

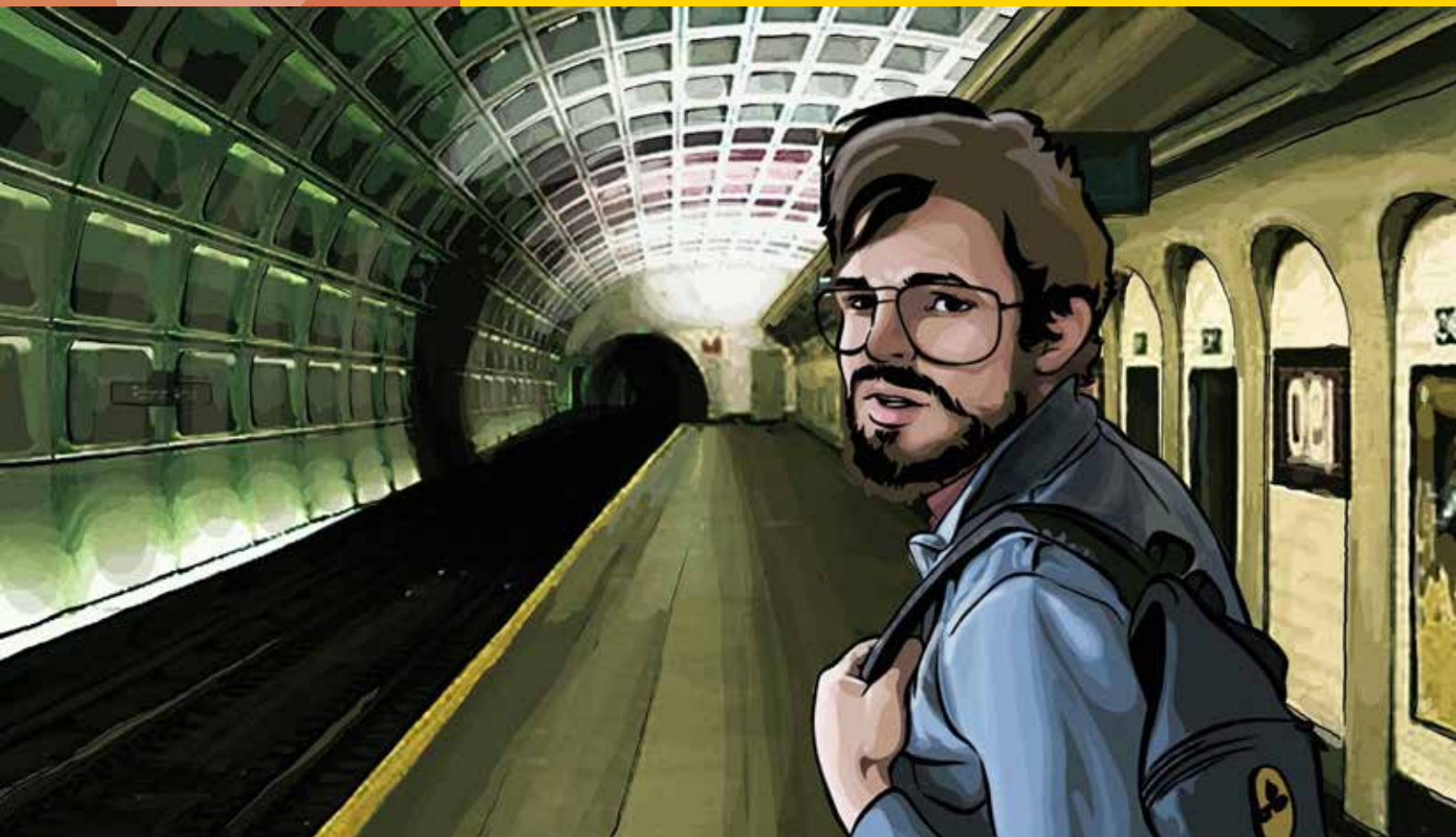
# Programme Ecogames symposium 2017

30 January | 09:15 - 17:15

Drift 21, Sweelinckzaal | Utrecht

Registration: [gameresearch@uu.nl](mailto:gameresearch@uu.nl)

[www.gameresearch.nl](http://www.gameresearch.nl)



Game  
Research

Interdisciplinary research on serious  
gaming and playful interaction

## Ecogames: Game Research meets Sustainability

Ecogames - or games with a focus on ecosystems and sustainability - are imaginative spaces for playing and learning, expressing often contested moral and political values. They are used to raise awareness for a variety of sustainability issues, such as renewable energy transition, circular economy, sustainable mobility, and green water use and energy consumption.

These persuasive and participatory games represent an experiential turn in climate communication and storytelling, trying to reinforce ecological attitudes and behaviour and stimulate collaborative environmental decision making.

This symposium, organised by the Utrecht University Research Focus Area Game Research, brings together experts in the fields of game design and research, communication, media and urban studies, ethics, geosciences, data and computer science. It explores the psychological, social, cultural and institutional conditions of a transition to a sustainable society, and the role ecogames could play in such a transition.



Four Dutch game studios and creative storytelling agencies (Grendel Games, Spektor, Organiq and Play the City) will present their media productions and will discuss how these productions can be understood as rhetorical devices.

## Colofon

**Foto cover:** Collapsus - Submarine  
**Tekst en redactie:** Joost Raessens  
**Vormgeving:** Studio Stennis

# Programme

## 08:45 - 09:15: Welcome and coffee

### 09:15 - 09:40: Welcome and introduction

- Societal impact of research.  
**Wiljan van den Akker**
- Collapsus, or how to make players become ecological citizens. **Joost Raessens**

### 09:40 - 11:00: Game Research meets Sustainability 1

- Games for healthy urban living.  
**Monique Simons**
- Games don't design themselves - How to design for effective behaviour change?  
**Reint Jan Renes.**
- Networked content analysis - The case of climate change.  
**Sabine Niederer**
- Employment of gamification techniques for enhancing consumer's empowerment and engagement in demand response mechanisms.  
**Ioannis Lampropoulos**

## 11:00 - 11:15: Coffee break

### 11:15 - 12:30: Ecogames 1 + 2

- The power of storytelling.  
**Tim Murck**
- Motivating more sustainable behaviour through gamification.  
**Fons Verhoef**

## 12:30 - 13:15: Lunch

- Everything you always wanted to know about the Sustainable Futures Hub, but were afraid to ask.  
**Anjelle Rademakers**

### 13:15 - 14:00: Ecogames 3

- Using games to inform the environment and aid in city-making.  
**Ekim Tan & Michiel de Lange**

### 14:00 - 15:15: Game Research meets Sustainability 2

- Urban futures - The dynamics of imagination.  
**Maarten Hajer**
- Game co-design for sustainable futures.  
**Joost Vervoort**
- Powersaver Game - Gamification in a household energy game.  
**Jan Dirk Fijnheer**

## 15:15 - 15:30: Coffee break

### 15:30 - 16:15: Ecogames 4

- Designing games for peak shaving water usage with smart meters.  
**Tim Laning**

### 16:15 - 17:15: Game Research meets Sustainability 3

- The importance of characters for narrative impact.  
**Hans Hoeken**
- Imagination and the ethics of climate change.  
**Marcus Düwell**

## 17:15 - 18:00: Drinks & bites

# List of speakers in alphabetical order

## Wiljan van den Akker

Vice-rector for Research and Director of the Centre for the Humanities, Utrecht University  
**W.J.vandenAkker@uu.nl**

### SOCIETAL IMPACT OF RESEARCH

The Centre for the Humanities is the platform for interdisciplinary and interfaculty dialogue at Utrecht University. It functions as a critical think-tank on academic knowledge and the social relevance and the value of the Humanities in the contemporary world. CfH is a flexible and fast-moving instrument that is capable of mobilising human and material resources to address urgent contemporary questions. Therefore, CfH provides quick and timely interventions in the public debate, through a number of concrete target-oriented activities.

## Marcus Duwell

Professor of Philosophical Ethics, Utrecht University  
**m.duwell@uu.nl**

### IMAGINATION AND THE ETHICS OF CLIMATE CHANGE

Climate change and other ecological challenges are forming a challenge for nearly all dimensions of our life. Possible solutions to those challenges can affect the structure of political institutions, the form of social relationships, the legal order and moral convictions. An ethical assessment of the possible changes presupposes awareness of the different possibilities a sustainable world could like. The ethics of climate change therefore necessarily presuppose imaginative sources to figure out how the future world could look like. The presentation will try to understand the importance of imagination for the ethical debate.

## Jan Dirk Fijnheer

Senior Lecturer Utrecht University and Inholland University of Applied Sciences, Amsterdam.  
**J.D.L.Fijnheer@uu.nl**

### POWERSAVER GAME: GAMIFICATION IN A HOUSEHOLD ENERGY GAME

Research where gamification is used to influence household energy consumption is an emerging field. The aim of *Powersaver Game* is to influence household energy consumption in the long-term. The research project will give insight into what the influence of gamification is on energy consumption in households by means of electricity and gas usage and on attitudes towards sustainable energy use at home. Since our aim is an effective transfer between the game world and real world, we introduced gamification elements from the real world, by energy saving activities, in the game. *Powersaver Game* is used in a series of experiments. First, the game will be compared with a control (non-game) version. Next, features such as feedback, personal relevance and competition will be examined.



## Maarten Hajer

Distinguished Professor of Urban Futures,  
Utrecht University  
[m.a.hajer@uu.nl](mailto:m.a.hajer@uu.nl)

### URBAN FUTURES: THE DYNAMICS OF IMAGINATION

Do cities merely evolve? Or are there ways in which our present behaviour can influence our urban futures? Is there, perhaps, even a way in which the past predetermines the routes taken? In his contribution Maarten Hajer explores the role of the imagination in urban futures in past and present.



## Hans Hoeken

Professor of Communication and  
Information Studies, Utrecht University  
[j.a.l.hoeken@uu.nl](mailto:j.a.l.hoeken@uu.nl)

### THE IMPORTANCE OF CHARACTERS FOR NARRATIVE IMPACT

Narratives can influence people's beliefs, attitudes, and behavior. An important driver of these effects is the extent to which an audience cares about a character's wellbeing and values the character's goals. I will discuss research showing that this type of character involvement can yield more intense emotions and have people adopt opinions and attitudes expressed by that character. I will also talk about research on what factors lead to becoming involved with a character.

## Ioannis Lampropoulos

Copernicus Institute of Sustainable  
Development, Utrecht University  
[i.lampropoulos@uu.nl](mailto:i.lampropoulos@uu.nl)

### EMPLOYMENT OF GAMIFICATION TECHNIQUES FOR ENHANCING CONSUMER'S EMPOWERMENT AND ENGAGEMENT IN DEMAND RESPONSE MECHANISMS

The increasing share of intermittent renewable energy resources and the targets for the reduction of greenhouse gas emissions pose enormous challenges for the reliable and economic operation of electrical power systems. These developments are calling for important changes in the European energy system, namely for more flexibility and collaboration, to ensure a reliable supply of electricity, economic operation, and the ability to cope with increasing electrification. In this presentation we will discuss how gamification techniques can be employed in order to contribute to the development of demand response mechanisms that meet social acceptance and avoid blockages.

## Michiel de Lange

New Media Studies, Utrecht University and  
co-founder of The Mobile City  
[M.L.deLange@uu.nl](mailto:M.L.deLange@uu.nl)

### USING GAMES TO INFORM THE ENVIRONMENT AND AID IN CITY-MAKING

The challenges of 21<sup>st</sup> century city-making require innovative methods that incorporate the complexity of today's rapidly urbanising world. Gaming and playful design carry unexplored potentials for city-making, which is crucial in building sustainable urban futures. In their talks, Ekim Tan and Michiel de Lange address the question how play can become a platform to close the communication gap between experts and support informed decision-making, and how play informs a people-centric view of smart city making. They will do so by drawing on their recent collaboration in the project Games for Cities.

## Tim Laning

Founder and Commercial Director of  
Grendel Games, Leeuwarden  
[tim@grendel-games.com](mailto:tim@grendel-games.com)

### DESIGNING GAMES FOR PEAK SHAVING WATER USAGE WITH SMART METERS

For Vitens, the country's largest water company, Grendel Games designed the *Wijk & Water Battle*. This game was developed in 2015 as the world's first IOT-game that actually has game play directly related to in- and output from the water network in real-time. Microsoft has sponsored the project. The prototype campaign was successful in achieving its goals. 2017 will see a completely new campaign that will run with adjustments made to make it even more successful. In this session Grendel Games will elaborate on design decisions, project goals and future plans that expand the project into the realm of energy with new partners.

## Tim Murck

Strategic Lead at Spektor, Creative  
Storytelling Agency, Amsterdam  
[tim@spektor.nl](mailto:tim@spektor.nl)

### THE POWER OF STORYTELLING

Tim Murck presents the project *Hemelswater* (Heavenswater). This project of brewing beer with rain water started as a campaign for Amsterdam Rainproof to make citizens aware of problems of heavy rainfall and take action to increase the city's sponge capacity, so that rainwater is absorbed and used instead of causing flash floods. *Hemelswater* seems like a disruptive idea, but when Spektor researched it, they found out that already in the Middle Ages, Dutch breweries were set up near churches and cathedrals to catch rainwater runoff from their roofs. With rainwater it is possible to make beer cleaner and tastier. At this moment, thousands of bottles containing *Hemelswater* beer are sold a week, and tens of breweries want to join the *Hemelswater* movement. *Hemelswater* won the ASN Bank Worldprice Sustainable Energy and the HORECAVA Overall Innovation Award.

## Sabine Niederer

Director of CREATE-IT, Amsterdam  
University of Applied Sciences  
[s.m.c.niederer@hva.nl](mailto:s.m.c.niederer@hva.nl)

### NETWORKED CONTENT ANALYSIS: THE CASE OF CLIMATE CHANGE

Content analysis has been developed within communication science as a technique to analyse bodies of texts for features or (recurring) themes, in order to identify cultural indicators, societal trends and issues. In her presentation, Sabine Niederer proposes that networked content analysis applied to the Web includes hyperlink analysis (which itself is informed by scientometrics) and resonance analysis that works with search engines. Her focus is on climate change, which she investigates across various platforms (such as Wikipedia and Twitter).



## Anjelle Rademakers

Manager Green Office, Utrecht University  
[A.Rademakers@uu.nl](mailto:A.Rademakers@uu.nl)

### EVERYTHING YOU ALWAYS WANTED TO KNOW ABOUT THE SUSTAINABLE FUTURES HUB, BUT WERE AFRAID TO ASK

At Heidelberglaan 8 a brand new Sustainable Futures Hub has been opened, housing Green Office Utrecht, the Sustainability Program Team, Utrecht Sustainability Institute and Urban Futures Studio. What's the purpose of this hub? What exactly is the Green Office doing? And what's in it for you? Anjelle Rademakers will tell you all the ins and outs of the Hub and how you can make use of it.

## Joost Raessens

Professor of Media Theory, Utrecht University  
[j.raessens@uu.nl](mailto:j.raessens@uu.nl)

### COLLAPSUS, OR HOW TO MAKE PLAYERS BECOME ECOLOGICAL CITIZENS

Climate and energy policies and measures rank high on both the societal as well as political agenda. But at the same time, only a very small number of Dutch citizens consider climate change to be an important societal problem. Raising awareness, reinforcing ecological attitudes and behaviour and stimulating collaborative environmental decision making are core challenges of our time. In his presentation, Joost Raessens examines how ecological games – such as *Collapsus: Energy Risk Conspiracy* (Submarine 2010) – seek to contribute to ecological thought and make people become ecological citizens.



## Reint Jan Renes

Professor of Crossmedia Communication in the Public Domain  
[reintjan.renes@hu.nl](mailto:reintjan.renes@hu.nl)

### GAMES DON'T DESIGN THEMSELVES: HOW TO DESIGN FOR EFFECTIVE BEHAVIOUR CHANGE?

Behaviour change design has much to gain with the integration of insights from social psychology in the design process. Similarly, behavioural scientists can greatly benefit from adopting designerly methods to make sure their strategies 'work' in a broad range of user contexts. This integration needs to be done carefully without hampering the creative process nor the scientific validity of the persuasive 'product'. In this contribution a model (Persuasive by Design) and tool (The Behavioural Lenses) are presented that contribute to the design of evidence-based behaviour change services and products. The model and tool offer possibilities to enhance user research and concept development by informing designs with principles central to the behavioural sciences.

## Monique Simons

Human Geography and Spatial Planning, Utrecht University  
[M.Simons@uu.nl](mailto:M.Simons@uu.nl)

### GAMES FOR HEALTHY URBAN LIVING

Monique works as a senior researcher on Serious Games and Smart Technology for Healthy Urban Living. She works both for the municipality Utrecht as for Utrecht University, aiming to bridge the gap between science and policy. In her presentation she will give an overview of her studies on how serious games and game strategies can be harnessed for promoting a healthy lifestyle. For example: Active video games to promote physical activity; Serious games to prevent overweight in children; Mobile games and sensors to promote physical activity in public spaces.

## Ekim Tan

Founder of Play the City, an Amsterdam and Istanbul based city consultancy firm  
[ekim@playthecity.eu](mailto:ekim@playthecity.eu)

### USING GAMES TO INFORM THE ENVIRONMENT AND AID IN CITY-MAKING

The challenges of 21st century city-making require innovative methods that incorporate the complexity of today's rapidly urbanising world. Gaming and playful design carry unexplored potentials for city-making, which is crucial in building sustainable urban futures. In their talks, Ekim Tan and Michiel de Lange address the question how play can become a platform to close the communication gap between experts and support informed decision-making, and how play informs a people-centric view of smart city making. They will do so by drawing on their recent collaboration in the project Games for Cities.



## Fons Verhoef

Gamification and Interaction Analyst at Organiq, a 'game thinking' production studio, Rotterdam  
[fons@organiq.nl](mailto:fons@organiq.nl)

### MOTIVATING MORE SUSTAINABLE BEHAVIOUR THROUGH GAMIFICATION

Everybody agrees that sustainable behaviour is something that is important and worth doing. Yet, it often becomes an empty promise, like a New Year's resolution. In this presentation, Fons Verhoef from Organiq will explain how gamification is the answer in motivating people to actually change their behaviour. He will demonstrate this clearly through two of Organiq's products: *From5to4* and *LOI Kidzz Thuisstrainer*.



## Joost Vervoort

Copernicus Institute of Sustainable Development, Utrecht University and Environmental Change Institute, University of Oxford  
[j.m.vervoort@uu.nl](mailto:j.m.vervoort@uu.nl)

### GAME CO-DESIGN FOR SUSTAINABLE FUTURES

Joost Vervoort approaches games from his experience in using foresight for decision-making. From this perspective, games offer great potential for foresight in a sustainability context. He focuses specifically on the collaborative design of games as a mode of inquiry. Game co-design combines the analytical strengths of participatory modelling and the experiential possibilities of interactive scenario storytelling, and in addition, offers specific opportunities for identification with and immersion in future perspectives and for the shared experimentation with challenges and solutions.

## Game studios and creative storytelling agencies

### Spektor - Creative storytelling agency

Spektor is a dedicated group of designers, filmmakers, scriptwriters, coders, app developers, game designers, publishers and media strategists. At Spektor we inspire and activate audiences by moving them through old and new media landscapes. We want to fight inertia, complacency, monotony and create wonder & awe together with our clients. We tell and re-tell (your) stories that audiences can interact with, react to and are activated by. We are based in Amsterdam, European city of innovation.

**Hemelswater Beer.** To raise awareness for climate adaptation we created a beer brand that creates beer from rainwater.

**Website:** [www.spektor.nl](http://www.spektor.nl)



### Grendel Games - We make seriously entertaining games

Our studio is based in The Netherlands, but we work and think globally. We are specialized in serious games and want to bring about a positive change in the world through our work. We offer clients practical, result-focused solutions for serious problems. These include obesity in children (*Garfield*), peaks in water consumption (*Wijk & Water Battle*) and motivating children to do their rehabilitation exercises (*Gryphon Rider*).

**Wijk & Water Battle.** As a water company, how do you influence your customers' consumption? By challenging primary schools and neighbourhoods to a water battle!

**Website:** [www.grendel-games.com](http://www.grendel-games.com)



### Play the City - We use gaming to engage multiple stakeholders in resolving complex urban challenges

Play the City uses gaming to engage multiple stakeholders in resolving complex urban challenges. Changing the way we engage stakeholders, Play the City designs physical games as a method for collaborative decision making and conflict resolution. We tailor our games according to the questions of our clients. These can relate to large urban projects, refugee camps, violence prevention and other multi-stakeholder challenges societies face.

**Games for Cities:** The 'City Game' platform enables stakeholders to visualize ideas, plans and project so various interests can be tested against one another.

**Website:** [www.playthecity.nl](http://www.playthecity.nl)

### Organiq – Learn, game, grow

Organiq is a Rotterdam based digital agency. We blend strategy, creativity and technology to help schools, homes, organisations to excellerate people by using gamification, games and interactive multimedia. We find solutions for various challenges in the areas of knowledge, awareness and behavioural change. We use the Total Brainbox methods to think outside or inside the box with our clients to pursue the main question(s) and the solutions. We produce e-learning, gamification, media productions and events to get things done.

**From5to4: Mobility Game.** We asked ourselves if it would be possible to design a gamified solution that could potentially reduce traffic congestion to an absolute minimum. The short answer is YES.

**Operation Tidal Wave!** This game asks the student to join a group of superheroes in saving te world from the evil Toxic.

**Website:** [www.organiq.nl](http://www.organiq.nl)





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