solve financial problems is by looking at what local residents need. In this initiative, GoeieBuurt indicates that they have the time and the means to act immediately and to tackle financial problems without lengthy procedures or waiting periods.

### Impulse for new collaborations

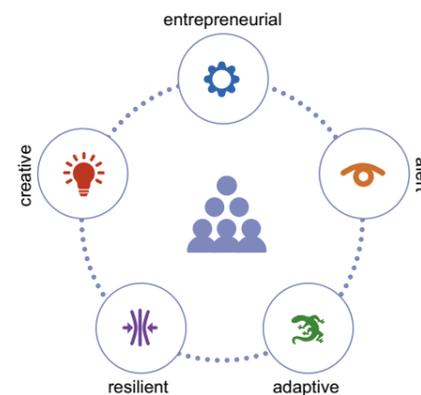
The Education Science Shop connected with the FEB through a grant from the City Deal Kennis Maken. This grant is intended as an impulse to create more durable connections between students, lecturers and researchers (including from the UG) on the one hand and societal issues in Groningen on the other hand. WIJS ('Wijk Inzet door Jongeren Studenten': neighbourhood participation by young people and students), a collaboration between the Municipality of Groningen, the WIJ Groningen foundation, the Hanze University of Applied Sciences, the UG, Noorderpoort, and the Alfa college, also plays an impor-



tant part in this. The grant allowed the Science Shop to connect with the issues from GoeieBuurt with regards to invisible poverty and how to reach residents who could be helped with this initiative. Together with Katya Byelova, Learning Communities project leader, and Prof. Dr. Lex Hoogduin, professor at the Faculty of Economics and Business, the Learning Community 'Dealing with wicked problems and uncertainty' was linked to real life as a pilot project.

### Interventions in the neighbourhood

In the LC, students learn with the help of the Framework for Acting under Uncertainty and Complexity (FAUC), which was developed by Hoogduin. This model is an alternative for the linear approach to problem solving, which works fine for the regular curriculum, but which cannot be applied to treacherously complex societal issues (so-called 'wicked problems') such as poverty, which are too changeable and uncertain. These kinds of problems require a more active approach with targeted interventions. The students



FAUC  
Framework for Acting under Uncertainty  
and Complexity

mapped out the potential obstacles in asking for and accepting help, including feelings of pride and shame, language barriers, and financial illiteracy. The interventions they develop to solve these obstacles are very diverse, ranging from offering the GoeieBuurt website and other promotional material in multiple languages, visiting people in person, and employing 'ambassadors' who represent all the diverse groups in the neighbourhood to offering jobs instead of regular payments. To counter shame, one student proposed to set up an anonymous chat environment in which people could discuss their problems with other residents and staff members from GoeieBuurt. The input from this chat environment can, in turn, be used as inspiration for new GoeieBuurt projects. It would also be a good environment to discuss how to reach out to these 'invisible people'.

### Connection in the future

Looking back on the project, students indicate that they have learned a lot, including from the personal stories

while interacting with GoeieBuurt, about the various and often invisible ways in which poverty can exist. Working together on this problem has led to a more in-depth understanding of the complexity and intangibility of societal issues. Francisco Botero Bernal, a Colombian Master student in Economic Development & Globalization, indicates that, for him, the greatest challenge of the LC was the ambiguity and the constantly changing interpretation of the problem. Despite this, or maybe even thanks to this, he has learned a lot from the project. 'Thanks to the close collaboration between the LC and the community associations GoeieBuurt and WIJS, and their representatives, students can develop important soft skills that will help them in their future careers', according to Botero Bernal.

For the near future, the FEB intends to further develop the Learning Communities into Living Labs that focus on interdisciplinary themes and that will offer students ECTS. Byelova: 'Further collaboration with WIJS/GoeieBuurt



Francisco Botero Bernal

on how to tackle complex societal issues seems a relevant contribution, both at faculty and university level, to one of the interdisciplinary themes, such as Future Welfare and Durability, and to the Living Lab connected to this theme.'



Photo: Willfried Wende on Unsplash

# Stimulating Green Mobility at the university

The Sustainability Program continually works to make the University of Groningen (UG) more sustainable, not just in Education & Research, but also in the operation of the university itself. The program develops sustainable policy, advises services and faculties, and makes sure the subject of sustainability is consistently on the agenda to make it an inherent part of the operation of the UG. The Green Office is part of the Sustainability Program and informs, connects, and inspires staff members and students to contribute to a sustainable university. In our Living Labs, we look into how the UG can become more sustainable and how we can stimulate sustainable behaviour together with students and lecturers from various faculties. This results in a win-win situation: students can execute a project based on a 'real' case and the Green Office receives useful advice that can sometimes be applied immediately to future policies.

By Irene Maltagliati and Francine Nijp

## Business travel abroad

The UG strives to reduce its CO<sub>2</sub> emission from flights by staff members by 30% (compared to 2019) and to achieve 100% CO<sub>2</sub> compensation in 2026. Every year, UG staff members travel thousands of kilometres by plane. Until recently, 70% of these flights were within Europe. To reduce the CO<sub>2</sub> emission of these flights and to stimulate staff members to make more sustainable choices, the UG has introduced an updated sustainable business travel policy as of 1 January 2023: for all destinations that can be reached by

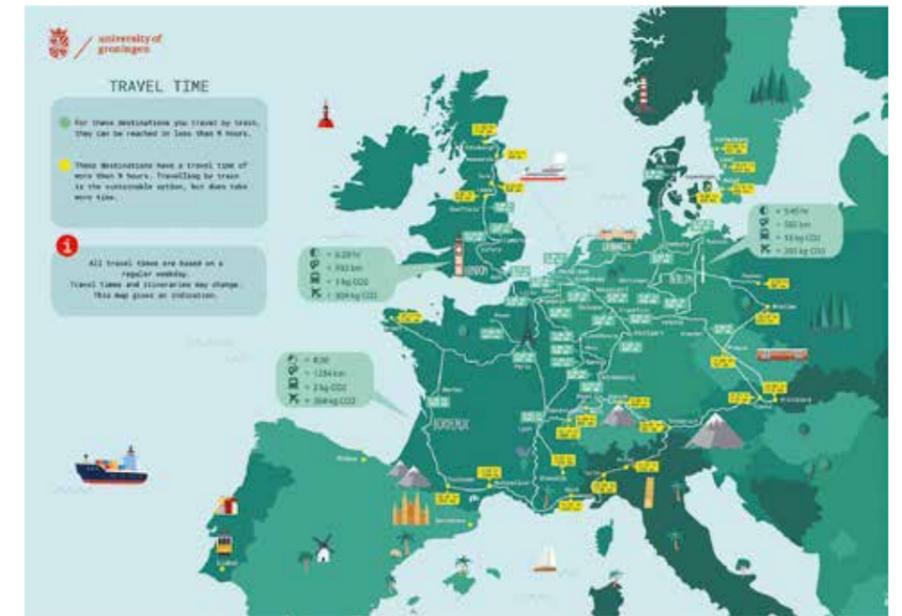
train within 9 hours and/or are within 800 kilometres, only trips by train are approved (this used to be 6 hours and 500 kilometres). The university is still looking into appropriate CO<sub>2</sub> compensation projects.

## The Living Lab project

Henriëtte, Kavishya, and Kiril, Bachelor students in Global Responsibility and Leadership at the Campus Fryslân, have studied CO<sub>2</sub> compensation as part of their Living Lab project. Together with Berfu Ünal and Pelin Gül, university lecturers in Social and Environmental Psychology, their goal was to help the Green Office answer the following question: What are the

disadvantages of compensating emissions from flying? Based on earlier research, the students focused on a psychological mechanism called 'moral licensing': people tend to feel justified to act less environmentally-friendly if their negative impact on the environment is compensated. This means that staff members might think that flying is no longer a problem if they pay to compensate for their CO<sub>2</sub> emission. To research this, Henriëtte, Kavishya, and Kiril have interviewed 113 staff members at the UG while showing them a fake (but realistic) screenshot of the booking page on the university website with two travel options from Groningen to Zürich: a cheap option by train and a more expensive option by plane (with CO<sub>2</sub> emission compensation included in the price). It turned out that 10% more staff members chose the train option if they were reminded that this is a more sustainable option (rather than a cheaper option). The students also discovered that the vast majority of staff members agreed to include CO<sub>2</sub> compensation in the price of the plane ticket when booking. To avoid moral licensing, staff members should therefore be reminded of the most sustainable option, which would be especially effective when booking

short trips, as this research showed. For longer trips that are not possible by train, CO<sub>2</sub> compensation could be included in the price, since this compensation seems acceptable for most staff members.



## Experiences of students and lecturers

'I believe that global warming is currently one of the most urgent and important issues worldwide, and we should all try our best to tackle using our own resources. This is why it has been of great pleasure to our team to work together with such an inspiring organisation like the Green Office, to help limit the university's carbon footprint.' – Henriëtte

'After learning about various psychological theories in my lectures, it was a very

interesting experience to work with the Green Office and put my knowledge into practice. Our group was very motivated and passionate about limiting the flying behaviour of staff, and understanding the travel behaviours.' – Kavishya

'We truly enjoy taking part in Living Lab projects and co-creating with students and societal partners. We find it important that students could apply their theoretical knowledge on a so-



Henriëtte



Kavishya

cietal problem, which is very motivating and facilitates deeper learning. Also, it is very rewarding for me as an

academic to witness that the Green Office is making use of the results.' – Berfu and Pelin



Photo: Skitterphoto

# 2022 in numbers

2022 again saw many fruitful collaborations between students and the organizations involved. We are very thankful for this. Together, we managed to start up many and very diverse projects. You can find last year's projects below in numbers.

We can hear you think: Numbers? That may be a bit too dry and academic for me. I think I will skip this part. But these numbers hide the most varied and unusual questions. To show you a bit more than just statistics, we showcase a couple of special questions that were sent to us. Maybe you too have a question that you desperately want answered. Fortunately, nothing surprises the Science Shops.

## Questions

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*'Are emotions an inherent part of activism?'*



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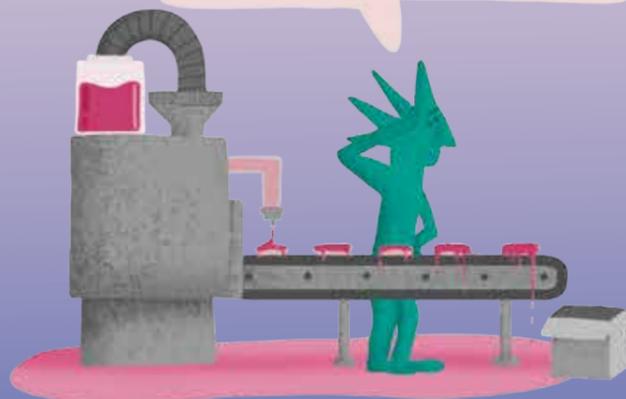
*'How relaxing is a Baby Spa for babies? Aren't the water jets too strong for a baby?'*



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*'How do we prevent the icing from flowing off the biscuits?'*



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*'How can the "No-Mow-May" policy in the municipality be communicated better?'*



Illustrations: Kim Dumoré

# Improving mutual self-reliance

*Community Support* is a support organization in Groningen that uses the method that it was named after. This method is aimed at improving mutual self-reliance among young people, adults, and families. When someone is (temporarily) unable to be self-reliant, help from his/her social network can lead to mutual self-reliance, so this person can still participate in society. How do you know, in your role as a social worker, that what you do actually contributes to improving mutual self-reliance, and which factors impact mutual self-reliance?



Photo: Daria Nepriakhina on Unsplash

By Vera Verhage

## Mapping out experiences

We know from literature that high co-reliance can offer support and prevent problems. High mutual self-reliance can prevent behavioural problems in the future. Community Support wanted to find out what the scientific foundation is for the goals of the work that they do. In 2022, Lize van der Vegt, a student in Special Remedial Education, started her Master thesis. She researched how families that received help look back on the support they got and whether the counselling has contributed to improving mutual self-reliance.

Her research consists of 'triple interviews' with young people, family members, and a person from the family's social network.

## First results

From the interviews, it appeared that families are happy about the way the counsellor from Community Support helped them to involve their social network. The counsellors offer suggestions on which people from the social network can be involved. Thanks to the counselling from Community Support, the social network is more aware of what

is going on, which makes it easier for the family to involve their network to share information about the family situation. The families are happy about the support they are currently still receiving. We can therefore conclude, with the necessary caution, that the families' social network is improved in the long term, which also improves mutual self-reliance. Further research will be done to find out which specific factors contribute to improving mutual self-reliance. Lize will interview more families in the coming months and hopes to conclude her research before the summer of 2023.

## Three questions for Nelly Heijs, director of Community Support

***This is the second project in which you are collaborating with the Science Shop. How does the organization benefit from this research?***

'This research provides us with information that helps us to further develop our methodology. It also helps to improve what we do as a team in daily life.'

***What do you like the most about the projects you carry out with the Science Shop?***

'Combining scientific knowledge and practical experience: we think this is a strong combination that keeps us on our toes as an organization.'

***Will there be other projects in the future?***

'Definitely! We see this as an ongoing collaboration. We really like how the second project builds on the first project. This makes it part of the ongoing research that we aim for as an organization.'



Nelly Heijs



Lize van der Vegt

## Four questions for student Lize van der Vegt, Master student in Special Needs Education

***What are your experiences with the Science Shop at Community Support?***

'The Science Shop acts as my supervisor in writing my thesis. I do my research within the Community Support organization. The Science Shop mainly offers me a lot of advice on how I can set up my research. In my experience, the Science Shop has a lot of expertise in doing research.'

***What is difficult and what have you learned so far?***

'In writing my thesis, I struggled with setting up the interview guidelines. As I am not involved in any participating work within Community Support, I do not have a clear idea of the target group. This made it difficult for me to decide what kind of questions I could ask. After discussing this with staff members from Community Support, I was able to come up with better questions.'

This has taught me a lot. The most important thing I learned is writing in a clear language.'

***What do you find most interesting about this project?***

'The most interesting part of this research is conducting the interviews. I really looked forward to talking to the families about what they liked and disliked about the support they received. Based on the results from the interviews, help to families can be tailored to their needs.'

***What are your plans after you have completed the projects?***

'After I have completed my thesis, I will start the second and (hopefully) last year of my Masters. This will be my apprenticeship. After completing my Masters, I hope to find an interesting job in which I can make a difference for children and families.'

## Four questions for Anne-Marie Huyghen, lecturer/researcher in Special Needs Education

**Have you collaborated with the Science Shop before? What do you think is the added value of this collaboration?**

'In the last couple of years, I have worked with the Science Shops on various projects with various clients. I really enjoy the collaboration, which has added value in several ways. We work on issues from real life. This benefits real life (what exactly is my question and how do I translate it to scientific research), the university (conducting relevant research for real life, which therefore has direct added societal value), and students (their research is relevant and is often translated into actual actions once the project has been completed).'

**What are your experiences with the Science Shop at Community Support?**

'This is the second year we are doing research in collaboration with the Science Shop and Community Support. This offers added value, because each new research can build on the previous. Community Support is looking for a scientific foundation for their methodology. It is interesting to figure out together the best way to research this and, at the same time, to keep the research manageable, so it will fit into a Master thesis project. Community Support is a special way of support, thanks in part to the huge commitment of the counsellors. Additionally, Community Support is special because they are very open to research and scientific insights. A lot is possible in research, because they also have a good relationship with their clients. This became very clear during the festive 'knowledge tasting' event Community Support recently organized on the occasion of their anniversary. The university and the Science Shop were also invited for this afternoon event, which is telling.'

**What do you like the most about the projects you carry out with the Science Shop?**

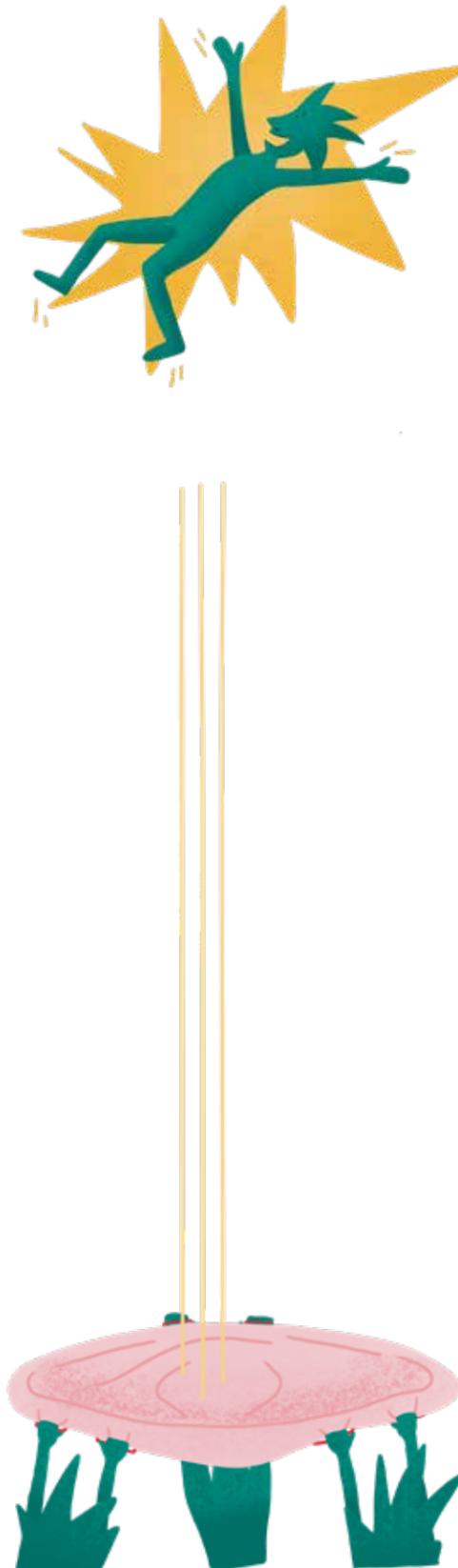
'What I like is that the offer for our students is very diverse, thanks to the Science Shop assignments. There are many different projects with many different organizations. As a result, I too learn something new from every project. In addition, it is good that the Science Shop is also involved with supervising the students when it comes to actual content. This brings extra expertise to the projects and everyone can learn from this.'

**Will there be other projects in the future?**

'Definitely!'



Anne-Marie Huyghen



# Science Shopping Mall

**In 2023, the UG will bring all parties involved with societal impact together in the old V&D building at the Grote Markt. This 'House of Connections' will be a home for UG staff members from the so-called 'vanguard of connections': staff members from interdisciplinary schools, the Young Academy, and the University Services' impact organization. Additionally, the House of Connections will offer room for exhibitions, symposia or presentations by community associations. The dynamic interior, with sliding panels and moveable furniture, is designed to make the building more accessible.**

By Vincent Hazelhoff

It is an ambitious plan that we observe with a critical eye. Almost fifty years ago, the Science Shops also started in a former storefront with the ambition to make science more accessible for people with a distance from academia. We still ask ourselves whether we are actually reaching these people and whether

we might have become too much a part of the (moveable) furniture. Often enough, we see innovative concepts that look good on paper, but are crushed by an uncompromising reality.

Inviting the outside world in is not enough, no matter how moveable the (symbolic) walls are. They are still walls and people who are functionally illiterate, have a migrant background or are in debt, do not just drop by. Why would they? Societal issues often require immediate action, while answers from science usually take a long time. It could be years before the effects of scientific research become noticeable, therefore it is very important for universities to build long-term and mutual relationships with the people they do research for. That is what societal impact should be all about.

I hear you ask: 'Could the House of Connections not be a vehicle for this mutual relationship?' Of course, an attractive building at the Grote Markt will certainly contribute to this. But sustainable relationships are also created within our faculties. Do we really need a separate building for this?

Would it not have been better to invest in sustainable relationships instead of a trendy 'science shopping mall'?

The British Science Association, for example, uses their Ideas Fund for this. The roles are reversed in this initiative: community associations can apply for a grant to collaborate with British scientists. The money is not given to the researcher, but to the people who benefit from the research. The citizens therefore decide on the agenda, which serves as an impetus for the scientists to listen carefully to the ideas offered by community associations.

Does that make the House of Connections a bad idea? No, we encourage any initiative that brings scientists, companies, and organizations together. But we should not forget that science is part of society, and that we are part of society. Libraries, community centres, shelters for homeless people, institutes for the deaf, mosques: they are all houses of connections. Researchers: visit those places, they might just invite you to the table. Provided they have moveable furniture, of course.



Design Studio Groen+Schild

# Philosophy beyond the walls

**As a philosophy student, you will probably have been asked this question many times: ‘Philosophy? Interesting! But... what can you actually do with it?’ Apart from aspiring to an academic career, a philosopher’s view of the future is clouded by uncertainty about their knowledge and ability outside of academia. Society seems to have an image of philosophers sitting in an armchair, leaning slightly forward with their chin resting on their fist. Is this stereotype realistic? Isn’t a philosopher much more than just a quiet thinker?**

By [Yorick Karseboom](#)

The Knowledge Centre Philosophy wants to introduce both philosophy students and community organizations and companies to the role of the philosopher in society. Together with

the Faculty of Philosophy, we have set up a new course on practical philosophy: Philosophy Beyond the Walls. This course invites students to tackle a philosophical issue from a company or organization ‘hands-on’.

In the pilot year 2022, the Know-

ledge Centre Philosophy has explored the world of companies and organizations, looking for philosophical issues. We assumed that most companies and organizations have at least one philosophical issue, even though they might not realize this. And we were right: during the introductory lecture of the course, we were able to present ten issues to the students, which they started working on.

Reporters from Dagblad van het Noorden newspaper, for example, realized their choice of topics for publication is increasingly influenced by smart software and algorithms. This led to the question: ‘To what extent should

(and can) algorithms and data replace humans in compiling a news overview?’ A group of four students was asked to develop a project plan based on this question, which they could work on during the second semester. The result was an ethics lecture about the pitfalls of artificial intelligence, which the students presented to the editorial board of Dagblad van het Noorden.

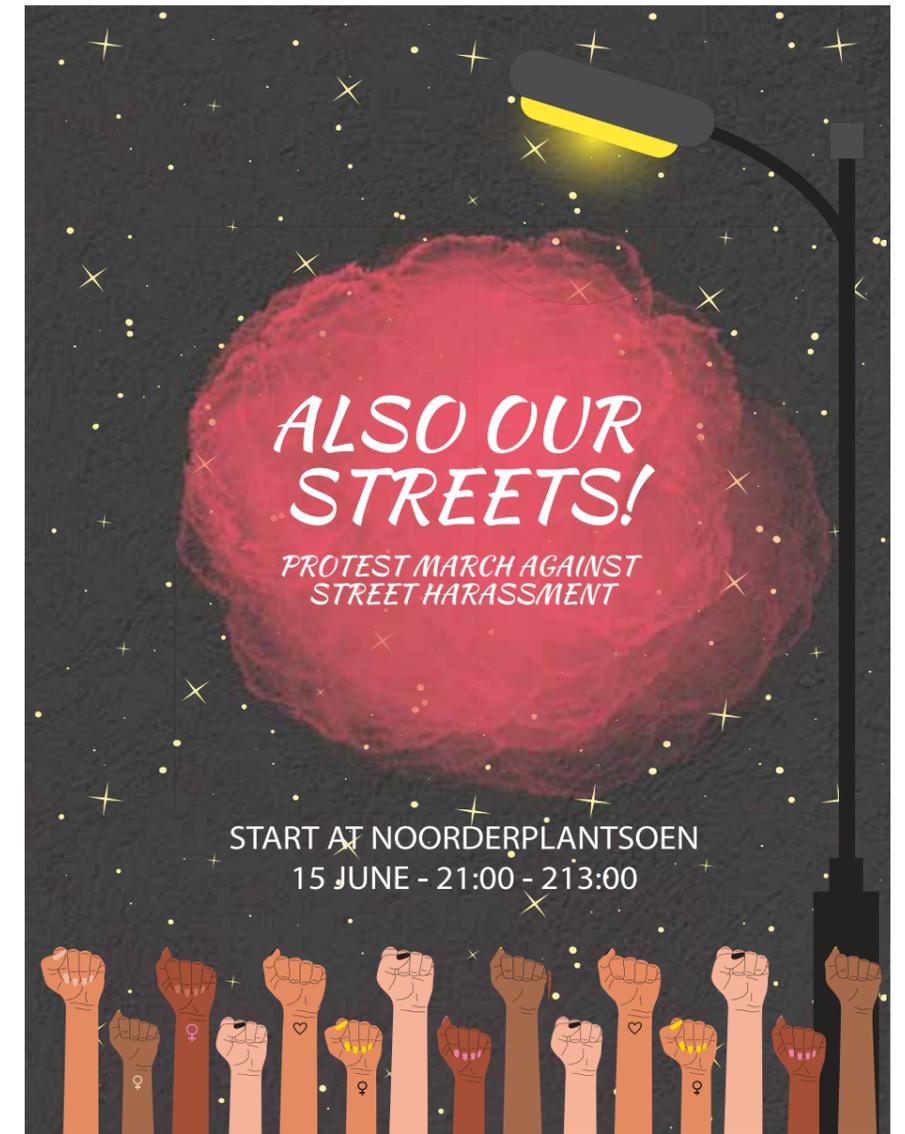
Another question came from Jimmy’s, a meeting and learning place for young people in Groningen. Young people can go to Jimmy’s if they have questions, problems, and ideas, or if they just want to socialize. It is important that everyone can be himself/herself at Jimmy’s. Unfortunately, sometimes the young people’s identities clash. Jimmy’s question therefore was: ‘To what extent can you “be yourself” if this limits someone else’s freedom?’ This question reminds us of the paradox of intolerance as formulated by the philosopher Karl Popper. He posed the question: ‘To what extent do we have to be tolerant towards those who are intolerant?’ This question from Jimmy’s is a good example of an abstract philosophical problem that occurs in everyday situations.

Students could also set up their own social-philosophical project. A suitable subject for the students is the gap between men and women with regards to feeling safe in the city after dark. To generate interest in this problem, the students organized a protest march. This event took place on 15 June 2022, between 9 and 11 p.m., and was called ‘Reclaim the Night’. A group of around 100 sympathizers, armed with slogans and philosophically substantiated speeches, marched through the Groningen night to stress the different ways in which the dark city is experienced by men and women.

All these projects are beneficial in two ways: both students and

non-philosophers were introduced in a new way to philosophy and its relevance in society. The course Philosophy Beyond the Walls shows that the archetypical philosophers have to get out of their armchair. There is a need for philosophers in areas where you might not expect them.

Do you want to know more? Or do you have an interesting philosophical issue in your company? Feel free to contact the Knowledge Centre Philosophy at [kcf@rug.nl](mailto:kcf@rug.nl).



# Hands-on experience for arts students

How can the municipality of Westerkwartier make sure their policies are better aligned with the United Nations Global Goals? How can local tailors compete with the fast fashion industry? How can rural heritage organizations in Fryslân work together more efficiently? These are just three examples of societal issues for which Arts students within the interdisciplinary Career Minor are trying to find solutions. How does this Career Minor work? And how do organizations benefit? Let's take a look behind the scenes.

By Vincent Hazelhoff

## Cultural participation in Hogeland

Students Roos, Joren, Stefan, and Ydwer tackled the question "How do we stimulate cultural participation among the youth in Hogeland?" by developing a survey, analyzing policy documents, and organizing a

focus group meeting. By comparing traditional views on cultural participation to modern theories, the students concluded that it is also possible for the municipality of Hogeland to work on a cultural ecosystem in which young adults have an active role. Young adults often find it hard to participate in cultural activities because they do not feel

involved in the cultural activities on offer. A more diverse offer contributes to attracting young adults. However, this is not enough, according to the project group. The municipality should also offer young adults the opportunity to participate in organizing cultural activities and even let them have a voice in administrative decisions on culture.



Students Roos, Joren, Stefan and Ydwer received the Ben Feringa Impact Prize for their research, presented by King's Commissioner Jetta Klijnsma (Drenthe). Photo: Douwe de Boer

## Four questions for Ydwer Hoekstra, Master student in History

### What attracted you in this project?

'This project gave me the opportunity to work on the societal value of culture. During my study, I was looking to add meaning to my role as a future historian; I think it is important that my work has meaning and that I have a connection with society.'

### What did you learn from this project?

'Mostly how to collaborate in an interdisciplinary team. During your study, you are often locked in your own bubble and you mostly work on your own. You are surrounded by very similar people who often have the same basic skills as you do. By collaborating with people from different disciplines, you learn new approaches and perspectives. You learn how others can complement you

and what you can add to a project like this.'

### In which way do you use this in your current job?

'Learning how to work together, because that is an essential skill in any job! I also use the societal perspective as a starting point in my job as a freelance historian. In my current job, for example, I try to work on participation as much as possible. The project has taught me how I can link my theoretical skills to societal issues.'

### What did you take away from this project?

'The feeling that our work was appreciated! Normally, when you hand in a research report, it is graded and that's it. It



Master student in History Ydwer Hoekstra  
Photo: Douwe de Boer

was really nice that, in this case, it went a little further like that.'

## Het Maai-Mei-Niet policy

The municipality of Groningen wants to create more space for nature, which is why the municipality joined the 'Maai Mei Niet' (Don't Mow in May) project. Not mowing during the month of May offers more living space to wild bees, butterflies, birds, and other animals. In 2021, the municipality started a pilot and it wanted to know how this pilot could have been communicated better internally.

Students Jorik, Bela, and Matthew researched, based on the case, how the municipality of Groningen's mowing policy can be communicated better internally. The three students spoke to different staff members of Stadsbeheer about their experiences and conducted literature research. One of the most important points of interest of the advice by the students was about communication as two-way traffic. Actively involving the overseers and mowers in the mowing policy and offering them the opportunity to contribute to the policy increases support for the new mowing policy. The students also advised to organize additional

and more elaborate workshops about biodiversity for mowers. Mowers were very enthusiastic about these work-

shops, because they immediately saw the results of not mowing in their own neighbourhood.



During the presentation by Matthew, Bela and Jorik, the employees of Stadsbeheer scrutinized their own internal communication via the 'telephone game'

## Four questions for Anna Krämer, strategic advisor Stadsbeheer Groningen

### Why did you participate in the Career Minor?

'We participated in the Career Minor because we are curious about the fresh, creative, and solution-oriented view of students! And I really enjoyed it personally, because I used to be an Arts student myself.'

### What is the added value of Arts students for an organization such as Stadsbeheer?

'Arts students have a broader, more generalist perspective view of research subjects. At first sight, the subject of the "Maai Mei Niet" case may not have that much in common with the Arts. But that was not what we were looking for. We wanted advice about internal communication: what is working well and what can be improved? Arts students are able to define a complex issue and to write a clear report with practical advice.'

### Which insights did the students gain at the municipality of Groningen?

'The students learned how dynamic working at the municipality is. As a



Alderman Mirjam Wijnja (GroenLinks) receives the report from the students

policy adviser, you work on different policy themes. You coordinate things with colleagues and you produce a succinct policy document. This is a different "product" from a thesis or a report at university: academic writing tends to be more comprehensive.'

### Which advice from the project will you be implementing?

'The most important advice resulting from the research was that we should focus more on internal communication. The students submitted the research report to alderman Mirjam Wijnja on January 30. We are now implementing the improvements in our policy.'

## Introducing Niels Alberts

"Hi there, thank you for not skipping this piece! My name is Niels and by the time you are reading this, I have just started my new role as coordinator of the Beta Science Shop. That is my day job, which I combine with being a guitarist in a cover band, an amateur actor, and a dungeon master during Dungeons & Dragons sessions with friends. It may not surprise you that I want to use my creativity in my day job as well. This is why the varying and project-oriented character of the

Science Shops in particular really appeals to me. For a long time, I was indirectly involved with (academic) teaching, for example in my role as coordinator of one of the School Project Support Centres and as supervisor of students during my PhD research (and secretly while I was still a student myself). I am happy that, after all these years, I am now directly involved with teaching via various Science Shop projects. In short, I am looking forward to my new job!"



# In praise of joy (for Tim)

**This is my last column for the annual Science Shop Journal. From November onwards, I am eligible for retirement and my subservient life as a Science Shopkeeper comes to an end. My first memory in this field goes all the way back to 1978, when, as a young chemistry student, I was scheming cunning plans together with critical 'unionmen' with hippie beards under a bare light bulb in a squat in Utrecht. Distribution of knowledge and power; times have changed. These 'unionmen' went on to become mayors and ministers in various governments and I bet that squat has become a fancy new studio.**

By Karin Ree

The position of the Science Shops has changed too. In the late 1980s, a chemistry professor from Groningen once called my Chemistry Shop 'our little fig leaf'. That was still okay back then and I did not have a problem with it (and I still don't). In times of reorganization, however, the fig leaf is the first to disappear, and the Chemistry Shop was almost discontinued three or four times (and rose again each time much stronger). Where do you find that today? These days, it is all about 'public engagement', 'citizen science', and the 'House of Connections'. All of this accompanied with the inevitable red tape and a fair share of boasting. In short, it is time for me to leave: I prefer to get my hands dirty.

In an essay in the book *Vergankelijkheid en continuïteit* [Transience and continuity] (1995), Ernst Kossmann, a historian from Groningen, tries to find the secret to the continuity of universities. Regimes and religions have fallen or have been thinned out, but the university has survived eight centuries of political and societal changes. Indeed, the university even has profited from this. Democratization, industrialization, and ideological infringement of scientific objectivity (notably under totalitarian regimes) have strengthened the university as an institution. Knowledge transfer is a long-term endeavour, and the university has a conservative flexibility in this process. Kossmann is no longer with us, but he would have undoubtedly been

able to fit modern phenomena such as ChatGPT, 'woke', and conspiracy theories into this analysis.

As a right-minded sixty-year-old, I am looking for a theme in my life (with thanks to Douwe Draaisma, a psychologist from Groningen; read his work!). Should I be looking for it in the role of the Science Shops in this university flexibility and in the broadening of the university's place in society? Or in the social movements for which we (read: our students) have conducted research? In the distribution of knowledge and power, but in a different coat? Certainly not; I am not that politically minded. You can read enough about this in the next and previous issues of the Science Shops Journal; I trust my fellow shopkeepers to keep you posted.

For me, the theme is joy, and that is my

advice for the future. Thinking back, from my own, very stubborn research as a student until the very last, challenging, 'weird' questions in our current projects, I have always tried to actively find pleasure in my work. The university is one big sweetshop, a beautiful chaos of disciplines, points of view, and stories that come together under one common denominator: 'science'. The inspiring discussion with people from all sides of society, the questions they have, the students looking for a meaning and place for their knowledge, the struggles and the (sometimes) surprising and inspiring results in their research: these are all things I thoroughly enjoy.

That is why it hurts when I see researchers and students suffer from the (in my view) detrimental image of science as a solitary struggle for genius and obscurity. Or science as a competition in the ivory tower of one's own method and discipline. Come on guys, it is art! Do your thing, explore your boundaries, and enjoy! Nothing wrong with fig leaves, I prefer them to togas.

Now I am going to read Erasmus' *In Praise of Folly*. I am looking forward to it. I wish you all the best.



Karin Ree, Photo Tata Steel

# Three Science Shop events

Every year, the Science Shops organize several events. The Science Shop Language, Culture and Communication, for example, brought several parties together in the Museum Ter Apel Monastery, the Knowledge Centre Philosophy opened its doors during the Zpannend Zernike festival, and the Beta Science Shop co-organized a hackathon about light pollution on the Zernike Campus.

By [Eline Huizing](#)

## Klooster Kennismiddag

What does a medieval book of tides look like? Were nuns homesick? How do you conduct archaeological research into monasteries that no longer exist? These were some of the questions that were answered during the Klooster Kennismiddag (Knowledge Afternoon at the Monastery) on November 4, 2022. Heritage organizations, archives, historical societies, academics, and interested amateur historians shared their knowledge and skills in Museum Ter Apel Monastery. The Klooster Kennismiddag was an initiative of the Science Shop Language, Culture and Communication.

Knowledge and skills about monasteries are mostly scattered in the province of Groningen. This already became clear during research by the Historical Committee in Thesinge, which later resulted in three theses. There was a need to exchange local knowledge between societies and organizations on the

one hand and the University of Groningen on the other hand. The Kennismiddag started with lectures from seven different experts on the archaeology and history of monasteries and life in the monastery. One example was a lecture by Dr. Stijn Arnoldussen, archaeologist at the UG, on the possibilities and impossibilities of archaeological and geophysical research into monasteries in Groningen.

The afternoon of lectures was followed by an information event, which offered various monasteries and historical societies the opportunity to meet each other and to talk about their shared passion for monasteries. In addition, Adrie van der Laan, conservator of Special Collections at the UG, presented two books: *Kroniek van Klooster Wittewierum* (Chronicle from the monastery of Wittewierum; from around 1243) and *Het Getijdenboek* (The Book of Tides; from around 1515) from the monastery of Thesinge, which were examined with interests by all attendees.



Presentation by dr. Adrie van der Laan

## Zpannend Zernike

During the Zpannend Zernike festival in October 2022, Groningen was taken over by a free science and technology festival for all ages. There were lots of activities on the Zernike Campus and in the city centre. The event lasted for two days, during which students and researchers took young visitors on an exciting voyage of discovery...

Visitors also had the opportunity to ask real scientists questions! The Knowledge Centre Philosophy collaborated on the Zpannend Zernike festival, along with the Faculty of Theology and Religious Studies.



On Saturday 1 October, parents and their children, and everyone who was interested, could explore the Faculty of Theology and Religious Studies. There were several fun assignments, tests, and riddles to solve, to give visitors a taste of both philosophy and religious studies. They were introduced to several philosophical questions, such as: When is a statement true? How do you know whether something is right or wrong? Do you always have to be honest? What is thinking really? Can machines and animals think? In addition, children could solve logic puzzles and they were presented with the 'trolley problem' built in Lego.

## Hackathon

Sixteen Bachelor students spent the weekend of 6 to 9 October 2022 intensively searching for innovative solutions to light pollution on the UG's Zernike Campus. This hackathon was a pilot as part of a European Erasmus+ project for educational innovation, which is carried out by Science LinX in collaboration with the UG Honours College. The Beta Science Shop co-organized the hackathon.

Fifteen of the second- and third-year students follow different Bachelor degrees within the UG Faculty of Science and Engineering, the sixteenth student studies at the Hanze University of Applied Sciences. They spent all weekend, from Friday night until Sunday afternoon, studying a problem and developing solutions, which they then presented to each other. The students began the weekend with an informal reception and a walk around Zernike Campus. This way, they could measure the light pollution and experience it first-hand.

The theme of the second day was 'Design Thinking', a method to look at a problem in different ways. This stimulates the development of innovative solutions. First, various specialists provided information on light pollution, after which the students had to look at this from five different perspectives using the so-called 'Pentagonal Problem Solving Approach'.

Next, they looked into the context of the problem, followed by an ideation process to come up with possible solutions. On the last day, the teams selected their solutions using visual methods. After a presentation training, the teams pitched their solutions to light pollution to each other and to a jury of experts.



Light Pollution - Photo: Gary McGillivray-Birmie via Unsplash

## Grant for research into monastery at Thesinge

A grant of 5,000 euros has been awarded to research the foundations of the former monastery of Germania in Thesinge. With the help of this grant, the area around the monastery can be investigated using ground-penetrating radar (GPR). This way, the Historical Committee in Thesinge will be able to build on the investigative research conducted by students from the Science Shop.

By [Nina Whiteside](#)

### Ground(breaking?) research

The monastery at Thesinge, which dates back to 1250, is one of four monasteries in Groningen that can still be visited today, but its contours are difficult to analyze because they are beneath buildings from later periods. During an earlier project from the Science Shop Language, Culture and Communication, an ohmmeter was used to measure electrical resistance, but it appeared that this was not suitable for further research in areas around the church where new buildings were erected. The GPR research, which will be carried out by a professional company, is suitable for these areas. With the results from this research, the committee hopes to gain new insights about the area around the monastery.



The ground radar of Medusa Explorations is mounted on the chassis of a pram, so that residents' gardens can also be measured.



The location and caution reconstruction (above) of monastery Thesinge

### — Bèta —

#### Publications

- *Karlijn de Vries*. **Contribution of Sustainable Aviation Fuels Towards Net Zero 2050 – Using Life Cycle Analysis**. Bachelor report Industrial Engineering and Management.
- *Maik van Rijn*. **Research on presenting life cycle assessment results concisely to a non-technical audience**. Bachelor report Industrial Engineering and Management.
- *Veerle van Citters*. **A comparative life cycle analysis of the environmental footprint of disposable versus reusable surgical instruments in general practices**. Bachelor report Industrial Engineering and Management.
- *Ellen Veldboom, Chantal van der Werf, Zuhar Incedalci, Frits van den Berg*. **The effect of masking noise on persons suffering from a low frequency sound**. Applied Acoustics 191 (2022). <https://doi.org/10.1016/j.apacoust.2022.108681>
- *Wicher Heeres*. **The environmental impact of shareable e-mopeds in the Netherlands**. Bachelor report Industrial Engineering and Management.
- *Doris Brasser*. **Environmental "Food"print of the University Canteen**. Bachelor report Industrial Engineering and Management.
- *Thiadmar van der Wal*. **Blood in the birth pool**. Bachelor report Industrial Engineering and Management.
- *Wouter Smit*. **Light Pollution from Nobian at the Chemical Park in Delfzijl**. Bachelor report Industrial Engineering and Management.
- *Zoé den Bieman Maturana*. **Biodegradability of (micro)plastics: how does it work and how to communicate**. Bachelor report Industrial Engineering and Management.
- *Mary Shanti*. **An LCA of Cotton & textiles disposal impacts in a Circular Model for the EU**. Master Internship report Energy and Environmental Studies.
- *Marije van Born*. **Emerging substances**; Prioritizing Zeer Zorgwekkende stoffen (ZZSs) based on their potential for biological remediation. Master report Energy and Environmental Studies.
- *Bram van der Sar*. **Blast furnace gas**

**condensate contamination with substances of very high concern**: The case of Tata Steel IJmuiden. Master report Energy and Environmental Studies.

• *Nino van Hees*. **Marine Awareness in the Cruise Industry**. A report evaluating the possibility of increasing marine awareness by providing sustainability training to actors in the cruise industry. Master advice report Science Business & Policy.

• *Joost van der Laan*. **Herstel en beheer Door middel van beheer herstel in de sublitorale Waddenzee**. Master advice report Science Business & Policy.

• *Sarah Paulson*. **Optimizing Shellfish Aquaculture for Multi-Use Spaces Within Offshore Wind Farms in the Dutch North Sea**. Master advice report Science Business & Policy.

• *Annika Schmidt*. **Introducing European macroalgae for human consumption to Roquette Klötze GmbH & Co. KG and society**. Master advice report Science Business & Policy.

• *Nils Jansen*. **Historical fish assemblages in the Wadden Sea, a pilot study evaluating the capability of history in informing future conservation efforts**. Master report Marine Biology.

• *Michiel Merckx*. **Menselijke invloeden en effecten daarvan op het Nederlandse strandleven**. Master report Marine Biology.

• *Isabelle Fruehwirth, Hilbert de Groot, Bram van Iersel, Marjan Kramer, Jagua Lamfers, Lorena Nicotera, Fiona D'Souza*. **The applications and marketability of high-quality Ulva spp. in Europe**. Master report Science & Business.

• *Isabelle Frühwirth, Igor Bij de Vaate, Thomas Polman, Teun den Herder, Hilbert de Groot, Maarten van Ittersum*. **Integrating science and policy for Base Quality of Nature**. Master report Science & Policy.

#### Presentations

• *Jordis Dörfler, Abel Koopman, Mati Mees, Sem Meijer*. **Gulls in the City**. First Year Symposium Biology/Life Sciences and Technology, 1 February 2022.

• *Anne-Mare Branderhorst, Danique Noordhof, Alessia Pallazo*. **Do not be a thief from the reef**. First Year Symposium Biology/Life Sciences and Technology, 1 February 2022.

• *Benja Blaschke, Diederik Amersfoort, Larisa Kamminga*. **Green-green dilemma Energy vs.biodiversity**. To what extent are wind energy farms responsible for bat mortality? First Year Symposium Biology/Life Sciences and Technology, 1 February 2022.

• *Jelle Dijkstra, Marrit Willegers, Carmen Brouwer, Isolde Breed*. **The impact of cats of global biodiversity**. First Year Symposium Biology/Life Sciences and Technology, 1 February 2022.

• *Marta Ferraro*. **Fair Fashion outreach the process of how to design a photoexhibition Fair Fashion, NGO Non-Fiction-Photo**. Green Office Sustainable Week 6 October 2022.

• *Maaïke de Heij, Denise Kool, Rick Stratingh, Han van der Strate, Karin de Boer*. **Hackathon light pollution**. Science LinX, Honours College (Erasmus+ Virtual Hackathon) 7,8,9 October 2022.

• *Karin de Boer*. **Shifting Baseline Syndrome**; WeWi, wetenschap en/of kunstprojecten RUG. Minerva, 4 November 2022.

• *Emma Brambilla, Paul Braun, Jens Veltman, Lonny Jagow, Lynn Grünhagen*. **Cigarette Filters (Cellulose Acetate)**. Honours College broadening module Garbage Patchwork, 21 December 2021.

• *Jon Keller, Fien Kuipers, Antonia Wirth*. **Bio-PET The impact of the usage of Bio-PET on the ocean**. Honours College broadening module Garbage Patchwork, 21 December 2021.

• *Annemiek Bos, Quinten Harskamp, Federica Pivetti*. **Take-out boxes, polystyrene**. Honours College broadening module Garbage Patchwork, 21 December 2021.

• *Henri Kieback, William Koor, Femke Noorman*. **Sustainability goals for high-density polyethylene bottle caps**. Honours College broadening module Garbage Patchwork, 21 December 2021.

• *Hannah Fritsch, Călin Ghizdavet, Lisa Majers, Frederic Schneider*. **PETE Clothing & The Sea**. Honours College broadening module Garbage Patchwork, 21 December 2021.

— **Medicine & Public Health** —

## Publications

- *V.P.A.M. Rientjes, A. Visser, Z. Lippényi.* **Een casestudie naar hoe de niet-medische zorginnovatie ‘arbeidsgerichte zorg’ geïmplementeerd wordt in de huidige zorgpraktijk.** Master report 2022. Science Shop of Medicine and Public Health, University of Groningen.
- *W. Steenbruggen, V. Verhage, N. Steverink.* **De pandemie: ervaringen van mensen met psychische problematiek:** Een kwalitatief onderzoek naar ervaringen van bezoekers van Stichting (On)Gestoord ten tijde van de coronapandemie. Master report 2022. Science Shop of Medicine and Public Health, University of Groningen.
- *V.P.A.M. Rientjes, A. Visser, Z. Lippényi.* **Een casestudie naar hoe de niet-medische zorginnovatie ‘arbeidsgerichte zorg’ geïmplementeerd wordt in de huidige zorgpraktijk.** Master report 2022. Science Shop of Medicine and Public Health, University of Groningen.
- *E. Tapper, V. Verhage, N. Verheij.* **Life-style of non-hospitalized Long COVID patients Before and after COVID-19 infection.** Master report 2022. Science Shop of Medicine and Public Health, University of Groningen.
- *J.A. van Marum, V. Verhage, A.M. Huyghen.* **Onderzoek naar beïnvloedende factoren op samenredzaamheid en de toepassing hiervan in de interventie Community Support:** Een systematische review. Master report 2022. Science Shop of Medicine and Public Health, University of Groningen.
- *E. Veldboom, C. van der Werf, Z. Incedalci, F. van den Berg.* **The effect of masking noise on persons suffering from a low frequency sound.** Bachelor project 2022. Science Shop of Medicine and Public Health, University of Groningen.
- *T. Van der Wal, H. Kloosterman, K. Ree.* **Blood in the birthpool.** Master report 2022. Beta Science Shop & Science Shop of Medicine and Public Health.

## Presentations

- *N. Heijs, V. Verhage.* **Community Support: a practice based intervention. 5 minute exposé 2022.** Science Shop of

Medicine and Public Health.

- *G. Mulder, E. Sulkers, V. Verhage.* **Voluntary return migration and reintegration: The wish and challenge to return: how voluntary return migrants come to the decision to return and their views upon reintegration.** Poster 2022. Science Shop of Medicine and Public Health, University of Groningen.

— **Knowledge Centre Philosophy** —

## Publications

- *Hessel Beijaard.* **Doodgewone vrienden - Paul van Tongeren.** Leeswijzer voor Stichting Senia.
- *Merel Lubbe.* **Iris Murdoch: een filosofie van de liefde.** Leeswijzer voor Stichting Senia.
- *Florida Visser.* **Wie is er bang voor Simone de Beauvoir - Ruud Welten.** Leeswijzer voor Stichting Senia.
- *Martin Wever.* **Geen idee - Jan Warendorff.** Leeswijzer voor Stichting Senia.
- *Lisa Janssen.* **Meer dan de mens alleen - André Nusselder.** Leeswijzer voor Stichting Senia.
- *Timon Beeftink.* **Langs de afgrond - Arnold Heumakers.** Leeswijzer voor

Stichting Senia.

- *Mark Koster.* **Vreemden - Paul Verhaeghe.** Leeswijzer voor Stichting Senia.
- *Olivier van Eijck.* **Fricitie - Miriam Rasch.** Leeswijzer voor Stichting Senia.
- *Randy Toisuta.* **Waarom schurken pech hebben en helden geluk - Jurriën Hamer.** Leeswijzer voor Stichting Senia.
- *Myrthe van Rijn.* **Gevormd of vervormd - Jan Bransen.** Leeswijzer voor Stichting Senia.
- *Ismar Jugo.* **Metafysica - Gert-Jan van der Heiden.** Leeswijzer voor Stichting Senia.
- *Antonie Willem Aué.* **Door Spinoza's Lens - Tinneke Beeckman.** Leeswijzer voor Stichting Senia.

## Presentations

- *Yorick Karseboom.* **Teaching Philosophy Outside the Walls.** Living Knowledge Congres, 30 juni 2022.
- *Marc Pauly.* **Workshop Burgerparticipatie.** Groningse Bestuurs Conferentie, september 2022.

## Events

- **Groningse Nacht van de Filosofie.** 22 april 2022.

## Joint presentations

- **Groninger Wetenschapswinkels. Introducing the Groningen Science Shop and the Living Knowledge Network.** Plenaire opening Living Knowledge Congres, 29 juni 2022.

## Joint events

- **Living Knowledge Summer School.** 28 juni 2022.
- **Living Knowledge Congres.** 29 juni t/m 1 juli 2022.

— **Language, Culture & Communication** —

## Publications

- *Thereza Dražanová.* **Inmigrantes latinoamericanos en los Países Bajos y problemas a los que se enfrentan, ¿Cuáles son los mayores problemas para los inmigrantes latinoamericanos durante y después del proceso de su**

inmigración a los Países Bajos? Bachelor thesis Januari 2022.

- *Lehane, Cate, Marcus Dugan, Ornella Berta Huapaya.* **BMA Noord Strategy Plan 2022.** Adviesrapport.
- *Emilia Waterhouse.* **GROWing Global, Chances for Migrant women in Groningen.** Bachelor thesis april 2022.
- *Matthijs Breedveld, Samir Quintich.* **Bidbook Oorlogs- en Verzetscentrum Groningen (OVCG).** Adviesrapport mei 2022.
- *Lars Kieskamp, Victorija Zemaityte.* **Bidbook Museum aan der A.** Adviesrapport mei 2022.
- *Wes Eeuwes.* **Transcript interview Johanna Bouma.** Transcript interview juni 2022.
- *Wes Eeuwes.* **Kolonialisme, geneeskunde en Schweitzer. Hoe verschilde het Albert Schweitzerziekenhuis van de overheids- en missie/zendingsziekenhuizen?** Paper juni 2022.
- *Jeroen Menno Postema.* **Behoeften van mensen met een NAH, Onderzoek naar de behoeften van mensen met een NAH gedurende (culturele) activiteiten.** Onderzoek MBO-student augustus 2022.
- *Marrit Claus.* **“Maar thans heb ik met heel mijn hart Toewan Jezus lief” Een onderzoek naar het zendingsbeeld in protestantse jeugdzendingspublicaties over Indonesië (1900- 1980).** Master-scriptie oktober 2022.

## Presentations

- *Lehane, Cate, Marcus Dugan, Ornella Berta Huapaya.* **Projectpresentatie BMA Noord.** Career minor, 18 april 2022.

## Poster Presentations

- **Studenten Atelier: Living Heritage.** 4 april 2022.
- *Thereza Dražanová.* **What do Latinamerican migrants experience when they come to the Netherlands?** Eindpresentatie voor Stichting Empower Yourself, 2 mei 2022.
- *Mathijs Breedveld, Samir Quintich.* **Eindpresentatie Atelier: Living Heritage.** 31 mei 2022.
- *Lars Kieskamp, Victorija Zemaityte.* **Eindpresentatie Atelier: Living Heritage.** 31 mei 2022.
- *Saskia Visser.* **Dutch-German en-**

counters on the impacts of Covid-19.

- Storytelling Living Knowledge Congres, 29 juni 2022.
- *Matthijs Breedveld.* **Students as heritage consultants, History students realizing exhibition plans in collaboration with heritage institutions.** Poster-presentatie Living Knowledge Congres, 30 juni 2022.
- *Felix van Driem.* **Sustainable local alternative to fast-fashion. BMA Noord strategy plan 2022.** Posterpresentatie Living Knowledge Congres, 30 juni 2022.
- *Saskia Visser.* **Make it visible! Project visualisations as a conversation starter for students and communities.** Workshop Living Knowledge Congres, 30 juni 2022.
- *Esther Haag, Vincent Hazelhoff.* **Placement or group assignment?** Presentatie Career minor, 5 september 2022.
- *Vincent Hazelhoff.* **Wetenschapswinkelworkshop.** Klooster Kennismiddag 4 november 2022.
- *Vincent Hazelhoff, Nina Whiteside.* **Visualising your project.** Workshop Career minor, 21 november 2022.
- *Bela Geick, Jorik Mossel, Matthew Squire.* **Communication of the maai-mei-niet policy.** Presentatie tussentijdse resultaten gemeente Groningen, 25 november 2022.
- *Vincent Hazelhoff.* **Senia reading guides.** Writing Editing Mediating college, 28 november 2022.

## Events

- **Klooster Kennismiddag,** 4 november 2022.
- **YARN Meet-up.** Bijeenkomst bedrijven en wetenschappers Faculteit der Letteren, 18 november 2022.

## Joint presentations

- **Groninger Wetenschapswinkels. Introducing the Groningen Science Shop and the Living Knowledge Network.** Plenaire opening Living Knowledge Congres, 29 juni 2022.

## Joint events

- **Living Knowledge Summer School.** 28 juni 2022.
- **Living Knowledge Congres.** 29 juni t/m 1 juli 2022.

— **Education** —

## Podcasts

- *S. Dullink.* (Host). **Opschalen (Nr. 1)** [Aflivering 5 oktober 2022]. In City Deal Kennis Maken Podcast.
- *S. Dullink* (Host). **Toekomstbeelden (Nr. 5)** [Aflivering 5 oktober 2022]. In City Deal Kennis Maken Podcast.

## Presentations

- *Denise Leidelmeijer.* **Workshop WIJS.** Pre-conference Living Knowledge congres, 28 juni 2022.
- *Denise Leidelmeijer, Suzanne Kuik.* **Workshop ‘Solving wicked problems: the use of societal problems as an effective context for innovative learning environments’.** Living Knowledge congres, 29 juni 2022
- *Denise Leidelmeijer, Tom Drukker.* **Posterpresentatie ‘School performance and the impact of school time models on learning outcomes in primary education’.** Living Knowledge congres, 30 juni 2022.
- *Denise Leidelmeijer, Anne Kraanen.* **Workshop WIJS,** Living Knowledge congres. 1 juli 2022.
- *Denise Leidelmeijer, Sebastiaan Haaijckens.* **Presentatie WIJS en opdracht GoeieBuurt, Learning Community ‘Dealing with ‘wicked’ problems and uncertainty’.** 12 september 2022
- *Denise Leidelmeijer.* **Presentatie WIJS, Sustainable Moments Festival (SuMo-Fest).** 23 september 2022
- *Denise Leidelmeijer, Caten Tat.* **Presentatie WIJS.** Career Week faculteit Economie en Bedrijfskunde, RUG, 4 oktober 2022
- *Denise Leidelmeijer, Marieke van Haaren, Suzanne Potjer, Susan Dullink.* **Podcast over ‘Toekomstbeelden’ City Deal Kennis Maken.** 5 oktober 2022.
- *Denise Leidelmeijer, Nurhan Abujidi, Suzanne Potjer, Susan Dullink.* **Podcast over ‘Opschaling’ City Deal Kennis Maken.** 5 oktober 2022
- *Denise Leidelmeijer, Inge Wichgers.* **Keynote presentatie WIJS en onderwijsprogramma WIJSSamen.** Netwerk-evenement Vlaams Netwerk Service-Learning in Hoger Onderwijs, 25 november 2022.