

PLAY & CIVIC MEDIA

Activities 2016•2017


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INTRO- DUCTION



The Lectorate of Play & Civic Media is an interdisciplinary research group at the Amsterdam University of Applied Sciences that manages research & education programmes in the fields of playful, immersive and civic media such as virtual reality, serious games, online platforms and digital placemaking. Researchers in our group explore both the design process of these new media technologies, as well as their application and societal impact.



Playfulness and (digital) storytelling are key aspects in our work, as these have become important features of contemporary digital media. In our research projects and through our Interaction & Games Lab, we have explored storytelling and audience engagement techniques for immersive media such as virtual reality. Examples are the projects Interactive Cinema and Persuasive Gaming. Our programmes on Live and Automated Game Design look at new technologies for designing computer games. And in our research line on digital placemaking we study the merging of physical and digital worlds and what that may mean for social interaction in public spaces. This is addressed through our participation in the Co-ReUse project that aims to design digital media interventions to strengthen the public domain at Amsterdam's Arena Boulevard.



One of our particular interests lies in the notion of playful empowerment. How can the design of playful interfaces empower citizens to improve or maintain the quality of their individual and collective lives, for instance with regard to health or education? To answer that question, the Smart Play Sets-project aims to design playful toys that can contribute to a healthy physical development for children. In Interactive Photo Sharing to Support 21st Century Learning, we experiment with the use of social interactive technologies for photo sharing in learning.

On the level of society, we explore how (playful) new media technologies can equip citizens with the agency to act and participate in a democratic society. Many of our projects in our research line on digital platforms and civic media such as The Hackable City and Games for Cities address these issues. They aim to open up the dominant techno-centered smart city paradigm by – following Bannon (1992) – introducing humans as actors and not merely as factors in the process of citymaking.

In all of our projects, we favor a ‘Research through Design’ approach. We try to understand the world around us by shaping it, in close cooperation with our research partners. These partners have come from many domains of society, from the game industry to ngo’s, and from citizens and civic organizations to national and local governments. In the past, our group has collaborated with a wide range of stakeholders within the creative industries such as Pakhuis de Zwijger, het Nieuwe Instituut, Philips, KPN, IJsfontein, Electronic Arts and many others.

Sometimes we work in the traditions of ‘future-finding’ and critical design, by designing probes that provoke discussion about possible futures. For instance, Project Submerged examines ways of gathering data on future scenarios for (smart) cities through the use of a ‘geolocalized app’ (e.g. a mobile application that reacts to the user’s location). At other times we develop prototypes for actual use that are designed and tested in the situated context of their intended use. In both cases, we aim not just to contribute to societal discussions or find solutions for actual problems, but also to contribute to the theory of design itself.

This perspective also resonates in our approach to education. In the past few years, we have contributed to various modules in our University’s

BA-programmes, from running a minor in game design to commissioning design projects to students of the Medialab. Last year we have put a lot of energy in the development of a new Master's programme in Digital Design that is set to take off in 2017. Here, it is our ambition to educate the designer of the future. In our vision, (s)he should be able to combine research and education to continually look for new ways in which design can be made productive to address societal issues from a humanist perspective.

It's with pride that we present an overview of all our activities undertaken in 2016: research projects, educational programmes, publications and designs. The researchers in our group are well situated in the contemporary public debate and, by doing so, connect the university with public and private institutions as well as industry. An example is the successful conference Design & the City organized in 2016 at the AUAS.

We will carry on with our take on design & society in 2017, and look forward to numerous new highlights: the launch of the M.Sc. programme in digital design as well as the organization of the international prestigious conference CHI PLAY 2017 (ACM).

Finally, we hope that you will not only read this report as an overview of the activities we have undertaken, but also as an open invitation to join us in 2017 and beyond in the further development of our research & education programmes.

Have fun reading.

Prof. dr. Ben A.M. Schouten
LECTOR DESIGN FOR PLAY & CIVIC MEDIA





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MISSION & VISION



One of the most interesting recent developments at the interface between academia and society is the convergence of three formerly separated disciplines: Design, the Humanities, and Computer Sciences. Increasingly, researchers and practitioners in these domains look beyond their traditional toolsets and disciplinary boundaries to find new ways to address contemporary societal challenges in an increasingly complex world.

The mission of our research group is to design for societal and economical innovation, propelled by a combination of interdisciplinary creative skills, cultural contexts, technology, entrepreneurship and design thinking at the crossroads of humanities, design and computer science. We like to call this Humanistic Design.

The Humanities and Social Sciences, over the last few years, have seen a growing interest in applied research, which goes well beyond the critical analysis of cultural developments. Similarly, in the wake of the rise of big data and after a first wave of a 'new empiricism', Computer Scientists have taken an increasing interest in cultural processes for the production of meaning. With the rise of "Social Informatics", algorithms are no longer just models or representations of objective reality, but are also understood as active producers of meaning in society, as they interact with social and economic forces. Design, in the meantime, is foregrounding culture, emotions, and experiences. Instead of simply optimizing the efficiency of rather abstract 'users', design has recently focused on 'full human beings', or citizens, with their affective and cultural characteristics.

These three disciplines offer a new design research approach - applying human-centered principles to inform economic, social and technological development - that leverages the expertise of designers to other domains and combines it with the epistemologies and methodologies of the humanities, such as cultural criticism and semiotic analyses with which it investigates social meaning-making, in direct dialogue with computer sciences and data science.

In recent years, the social, economic, and cultural relevance of design has grown significantly, not only because the number of design artefacts produced worldwide has increased exponentially (e.g. apps, VR experiences, smart objects, internet-of-things...) but also because design processes are seen as contributing to tackling complex issues. For these reasons, methodologies based in design have the potential to shape both academic research and business. The Research Group Play & Civic Media at the Amsterdam University of Applied Sciences [AUAS] contributes with a strong expertise in “Design Thinking” and in “Research through Design”. These two concepts are fundamental methodologies for applied research.

Research through Design is an exploratory and design-oriented iterative process

Design Thinking is an effective way to foster innovation, growth and positive societal effects. In synthesis, Design Thinking is the generalization and scaling-up of design processes to other domains, thus applying human-centered design principles to inform economic, social and technological developments, and leveraging the proven expertise of designers to empathize, innovate, and solve problems. As designers are trained to address complex issues (‘wicked problems’), we may look at their processes as a way to innovate and disrupt today’s business challenges.

Research through Design is an exploratory and design-oriented iterative process where knowledge is produced through hands-on, practical explorations that start from the creation of experimental artifacts as springboards for theorization. We recognize that designers have a uniquely effective way of framing problems, understand the world, and generate new ideas. For this reason Research through Design aims at generating scholarly knowledge through exploratory design processes, and by creating, deploying, and validating design artifacts.

The research group Play & Civic Media contributes to research and education in new media domains such as playful interaction, virtual reality and civic media. These media are studied from two perspectives. At first there is the design perspective of (playful) interaction. What are the design requirements for digital media, such as games & play, and supporting technologies? This leads to research questions such as: what are the new narrative theories and grammatical constructions necessary to underpin the experiences for media like virtual and augmented reality? Or how can we provide programming tools for game designers that optimize creativity?

[1] B.A.M. Schouten.
Playful Empowerment.
Inaugural address on
May 12, 2015. Amsterdam
University of Applied
Sciences.

[2] The term empowerment refers to measures designed to increase the degree of autonomy and self-determination in people and in communities in order to enable them to represent their interests in a responsible and self-determined way, acting on their own authority.

Within this design-oriented approach, there is specific attention to the notion of 'playful empowerment'[1]. This means that the research group is looking for insights how playful interaction leads to empowerment[2] of the end-user. How can the notion of playful interaction lead to participation and engagement of citizens for social innovation, such as designing a circular economy for fashion? Or how can playful interaction and gamification strengthen the capacity, competency and ability of patients in order to increase therapy loyalty? These research activities lead to better concepts, models and theories on how (playful) interaction contributes to participatory design methodologies, co-creation and collaboration. Which are the design methodologies of the future as a consequence of new media technologies? And how does the role of the designer change with the emergence of new media practices?

A second approach within our research is the societal impact of playful interaction and civic media. The rise of the digital media not only leads to new design processes, its products and instances also lead to a (post) digital culture and social innovations that are unprecedented. We are interested in the role of (digital) play in society and post-digital culture. One of the central themes in this research is the position of the consumer and citizen in an emerging network culture or 'platform society'. How does society change through the rise of digital media, big data and other new technologies? And, more importantly: how can citizens and consumers be empowered?

The study of civic media is an international emerging discipline that looks at ways in which people use new technologies and digital platforms to inform themselves or organize around (local) commons and matters of public interest. How do platforms that enable this organization, function and change the relationships between professional designers, citizens and governments? What does that mean for the democratic society? What new concepts do we need to identify these technological, economic and social developments? And how can researchers and designers contribute, for example in developing alternative visions or consult on policy?

Humanistic design applies human-centered principles to inform economic, social and technological developments.

The strength of the research group Play & Civic Media is that it connects both research perspectives with each other. Most research projects have a design dimension, which is reflected in the design methods and the role of designers and contribute to the development of design toolboxes. At the same time, many of our projects also have a societal dimension. They reflect on the social embedding of digital media design in society. What type of society emerges from these new design practices?

The combination of the design method and domain-specific content reflection is also expressed in a preference for 'research by design' within the research group. That means that researchers themselves - in collaboration with external partners, often from education – design new platforms and systems to test or to question specific societal issues, and simultaneously gain insights into the design process and methodology.

The research angles and issues listed above are highly relevant for a number of focus areas of the Amsterdam University of Applied Sciences. For the Creative Industries for example, the design of digital media and the changing role of designers and professionals are of great interest. These issues also resonate in the AUAS Urban Management programme. There, they are addressed in discussions around citizens and designers as 'city makers'. What does the empowerment of citizens mean for urban democracy? Also within the focus area of 'Smart Cities', which is currently high on the agenda, the perspective of the empowered citizen is very important.

Within our mission, the research group connects with wider (international) research agendas. The themes are closely linked to the roadmap Smart Culture from NWO and CLICKNL, and global research and debate on smart cities and the platform society, inter alia in various H2020 calls as well as the JPI Urban Europe programme. Finally, the subject matter is also consistent with a number of routes of the 'Nationale Wetenschapsagenda', such as Smart, liveable cities and Op weg naar veerkrachtige samenlevingen.





RESEARCH



Interactive Cinema



Website

[www.amsterdamcreativeindustries.com/
project/interactive-cinema-de-pont](http://www.amsterdamcreativeindustries.com/project/interactive-cinema-de-pont)
[www.amsterdamcreativeindustries.com/
project/project-orpheus-vr](http://www.amsterdamcreativeindustries.com/project/project-orpheus-vr)

Time

September 2015 – June 2016

Play & Civic Media Researchers

Mirjam Vosmeer

Project Lead

Amsterdam University of Applied Sciences
(Mirjam Vosmeer)

Financed by

ACIN, Amsterdam Fonds voor de Kunst

Research Partners

VU, Nederlandse Filmacademie

Project Partners

WeMakeVR, AVROTROS,
Submarine Channel

Additional Parties involved

AMP Amsterdam, Nl Film, Lava Labs

Interactive Cinema was set up in 2013 as a research collaboration between the HvA and The Netherlands Film Academy. The main question underlying the research is 'What does it mean when cinema and videogames merge'. Within this project, answers to that question were found within the upcoming field of Virtual Reality.

In 2016, the project was concluded successfully with the presentation of some final projects: De Pont (The Ferry) and Project Orpheus.



De Pont - Virtual environment

In 2015, Submarine Channel and the Amsterdam Creative Industries Network launched DE PONT – an interactive film and game challenge that revolves around a true Amsterdam icon. DE PONT continued in 2016. It consists of a virtual environment with assets that depict the area behind Amsterdam Central Station, and was part of a research project that explores the storytelling potential of 3D game engines such as Unity for both filmmaking and game development. Storytellers such as game designers and filmmakers worldwide were invited to create a short (interactive) animation or game that takes place on the famous free ferry over the river IJ that connects the center of the capital to the upcoming north district. The virtual environment and the assets are still being used in courses on game design at the HvA.



De Pont - Hackaton

<http://lava.nl/lavalab/hackdepont>

On April 30 2016, industry partner Lava Labs organized a Hackaton named 'Hack the Pont', in collaboration with Submarine Channel and Code Academy. Code Academy is an institution that organizes programming courses for refugees in Amsterdam. During one day, participants worked in small groups on De Pont projects, presenting their work to each other and the public that same evening.



De Pont - Eindpresentatie EYE (event)

On July 14 2016, the final presentation of a selection of the best of De Pont projects took place in EYE Filmmuseum, organized in collaboration with Submarine Channel. Both students, Hackaton-participants and individual designers were invited to show their interpretation of the De Pont on the big screen.



Project Orpheus - Eindpresentatie VondelCS

Although the VR video *Project Orpheus* can be watched as a stand alone production, it was set up as a 'VR-companion piece' to accompany a Dutch television drama series of the same title, that was broadcasted in the Netherlands in the spring of 2016. The project is a collaboration project with students and researchers of HvA, and the national television broadcasting company AVROTROS, the television production company NL Film and the VR production company We-MakeVR. The challenge that the students were confronted with was: *'Can you create a VR experience that reinforces the impact of a traditional TV-show?'* The TV-show *Project Orpheus* was used as the starting point for this transmedial storytelling experiment. In this show a group of young doctors and hospital interns experiment with near-death experiments, which leads to all kinds of dramatic events. While the VR production was set up as a student assignment, it also served as a research instrument for the Lectorate, as a demo tool for the VR company and as a publicity generator for the television partners. In february 2016, the project was officially launched on a presentation in VondelCS.

Storytelling for 360° media



Website

[www.amsterdamcreativeindustries.com/
project/vr-storytelling](http://www.amsterdamcreativeindustries.com/project/vr-storytelling)

Time

May 2016 – May 2018

Play & Civic Media Researchers

Mirjam Vosmeer

Project Lead

Amsterdam University of Applied Sciences
(Mirjam Vosmeer)

Financed by

SIA RAAK

Research Partners

VU, Nederlandse Filmacademie, HKU

Project Partners

AVROTROS, WeMakeVR

Additional Parties involved

Purple Pill, IDFA DocLab



In 2016, the Lectorate received a grant from SIA RAAK to set up a research project on the topic of Storytelling for 360° media. This project is set up as a collaboration with The Netherlands Film Academy and ten industry partners from the field of VR.

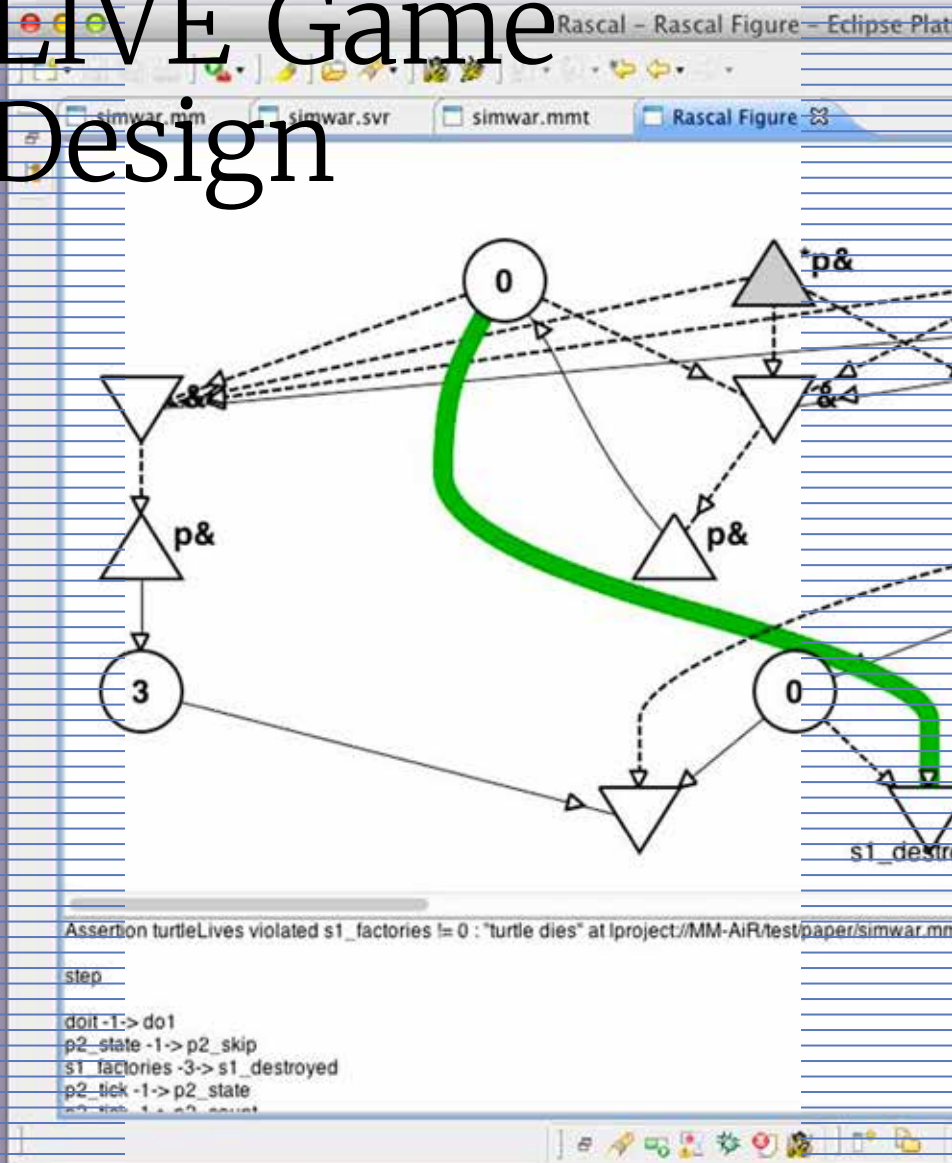
In this research project, we focus on the basics of VR storytelling. We intend to isolate small elements of the language of VR, and investigate how they work and what impact they may have on the audience. The research is set up as experiments in collaboration with industry partners and students, producing short VR movies that can be viewed as stand alone productions as well.



IDFA experiment

At IDFA 2016, we set up an experiment in collaboration with VPRO Tegenlicht and IDFA DocLab. During the documentary festival, attendants were asked to watch a short VR documentary, for which we had produced an alternative version to test the use of voice over in documentary VR. After watching the movie, viewers were asked to fill in a survey in which the level of immersion and engagement were measured.

LIVE Game Design



Website

livegamedesign.github.io

Time

May 2016 – May 2018

Play & Civic Media Researchers

Riemer van Rozen

Anders Bouwer

Stefan Leijnen

Project Lead

Amsterdam University of Applied Sciences
(Riemer van Rozen)

Financed by

Stichting Innovatie Alliantie (SIA), RAAK-MKB
Programme Co-financing by HvA, research partners &
business partners

Research Partners

Amsterdam University of Applied Sciences
Centrum Wiskunde & Informatica
TU Delft

Business Partners

12 Dutch Game Companies:

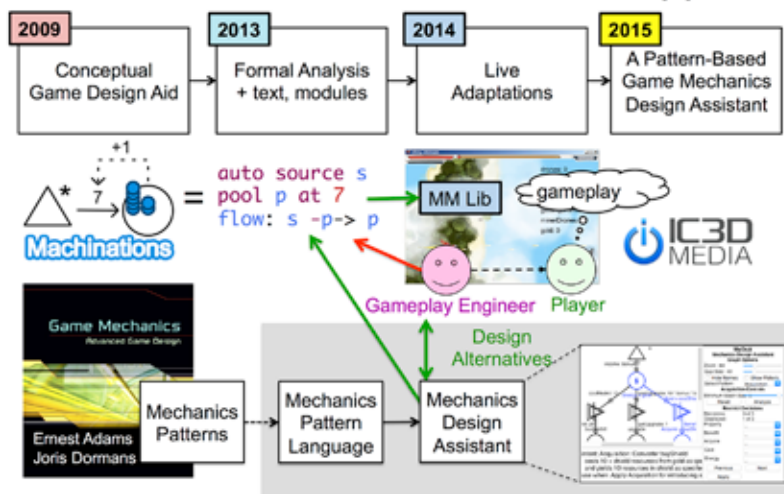
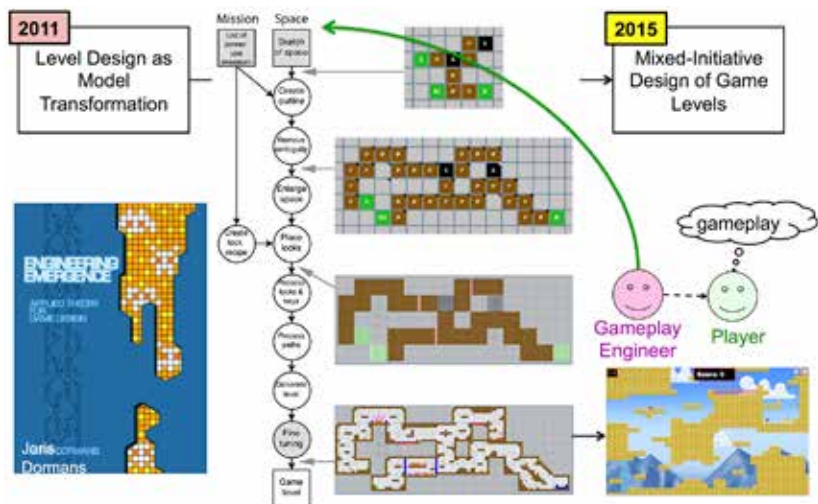
| | |
|-------------------|-------------------|
| Ludomotion | Firebrush Studios |
| IC3D Media | Paladin Studios |
| Ijsfontein | Codeglue |
| &Ranj | Little Chicken |
| Wild Card Games | FourceLabs |
| DoubleDutch Games | Virtual Play |

Additional Parties involved

| | |
|-------------------|-------------------------|
| Dutch Game Garden | Dutch Games Association |
|-------------------|-------------------------|

Advisory Group

University of California Santa Cruz
Anadrome Research



Live Intelligent Visual Environments for Game Design, or in short, LIVE Game Design, is a RAAK-MKB applied research project funded by the Dutch funding body SIA/NWO, co-financed by the HvA, research partners and business project partners. The project started in May 2016 and will run for two years, until May 2018. The goal of the project is to be able to adapt games across several dimensions in real time, in order to speed up the game design process. Techniques, methods, and tools will be created by the HvA together with the research partners. These will be applied and tested in three case studies involving real cases of business project partners.

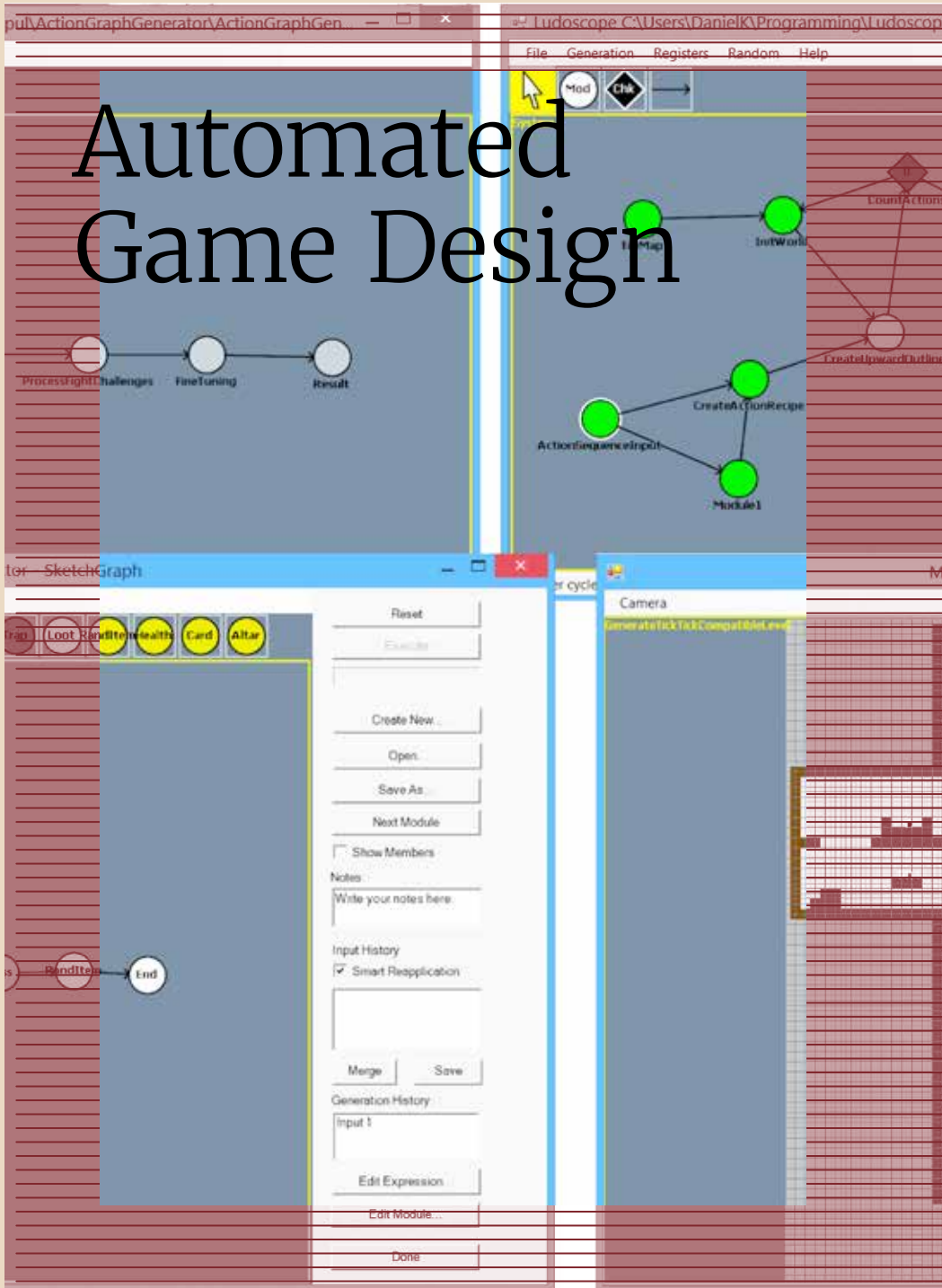
Important planned project results of three case studies are: show cases (game/software prototypes), usable *LIVE game design tools* that enable modifying elements of the show cases and provide immediate and continuous feed-back and feed-forward, and publications.



Project Symposium

On October 7th, 2016, the HvA organized the LIVE Game Design kick-off symposium, intended for project partners and interested game businesses. This symposium focused on formulating and refining research themes, involving business partners and creating co-ownership of future project results. Two more project symposia are planned during the course of the project, focusing on intermediate and end results of the project.

Automated Game Design



Website

www.automatedgamedesign.wordpress.com

Time

March 2013 – December 2015 (final report in March 2016)

Play & Civic Media Researchers

Anders Bouwer (project leader)

Joris Dormans (initial project leader, now at Ludomotion)

Riemer van Rozen

Stefan Leijnen

Daniël Karavolos (now at University of Malta)

Project Lead

Amsterdam University of Applied Sciences

(Joris Dormans; Anders Bouwer)

Financed by

Stichting Innovatie Alliantie (SIA), RAAK-MKB Programme

Co-financing by HvA, research partners & business partners

Research Partners

Amsterdam University of Applied Sciences, TU Delft, NHTV Breda

Business Partners

Dutch Game Companies participating in the project:

| | |
|----------|--------------------|
| Codeglue | Double Dutch Games |
|----------|--------------------|

| | |
|-------------------|------------|
| Firebrush Studios | FourceLabs |
|-------------------|------------|

| | |
|---------|---------------|
| Gamious | Grendel Games |
|---------|---------------|

| | |
|--------|------------|
| Hubbub | IC3D Media |
|--------|------------|

| | |
|----------------|------------|
| Little Chicken | Ludomotion |
|----------------|------------|

| | |
|-------------------|---------|
| Mijn naam is Haas | Paladin |
|-------------------|---------|

| | |
|-------|-----------------|
| &Ranj | Wild Card Games |
|-------|-----------------|

Additional Parties involved

Dutch Game Garden

Dutch Games Association

Advisory Group

University of California Santa Cruz

ITU Copenhagen

The Automated Game Design project was a RAAK-MKB applied research project funded by the Dutch funding body SIA/NWO, co-financed by the HvA, research partners and business project partners. The project started in March 2013 and ran for two years, until May 2015, but was extended for three months (October–December 2015), to be able to apply unused project resources for (1) the development of course and training material (2) evaluation of these educational materials, and (3) refinement and dissemination of the project results. The final report was delivered in March 2016, and the resulting course on Automated Game Design was introduced in the summer of 2016 (see Education).



Project Symposia and Conferences

In the course of the project, three project seminars have been organized by the HvA:

The first seminar, on 20 November 2013,
at HvA Duivendrechtsekade, Amsterdam

The second seminar, on 17 September 2014,
at CASA 400, Amsterdam

The third and final seminar, on 8 July 2015,
at Volkshotel, Amsterdam

In addition, the HvA has presented project results at several conferences, including the Dutch Control Conference for game professionals, and several international conferences, including the Foundations of Digital Games Conference, the Procedural Content Generation Workshop, and several other AI-conferences in 2013, 2014 en 2015 [see Publications for details].

Three researchers of the HvA have also presented their project work at the symposium “What’s next for procedural content?”, organized in November 2014 by ITU Copenhagen, about the future of procedural content generation in games.

What became apparent at some of these events was that the HvA seems to be uniquely positioned by the strong collaboration and interaction between researchers with professional game designers from the Dutch game industry.



Ludoscope

Ludoscope originated from Dormans' work on engineering emergence, and modelling game design in terms of model transformations. In the Automated Game Design project, this work was extended by Daniël Karavolos et al., who addressed how to implement tools using these ideas, in order to support a game designer in a mixed-initiative setting. The idea behind this is to generate game levels for a platform game by first drawing a sketch of the space and a conceptual idea of the mission, and from this, iteratively refine the level design using model transformations by the computer, which are controlled, inspected, and if desired, edited by the human designer.



Machinations

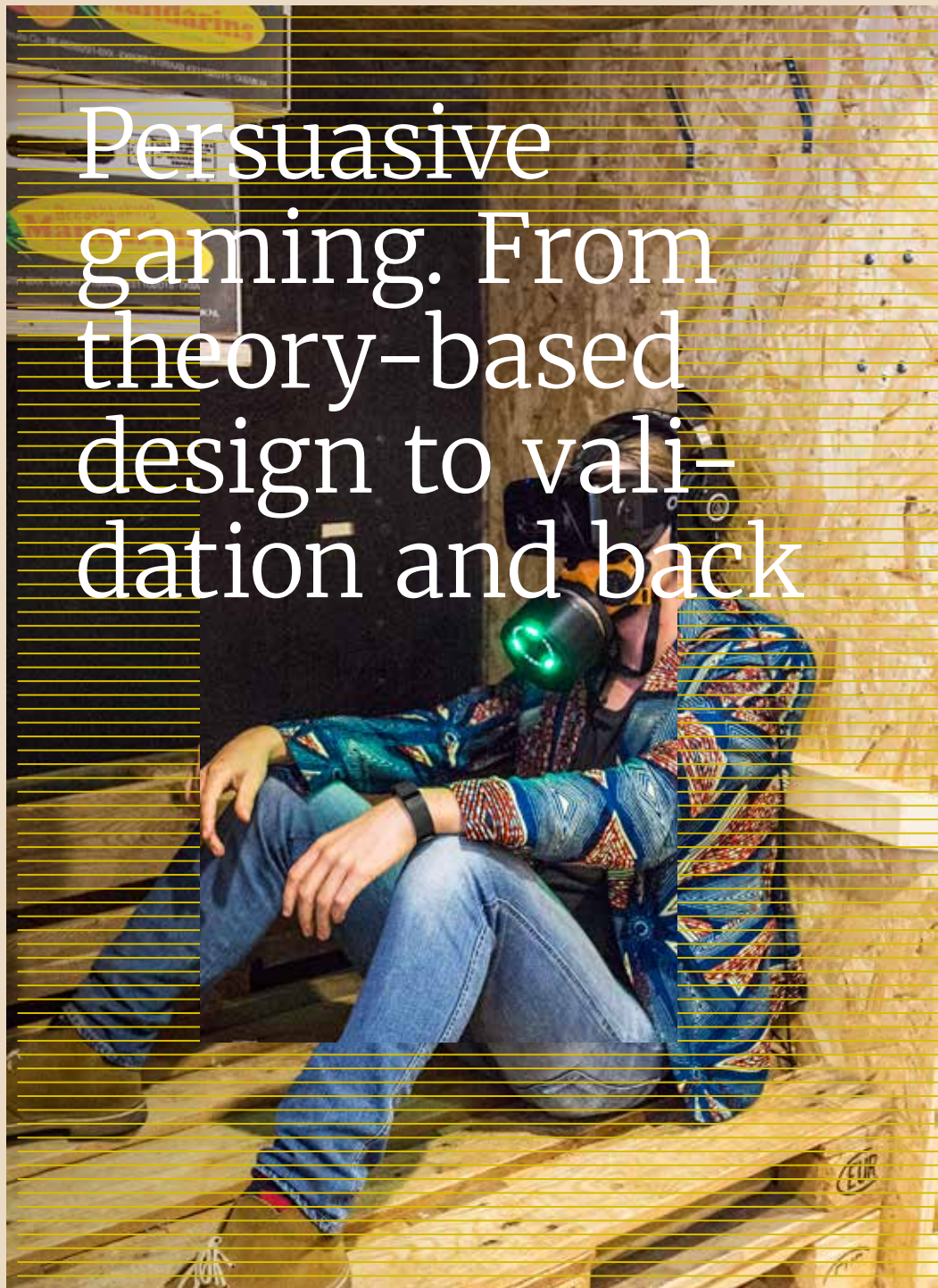
Machinations is a conceptual framework for modeling game mechanics that was described in Adams and Dormans' book 'Game Mechanics'. Within the project, Riemer van Rozen formalized the semantics of the design notation, which evolved into a visual programming language called Micro-Machinations intended for developing better games faster. As a result, behaviors of a game's rules can now be separately modeled and automatically analyzed while prototyping and play testing. This work is foundational for live adaptations of game mechanics, enabling game designers to iteratively improve the rules of running software prototypes with tool-predicted quality.



Workshop game storytelling in open world games

As an extension of the automated game design research, Joris Dormans and Karel Millenaar came up with a workshop to generate ideas on how to design interesting structures to meld storytelling and open world games. The workshops have been given several times at the minor game design of the HvA, the play design course at Interactive Performance Design of the HKU, and in 2015 it was given at SxSW. At this time it is being developed as game design prototyping tool.

Persuasive gaming. From theory-based design to vali- dation and back



Website

www.persuasivegaming.nl

Time

2013–2018

Play & Civic Media Researchers

Martijn Kors
Ben Schouten

Project Lead

Utrecht University (Joost Raessens);
Eindhoven University of Technology
(Ben Schouten); Erasmus University
Rotterdam (Jeroen Jansz)

Financed by

The Netherlands Organisation
for Scientific Research

Research Partners

Joost Raessens (UU); Teresa de la Hera
(UU);
Jeroen Jansz (EUR); Ruud Jacobs (EUR)

Project Partners

IJsfontein; Submarine

The “Persuasive Gaming in Context” project (2013–2018) is a collaboration between Utrecht University, Eindhoven University of Technology, Amsterdam University of Applied Sciences, Erasmus University Rotterdam, IJsfontein, Submarine, and funded by the The Netherlands Organisation for Scientific Research (NWO). The research in this project is concerned with the characteristics, design principles, and effectiveness of Persuasive Games. Persuasive Games are interactive entertainment designed to shape how the player thinks and feels about issues in reality, or simply games designed with the intent to shape player’s attitudes.

Theoretically, we develop the innovative approach of a constant and intense interaction between what is drawn from theory with the actual design of game experiences. By following a Research through Design approach, we generate knowledge through the design of exemplar persuasive games. Driven by industry we currently focus on the opportunities of immersive multi-sensory experiences to support the transfer of persuasive messages in games, and subsequently question what design strategies are successful for the persuasive game design process.



A Breathtaking Journey

A Breathtaking Journey (ABTJ) is a mixed-reality game designed to raise empathy and shape attitudes towards refugees. ABTJ was born out of a project with Amnesty International in the Netherlands in which we set the objective to explore how interactive entertainment could help motivate people to change or reinforce attitudes towards human rights related issues. ABTJ places the player in the shoes of a refugee who is fleeing from a war-torn country, hiding in the back of a truck, to reach a safe haven. Throughout the experience the player is subjected to a series of uncomfortable events, representing a glimpse of the stressful journey of a refugee to reach a safe haven. The physical recreation of the truck offers the player a multi-sensory experience in which she can touch the super-imposed environment and its materials, feel the truck shaking and experience the tactility of falling objects, smell particular

scents, and use their own breath to determine whether one will get caught or not. The game has been developed to study the influence of multi-sensory immersive experiences on presence, empathy and ultimately on attitude change. In 2015 the project was selected as 'best of VR Days' and in 2016 its companion full-paper received an honorable award at the 2016 Annual Symposium on Computer-Human Interaction in Play.

Project Presentation at Public Events

Dutch VR Days, 2015

Bright Day, 2015

Groninger Forum: Virtual Playground, 2015

Culturele Zondag, 2016

Night of the Nerds, 2016

Festival De Beschaving, 2016

Dutch Design Week, 2016

Featured in Media

NTR De Kennis van Nu, 2016

NOS 8 o'clock New, 2015

NOS Airtime, 2015

RTL, 2015

Bright TV, 2015

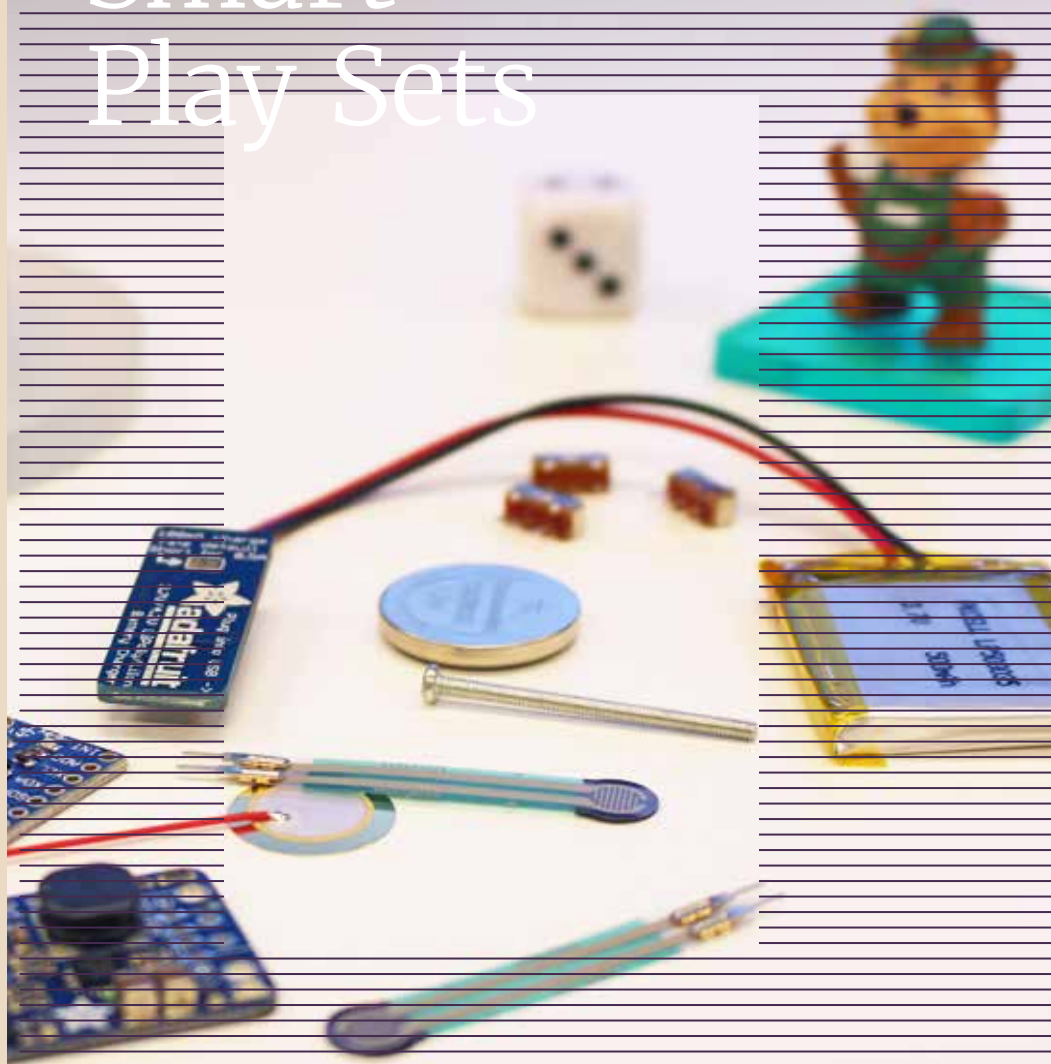
Radio EenVandaag, 2015

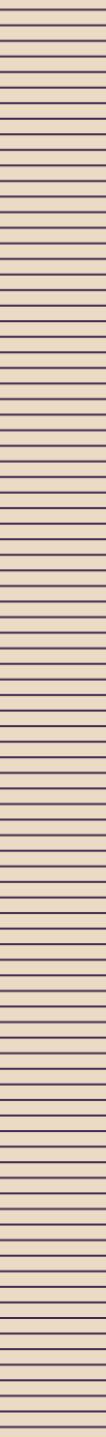


Hidden

Hidden is a mixed-reality game to raise empathy for evacuees of the 2011 Fukushima Daiichi Power Plant disaster in Japan, and intends to shape attitudes for the discontinuation of nuclear energy. The project is currently in development and will premiere in September in 2017 at the Fukushima Film Festival in Japan. The game presents a persuasive message about the dystopian consequences of nuclear accidents with in particular their impact on the environment and society through the eyes of a evacuee currently living in temporary housing. The project follows a Research through Design approach in which knowledge is generated through making practises, in which documentation and design reflection are integrated in the production process. In this project we study the design opportunities of immersive technology, in particular that of multi-sensory experiences, for raising empathy and shaping attitudes.

Smart Play Sets





Time

2016–2017

Play & Civic Media Researchers

Gabriele Ferri

Svetlana Mironcika

Ben Schouten

Luis Rodil-Fernández

Project Lead

Amsterdam University of Applied Sciences

(Ben Kröse; Ben Schouten; Huub

Toussaint; Antoine de Schipper)

Financed by

COMMIT

Research Partners

Lectoraat Human Movement Science

Lectoraat Digital Life

Project Partners

Janssen Fritsen

NYOYN





The Smart Play Sets–COMMIT project focuses on the early detection of derailment of the healthy development of motor skills in primary school children through Smart Play Sets. These play sets are on the one hand capable to provide a high level diagnosis through sensors and captured data and on the other hand to engage children in physical activities that are fun to do and offer relevant exercises for care and cure.

Each child develops fine motor skills at his own pace. To ensure an optimal skill development pace, a child should receive individual attention in skills assessment and training. Games can help transform a process of motor skills assessment into a fun and enjoyable activity. Such games can support teachers and parents to detect deficiencies in motor skills development of children in an early stage.

In this project we explore design opportunities for games that assess a child's motor skills and offer adaptive games to support skill development for each individual child. To verify the feasibility of our vision we have designed and deployed several toy prototypes equipped with sensors.

Games 4 Therapy



Website

www.games4therapy.info

Time

2015–2016

Play & Civic Media Researchers

Ben Schouten
Gabriele Ferri

Project Lead

Fontys Hogeschool
(Wouter Sluis-Thiescheffer)

Financed by

RAAK Publiek

Research Partners

Hogeschool van Amsterdam
Zuyd Hogeschool

Project Partners

GGzE
Mondriaan
Kenniscentrum Kinder en
Jeugdpsychiatrie
Ijsfontein
De Bascule



The Games For Therapy project explores design solutions for blending face-to-face psychological therapy with digital interventions, within a 2-years RAAK grant from the Dutch government. It leverages playful design, with the objective of producing tools that are at the same time compelling and empowering, and effective in supporting professional psychological therapy. G4T addresses teenagers with problematic externalizing behaviors, such as aggression, hyperactivity, or substance abuse.

G4T is a distributed project across a network of institutions, bringing together design education, research and healthcare. It adopts a “Research through Design” approach, extrapolating practical design knowledge (such as insights on users’ needs, best practices, and a design framework) from producing, testing and iterating upon prototypes. As an overall outcome, we aim at generalizing our design insights and formulate a more effective framework that could be adopted for the creation and evaluation of a broader variety of blended therapy tools.

Gabriele Ferri was “project owner” for the course in Persuasive Design at HvA (teacher: Marjolijn Ruyg), together with pediatric psychotherapists from De Bascule. Students in that class ideated, developed and tested some conceptual prototypes for games for CBT (Cognitive Behavioural Therapy). The analysis of those games and of the design process was documented in the paper “Playful Cognitive Behavioral Therapy Apps: Design Concepts and Tactics for Engaging Young Patients”, presented at the ACM Interaction Design and Children conference.

Interactive photo sharing to support 21st Century Learning



Time

2016–2017

Play & Civic Media Researchers

Marije ten Brink (pre-promovendus)

Ben Schouten (promotor)

Project Lead

Amsterdam University of Applied Sciences
(Marije ten Brink)

Financed by

ACIN

Co-financed by HvA

Research Partners

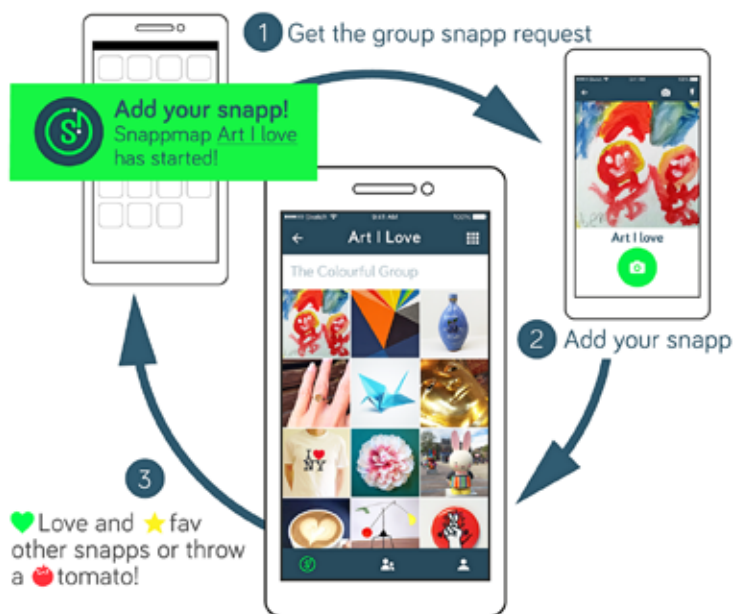
Citizen Data Lab

Project Partners

AMFI, HvA

Additional Parties involved

Het Nieuwe Instituut



How to design and use social interactive technologies for photo sharing to support 21st century learning? This is the main question addressed in the proposed PhD. It connects the field of interaction design and trends in (digital) visual culture and communication with the latest insights in education. The goal is to establish effective interface and technology solutions as well as guidelines and working materials for actual 21st century learning scenarios.



Snapphthis

www.snapphthis.com

A fully functioning mobile application for Android as well as for iOS has been developed: Snapphthis. With Snapphthis, *photo mind maps* (snappmaps) are created, together with a group. Group members create, share and reflect upon the photos, playfully revealing and discovering personal stories and values of the other group members. Testing and iterating Snapphthis, while using it as a design probe within different contexts this research wants to find out how 21st Century Learning can be facilitated, such as creative thinking and critical reflection.



Round N Around workshop for a bikeable San Paulo, in Sao Paulo

Supported by Snapphthis, members of the biking community in Sao Paulo *photo-mapped* the opportunities and challenges for improving the biking culture in this city. The photos were discussed in the workshop with all group members and insights - clustered in design challenges - were used to inspire the second workshop. The results are published in the publication 'A Collaborative Action for a Bikeable Sao Paulo'.

Co-Creating Responsive Urban Spaces

An aerial photograph of a city, likely London, featuring the London Eye and a large stadium. The image is overlaid with a grid of horizontal lines and vibrant, glowing blue and purple digital lines that trace paths through the urban landscape, suggesting data flow or digital connectivity.

Website

www.responsiveurbanspaces.amsterdam

Time

2016–2018

Play & Civic Media Researchers

Martijn de Waal

Gabriele Ferri

Project Lead

Lectorate Bouwtransformatie; Amsterdam University of Applied Sciences (Frank Suurenbroek)

Financed by

RAAK

Research Partners

Lectorate Crossmedia

Amsterdam University of Applied Sciences

Project Partners

Ax710 in collaboration with NP3; Northernlight; Pronorm; IJsfontein; Info.nl; Golfstromen; Foodjoy; Ledwork; Entangle; Design by Nine; Space & Matter; IAA stedenbouw en Landschap; AKKA architecten; Amsterdam ArenA; Heineken Music Hall / Afas live; Holiday Inn Express; Villa Arena; TU Delft – Faculteit Transport & Planning; Universiteit van Amsterdam – Big Data; Universiteit van Amsterdam – Urban Cycling Institute; Gemeente Amsterdam – Stadsdeel Zuid-Oost; Stichting Partners ArenAPoort; Beroepsvereniging van Nederlandse Stedebouwkundigen en Planologen; De Levende stad; Amsterdam Smart City



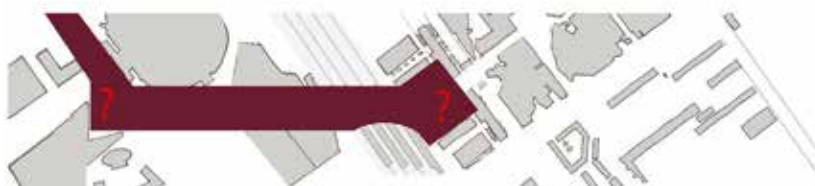
Arena Boulevard



Champ-Élysées

BEREIKBAARHEID |

- motorvoertuig
- fietswiel
- rolstoel
- pedalen



Arena Boulevard



Champ-Élysées

OPENBARE RUIJTE |

- primaire openbare ruimte
- secundaire openbare ruimte
- belemmeringsvrij

How can interactive and responsive media objects and platforms increase the sense of place and the quality of public spaces? That question is addressed in the context of the Arena Boulevard in Amsterdam. This shopping and leisure boulevard near the main stadium and concert venues in Amsterdam has a number of specific characteristics. It is designed to accommodate large crowds during events. However in off-peak periods, many users find it an inhospitable place, that for some even feels unsafe.

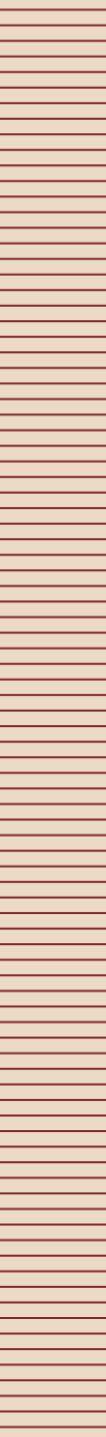
The Lectorate of Play & Civic Media is interested in the usage of interactive and responsive media as digital placemaking tools. What design aspects could enhance the quality of public spaces?

The project has a Research through Design-approach. After a spatial analysis and mapping of current uses and experiences of the Arena BLVD, a coalition of researchers, local stakeholders and interactive design offices and offices for spatial planning and architecture will design a number of prototypes that will be tested on site.

The project started in the fall of 2016. The contribution of the Lectorate of Play & Civic Media so far has consisted of running a number of design studios in the education programme of Communication and Multimedia Design. From 2017 on we will play a role in the design process and evaluation of the prototypes.

Street Values (Straatwaarden)





Website

[www.reinwardtcommunity.nl/nl/
page/15821](http://www.reinwardtcommunity.nl/nl/page/15821)

Time

2016

Play & Civic Media Researchers

Martijn de Waal

Project Lead

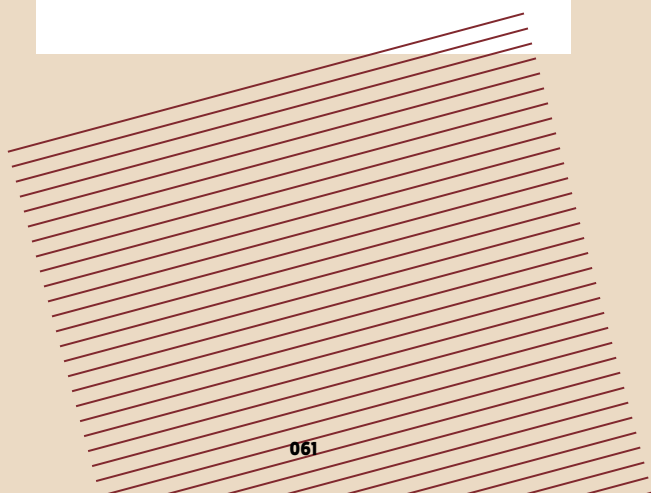
Reinwardt Academy
(Riemer Knoop; Nancy van Asseldonk)

Financed by

ACIN

Project Partners

Sustainism Lab (Michiel Schwarz)
Gordion Cultureel Advies
The Beach Company



Street Values (Straatwaarden) is a research project initiated by the Reinwardt Academy in Amsterdam and Sustainism Lab, carried out in cooperation with the Lectorate of Play & Civic Media. Over the last few years, many institutions in the fields of art, culture and heritage have seen their surroundings change considerably. Their position as cultural authorities is no longer taken for granted; societal changes as well as changing expectations of audiences have led them to reconsider their role. How can they remain relevant as institutions in the 21st Century?



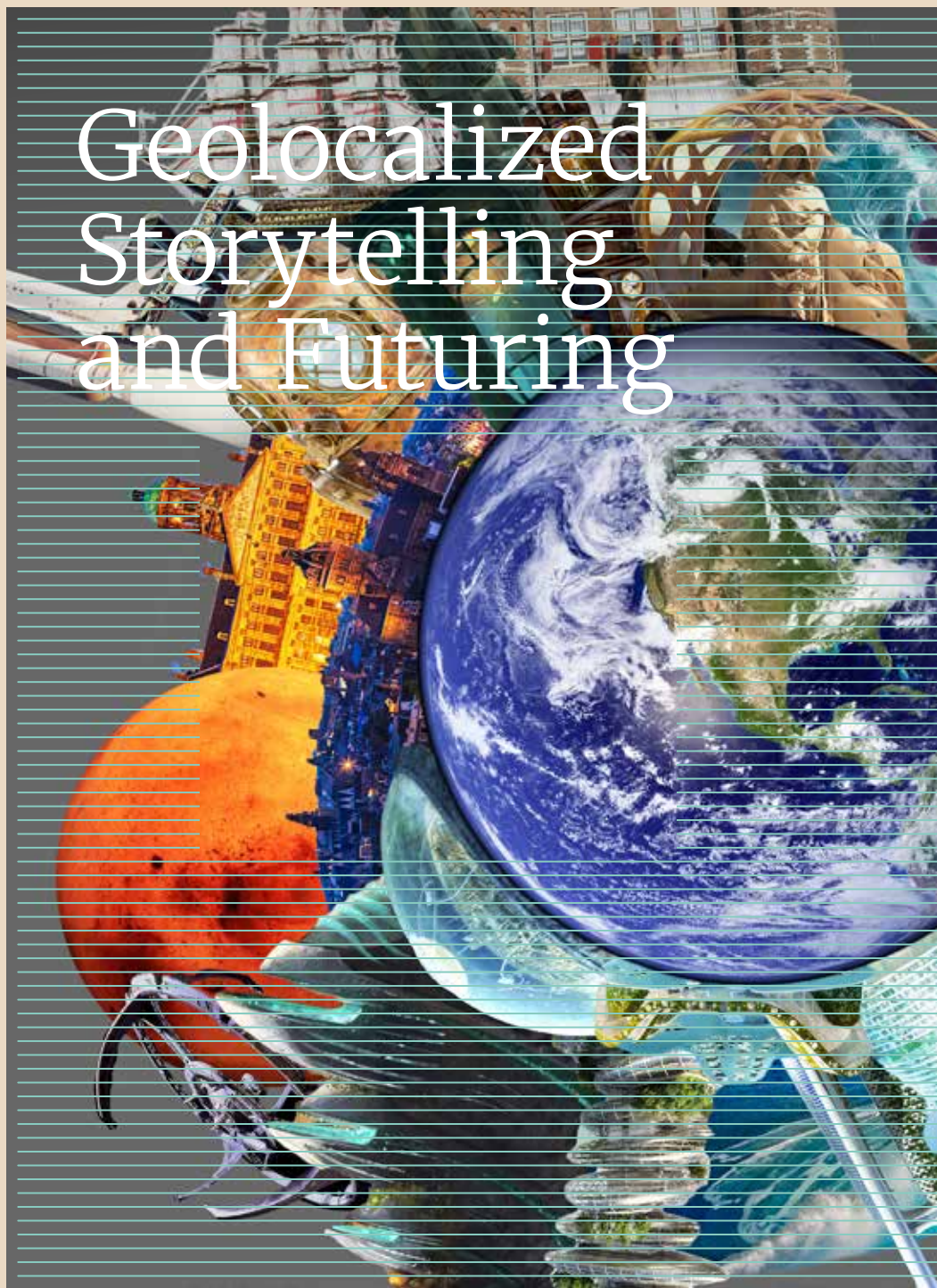
In that context, Street Values looks at the relation between heritage and placemaking and the role that heritage professionals could take in a network society. Starting point is the socially sustainable 'sustainist' perspective, developed by Michiel Schwarz. The interest for the Lectorate of Play & Civic Media lies in the potential for citizen empowerment in these processes. Could citizens be given a greater role in the production of heritage? Or, the other way around: can heritage professionals make heritage productive in the context of civic issues? The project has led to a publication in the spring of 2017 presenting the main findings as well as an agenda with input for the future development of the heritage sector.



Research Ateliers

The changing relationships between heritage, space and community and civic organization were explored in three research ateliers, each centering on a different theme: placemaking, commons and co-design. Various actors from the sectors of heritage, social design, the arts and civic organization presented their experiences with opening up the 'making' of heritage to broader audiences, and discussed what that shift meant for their profession.

Geolocalized Storytelling and Futuring



Website

www.submerged2017.wordpress.com

Time

2016

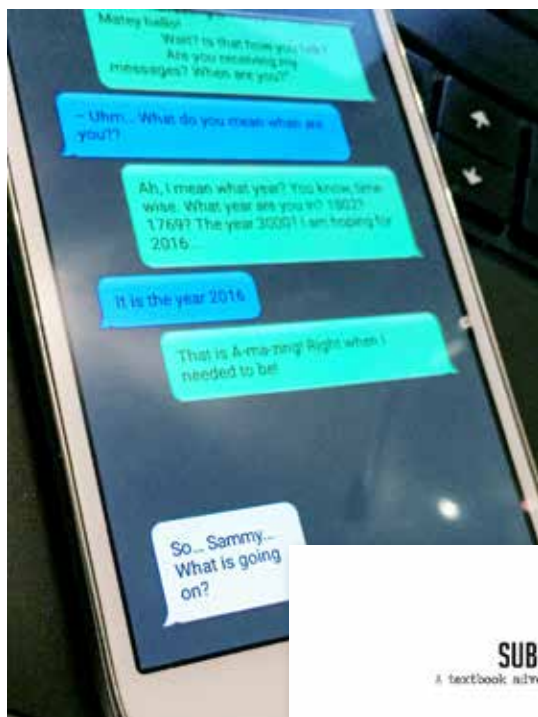
Play & Civic Media Researchers

Gabriele Ferri

Genevieve Korte

Project Lead

Amsterdam University of Applied Sciences
(Gabriele Ferri)



The Geolocalized Storytelling and Futuring project is an exploratory and experimental project carried out as a stepping stone towards possible further grant applications and research initiatives. It examines ways of gathering research data on future scenarios through the use of a “geolocalized app” (e.g. a mobile application that reacts to the user’s location) that tells an interactive narrative. The hypothesis is that by collecting research data from participants that are physically situated in the location they imagine in a possible future is qualitatively different from doing so in a workshop setting. In other words, we hypothesize that developing a future scenario while being immersed in a specific context may yield better results than doing so in abstract.

As a preliminary exploration of this problem space, Gabriele Ferri was “project owner” in the Minor in “Mobile Development” (faculty ICT, teacher: Marco Marcellis). A team of students, hosted by Info.nl (referent: Iskander Smit) was tasked with creating a smartphone app that would tell an interactive story while reacting to GPS coordinates.

Later, Gabriele Ferri tutored Genevieve Korte (research intern at Play & Civic Media) in creating an interactive story using the app, and in playtesting and documenting the outputs.

The app has been demoed so far at the Games for Cities training school, and further grant applications will use it as a “proof of concept” towards further research.

A woman in a black dress is holding a large red sign high above her head with both arms. The sign has white text and numbers. The background is a blurred outdoor setting with other people and structures. The text 'Round n' is at the top, followed by 'Around. A Collaborative Action for a Bikeable Sao Paulo' in a large, white, serif font.

Round n Around. A Collaborative Action for a Bikeable Sao Paulo

Website

www.roundnaroundblog.wordpress.com

Time

2016

Play & Civic Media Researchers

Martijn de Waal
Marije ten Brink
Loes Bogers
Gabriele Colombo

Project Lead

Het Nieuwe Instituut
(Floor van Spaendonck)

Financed by

Het Nieuwe Instituut

Research Partners

Inovalab University of Sao Paulo
(dr. Andre Leme Fleury)

Project Partners

Dom Producao
(Gisela Domschke)

Additional Partners

City of Amsterdam; Consulate General of
the Netherlands, Sao Paulo; EBAC; Sala
Crisantempo; Cyclespace; Ciclocidade,
Bike Anjo; SP Tech Week.

How can we increase the usage of bikes in São Paulo as alternative means for transport? How can we make the city more welcoming to cyclists and bikes? And how can we further employ the usage of urban data and social media to promote biking in São Paulo? These were the main questions addressed in the Round N Around project.

Researchers from the Lectorate of Play & Civic Media and the Citizen Data Lab were invited by Het Nieuwe Instituut (the national institute for architecture, design and e-culture in The Netherlands) to take part in this exchange programme between Brazil and The Netherlands. Our contribution consisted of the organization of two workshops and a conference in which we explored opportunities of digital media for citizen empowerment around the theme of cycling.



Workshops and Conference in Sao Paulo

The project was launched by Amsterdam mayor Van der Laan on an official visit to Sao Paulo in June 2016 and followed up by two workshops in the fall of that year. In the first workshop we used the Snappthis-app that was developed by AUAS-researcher Marije ten Brink as a tool for location based collaborative issue mapping. With the help of this tool, members of the biking community mapped the opportunities and challenges for improving the biking culture in Sao Paulo. In a second workshop, we used a design thinking methodology to develop new media campaigns that build upon the findings of the first workshop. The second workshop was organized in the context of the Sao Paulo Tech Week and accompanied by a public conference on 'urban tactics and the appropriation of public space.'

Findings & Outcomes

In the first workshop, participants concluded that one of the main challenges to improve biking in Sao Paulo is as much a cultural one as a matter of providing more and better biking infrastructure. Although biking is on the increase in the city, many people are still hesitant to ride their bikes, and if they do, they do so mainly for recreational uses. Public support

for further investment in biking infrastructure is also weak, as many car drivers see it as a waste of money while also decreasing the scarce space for cars. In the second workshop five probes were designed that addressed these issues. A variety of new media storytelling and campaigning techniques were employed to target women cyclists, explain the city wide benefits of biking such as clean air and less congestion to both drivers and prospective bikers, and educate both bikers and drivers to show more respect toward each other. The probes were presented and discussed during a public event, at which also a representative of the city was present. The outcomes were also discussed with the Sao Paulo mobility lab - a government sponsored incubator focussing on mobility solutions.



Publication A Collaborative Action for a Bikeable Sao Paulo

The outcomes of the workshops are documented in a publication. This publication features descriptions of the prototypes that were developed in the second workshop as well as a number of essays on the issue of biking in Sao Paulo and the use of civic media and urban data for the promotion of a public cause.



Games for Cities. Exploring How Games Improve Citymaking.



Website

www.gamesforcities.com

Time

2016–2017

Play & Civic Media Researchers

Martijn de Waal

Gabriele Ferri

Ben Schouten

Project Lead

Play the City Foundation

(Ekim Tan)

Financed by

Creative Industries Fund NL

Research Partners

Utrecht University

TU Delft The Why Factory

Project Partners

The Mobile City Foundation

Additional Partners

City of Amsterdam

City of Utrecht

City of Amsterdam

Pakhuis de Zwijger

Het Nieuwe Instituut

Designhuis

The Lectorate of Play & Civic Media is an academic partner in the Games for Cities project initiated by the Play the City Foundation. In this programme, three local city governments in The Netherlands will collaborate with game designers and researchers to explore the use of city games as a tool for collaborative practices of city making that include citizens in processes of urban planning.

The programme has three goals

1. To produce a guidebook for policy makers and regulators to employ city gaming in their daily work.
2. To activate and grow of the City Gaming community through public events and an online network.
3. To create a comprehensive City Gaming database on the Games for Cities website.

The main activities of the programme are centered around City Game Jams in the cities of Eindhoven, Amsterdam and Utrecht. For these game jams, game designers and other professionals are invited to prototype a game that addresses a theme specifically set for that city. Each game jam is accompanied by a 'City Game Talk Show', a public event in which game designers and commissioners exchange their experiences. The programme will be finished by a large international conference in the spring of 2017 in Het Nieuwe Instituut in Rotterdam. The challenges addressed are The Circular City for Amsterdam, The Inclusive City for Utrecht and Citizen City for Eindhoven.



**Games for Cities
Training School on the Circular City**

In October 2016, the Lectorate of Play & Civic Media organized the Amsterdam City Game Jam. This event was organized as the Games for Cities Training School, in close cooperation with the EU COST Action TU 1306 Cyberparks. Out of more than 120 applications, we selected 20 participants that in the course of one week took up a challenge related to the circular economy brought in by an actual stakeholder. The AMS Institute invited participants to come up with a game that would bring the issue of urban mining to the attention of a wider public.

Metabolic and the Amsterdam University of Applied Sciences were looking for a game that would engage a larger public with their Noordooft-project, an area in the North of Amsterdam that is to serve as a prototype for circular community food production. Researchers from Utrecht University wanted to see if gaming could be used to reframe the issue of water as a communal, commons-based issue rather than a problem that the government should solve. Waag Society asked participants to invent new ways in which urban data about environmental issues such as air quality can be used to activate people to change their behavior, rather than just inform them. And finally WASTEDlab was looking for ways to engage and reward citizens in their plastic recycling project through game techniques. The training school included lectures, playing sessions and two public events: a City Game Talk Show and the presentation of the final probes designed by the participants, both took place at Pakhuis de Zwijger.



The Inclusive City Game Jam and Talk Show

In November 2016, in Utrecht a smaller game jam and talk show were organized in Utrecht Overvecht. Here a first version of a game was designed that will be further developed in the beginning of 2017. This game aims to help residents understand current and historical realities of the neighbourhood through residents accounts, while working towards an inclusive future with new inhabitants. The aim is for a serious and playful process that involves representing the neighbourhood both spatially and socially. Imagine the construction of mutual agreements and partnerships about the physical use of public spaces such as parks, or information concerning the availability of housing, the encouragement of entrepreneurship, the exchange of skills between residents, or simply the acquaintances made across the game board. All of these could contribute towards decreasing tension between various social groups.

An aerial photograph of an urban landscape, likely Rotterdam, featuring a complex network of streets and buildings. Overlaid on this is a digital visualization consisting of numerous small, colorful 3D rectangular blocks in shades of yellow, orange, green, and blue. These blocks are interconnected by a web of thin, glowing lines in blue, green, and yellow, suggesting a data network or a collaborative urban planning tool. The text is superimposed on the upper left portion of this image.

The Hackable City. Collaborative Citymaking in Urban Living Lab Buiksloterham

Website

www.thehackablecity.nl

Time

2015–2016

Play & Civic Media Researchers

Martijn de Waal

Ben Schouten

Karel Millenaar

Gabriele Ferri

Project Lead

University of Amsterdam

(Martijn de Waal)

Financed by

Netherlands Organization
for Scientific Research (NWO)

Research Partners

Utrecht University

(Michiel de Lange)

Project Partners

Ministry of the Interior and
Kingdom Relations

One Architecture

Pakhuis de Zwijger

Stadslab Buiksloterham

Additional Partners

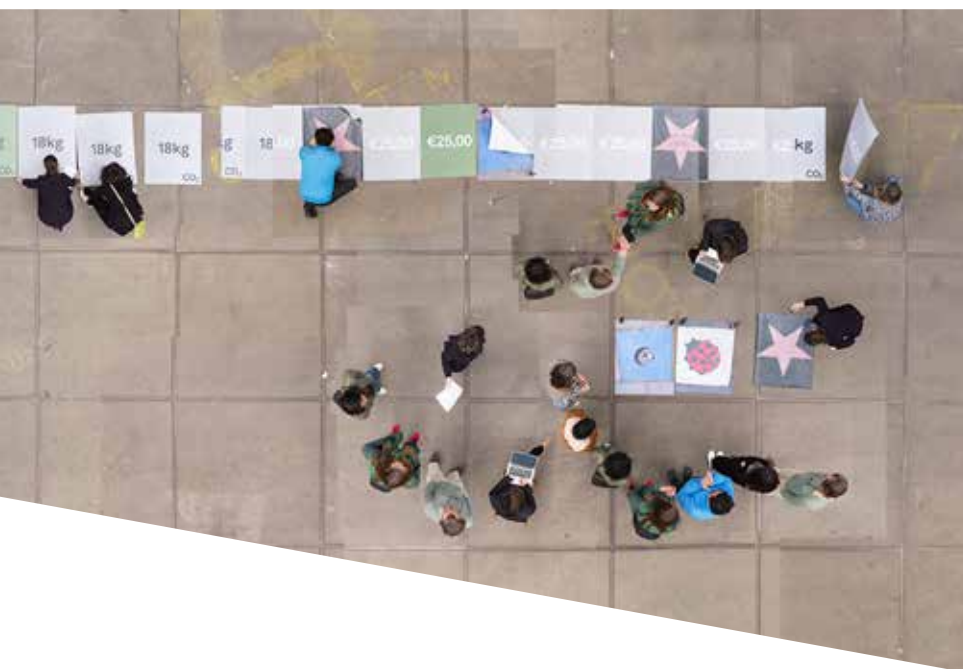
Delva Landscape Architects

Studio Ninedots



The Hackable City is a research-through-design project that explores new forms of collaborative citymaking. The team's primary case study is Buiksloterham, a brownfield regeneration project in Northern Amsterdam. The goal is to understand the opportunities as well as challenges of new media technologies for an open, democratic process of collaborative citymaking. How can citizens, design professionals, local government institutions and others employ digital media platforms in collaborative processes of urban planning, management and social organization, to contribute to a liveable and resilient city, with a strong social fabric?

These questions were addressed through the design of a number of probes as well as by being immersed in the development of the area. Most of the probes were designed by embedded researchers working at the office of One Architecture, an office for architecture that is one of the stakeholders in the development of Buiksloterham. In addition, many interviews and expert sessions were held with future residents, stakeholders and outside experts.



Findings

One of the main outcomes of the project is the Hackable City-model, that can be used to analyze citymaking processes as well as in the management of projects or the design of policy. The model shows how in a hackable city, individuals are organized into collectives around particular themes (such as water management, self-building, collaborative area development). Often professionals play an important role in the organization of these collectives. In turn, these collectives operate in (legal) frameworks set by institutions of local government that can create policies to either stimulate or prohibit particular forms of collective action.

5 design probes

A total of five probes were developed in this research project, each very different in scope and methodology applied. These probes included The City Innovation Game - a game for collaborative agenda building around urban development; The Neighborhood - a game that allows players to start building scenarios for collaborative resource management around water issues; The International Building Exhibition-app; a platform for knowledge sharing for self-builders and a round of discussions and workshops on the mapping of public and private gains in collaborative area development.

The Water Game

In the research project The Hackable City, this workshop game was developed with the purpose to let participants creatively connect in a short time. Karel Millenaar designed this game to allow participants to apply their knowledge relevant to the process of water management in the city in a playful creative way. Using drawing and storytelling, participants play out the actions of the role they have chosen to deal with a particular dilemma in the city. The result is a creative illustrated map of the solutions the participants actions.

23 International Architecture Biennale Rotterdam 23 april – 10 juli 2016

The Hackable City research team has teamed up with Delva Landscape Architects, Studio Ninedots and Stadslab Buiksloterham to contribute an exhibit to the IABR 2016 titled Hackable Cityplot. In this installation, the story of the collaborative development of Buiksloterham was told through a series of animations projects on a scale model of the area. During the exhibition, four expert meetings were organized in which strategies for collaborative citymaking in Buiksloterham were discussed further.



The Hackable City International

In 2016 the Hackable City organized an exchange programme with city-making communities in Shenzhen (China), Athens (Greece) and Sao Paulo (Brazil). In each city, a mini-symposium was organized to discuss strategies and tactics of 'hackable citymaking' with local stakeholders, that was followed or preceded by site visits to local projects. A concluding event was organized in Rotterdam, as part of the International Architecture Biennale Rotterdam.



Hackable City Workshops & Debates

In 2016, The Hackable City team organized four events aimed at students and professionals.

Hackable City Workshop

Buiksloterham 19-22 January

Students of the Utrecht School of Arts visited the Hackable City project and developed prototypes in a week long workshop.

The Cultural Commons

Pakhuis de Zwijger 14 March

The Hackable City Research Manifesto was officially launched at this themed discussion night organized by Pakhuis de Zwijger.

Recoded City: Co-creating, Urban Futures

Pakhuis de Zwijger 14 June

Lucy Bullivant and Thomas Ermacora presented their book Recoded City and discussed 'hackable city making-strategies'.

Hackable City Workshop

Pittsburgh

Matthijs Bouw of One Architecture (research partner in the project) organized a workshop on hackable citymaking at Carnegie Mellon University.

Social Media and the Transformation of Public Space



Website

[www.knaw.nl/nl/actueel/agenda/
platformsamenleving](http://www.knaw.nl/nl/actueel/agenda/platformsamenleving)

Time

2013–2016

Play & Civic Media Researchers

Martijn de Waal

Project Lead

University of Amsterdam
(dr. Thomas Poell, prof. dr. Jose van Dijck)

Financed by

KNAW Over Grenzen
(Royal Netherlands Academy of
Arts and Sciences)

Research Partners

University of Amsterdam

Project Partners

WRR (Wetenschappelijke Raad voor
het Regeringsbeleid; Scientific Council
for Government Policy)



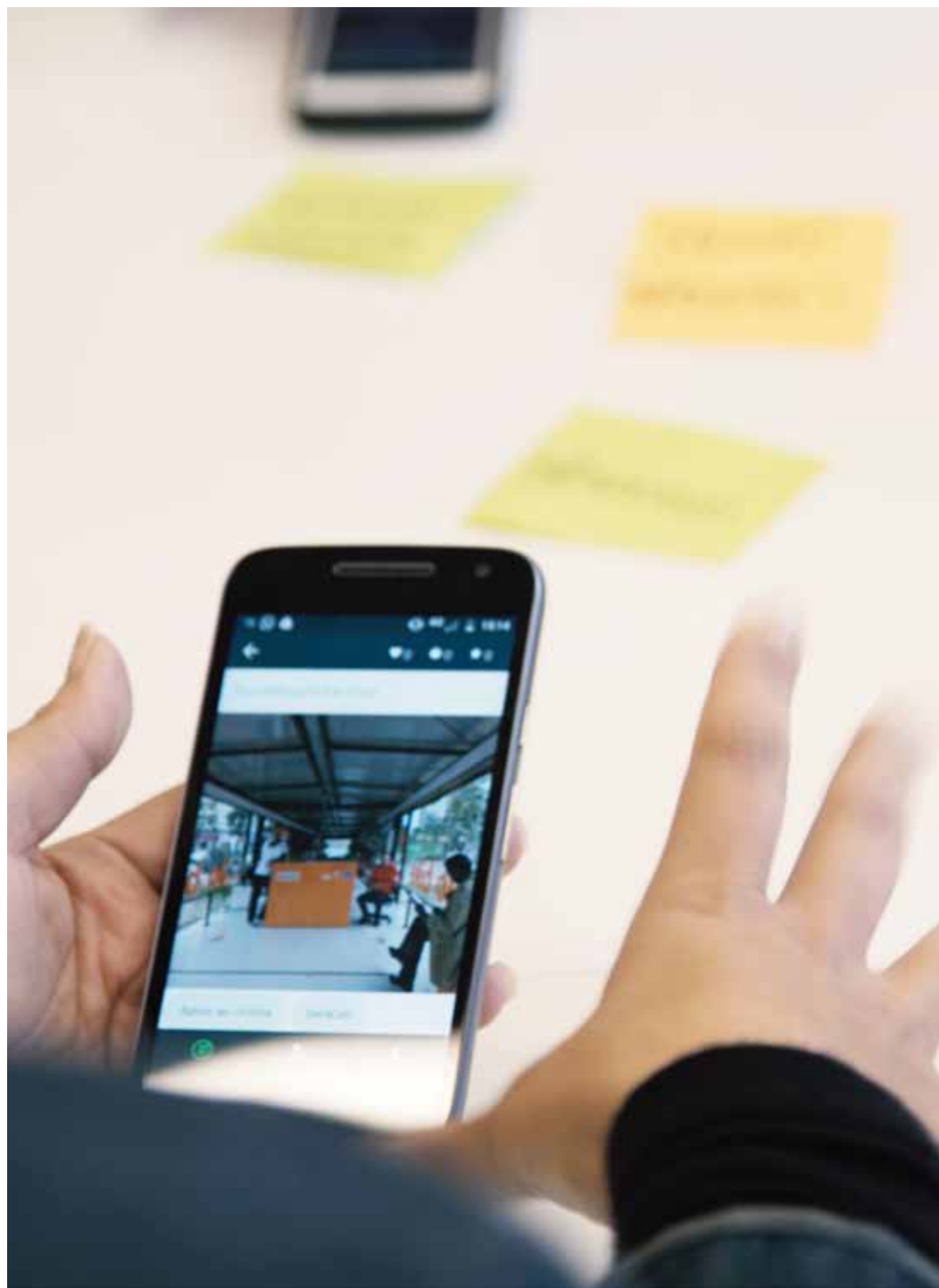
This research project critically investigates how public space is reconfigured in the new emerging ecosystem of social media and conventional mass media. The quick rise of social media has affected the balance between (private) space, community (public) space, and corporate (commercial) space, transforming not just the media ecosystem, but also other domains of public life.

This project investigates how major social media platforms, mostly steered by global commercial companies, in constant interaction with mainstream media, affect and reshape key areas of public communication as well as economic production and civic organization. Central issue is the notion of public values: how can public values be safeguarded in various domains of society when digital media platforms have started to take a central organizing role in these domains?



The Platform Society book

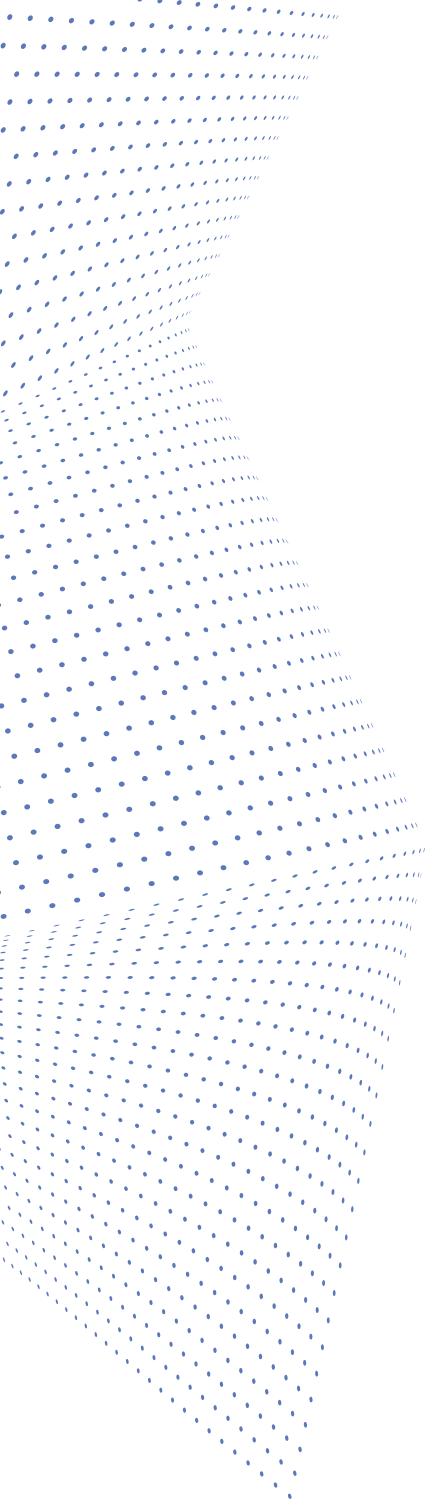
In the fall of 2016, the book *De Platformsamenleving. Strijd om publieke waarden in een online wereld*. [The Platform Society. The Struggle for Public Values in an Online World] was published by the Amsterdam University Press. The book was launched with a public debate at the Royal Netherlands Academy of Arts and Sciences. Currently, the research team is preparing an updated English edition of the book..





EDUCATION

The background of the page is a white surface covered with a grid of small, blue dots. These dots are arranged in a way that creates a strong three-dimensional perspective, making the grid appear to recede into the distance, forming a series of converging lines that meet at a vanishing point in the upper right corner.



The Lectorate of Play & Civic Media has the ambition to closely integrate its research in various educational programmes of the Amsterdam University of Applied Sciences. This works two ways around. Students play a role in the actual research projects, for instance by contributing to research by design-products, learning new research skills in the process. On the other hand, the insights and outcomes of our research are fed back into the curriculum through individual lectures or the co-development of educational modules with AUAS-teachers.

Current Research Projects Embedded in Education

Geolocalized Storytelling and Futuring @ MIC

Genevieve Korte (MIC Media Information and Creation, research intern at Play & Civic Media) was tutored in creating an interactive story using the Geolocalized Storytelling app.

Interactive Cinema @ AUAS Onderwijslab

A presentation was given at the Virtual Reality Theme-day of the HvA Onderwijslab

Storytelling for 360° media @ CMD

Expert feedback on VR insights was given about final projects of students in Persuasive Design (Communication and Multimedia Design)

Co-Creating Responsive Urban Spaces @ CMD

The Arena Boulevard was brought in as a design case in the module Persuasive Design for third year students of Communication and Multimedia Design.

Geolocalized Storytelling and Futuring @ HBO-ICT

Students in Mobile Development (Information and Communication Technologies ICT) were given the task to develop and test a mobile app that, interpreting a XML file, would tell an interactive story reacting to the user's location. This was carried out with the assistance of Info.nl (Iskander Smit).

Interactive Cinema @ MIC

A presentation was given to MIC students about our ongoing VR research and methodologies

Photo sharing for 21st Century Learning @ HBO-ICT

In the 18 weeks course *Enterprise Web Applications*, 18 ICT students were given the task to design and implement an online dashboard, to facilitate researchers with a dynamic view on the visual and statistic data collected by the mobile application Snappthis.

| | |
|---|--|
| <p>The Hackable City @ AUAS MA Urban Management</p> <p>A lecture was given to students of the MA in urban management on the Hackable City-model. How can citizens and governments work together in the process of citymaking?</p> | <p>The Hackable City @ AUAS Medialab</p> <p>Students in the AUAS Medialab were commissioned to design a prototype that would engage citizens in Amsterdam with the issue of sudden flooding due to the increase of heavy rain storms in The Netherlands. How can citizens be motivated to take measures that would prevent flooding?</p> |
| <p>Games 4 Therapy @ CMD</p> <p>Students in Persuasive Design (Communication and Multimedia Design) were tasked to ideate, develop, test and present concepts for playful applications to facilitate Cognitive-Behavioral Therapy in teenage patients.</p> | <p>Storytelling for 360°media @ AMFI</p> <p>A presentation was given for the VR minor Fashion Technology.</p> |
| <p>Live Game Design @ HBO-ICT</p> <p>Starting in the spring of 2017, two BSc research projects will commence, related to case studies within the Live Game Design project (2016–2018), involving researchers from the lectorate as well as business partners such as Firebrush Studios.</p> | <p>Automated Game Design @ HBO-ICT</p> <p>In the summer of 2016, the new course <i>Automated Game Design</i> was introduced, for students HBO-ICT specializing in Game Technology.</p> |
| <p>Photo sharing for 21st Century Learning @ AMFI</p> <p><i>Snapp the silhouette</i>: ± 60 visiting students from the London College of Fashion used Snapththis to create <i>photo-maps</i> of design principles and translated the results into tangible fashion design projects at AMFI.</p> | <p>Photo sharing for 21st Century Learning @ AMFI</p> <p><i>Snapp the neighborhood</i>: ± 450 students, divided into 16 groups, <i>photo-mapped</i> Amsterdam neighborhoods with the mobile app Snapththis, as part of the Introduction Programm of AMFI. All students presented and reflected upon the results, within their group and for other groups.</p> |

Contributions to Regular Education

Minor (Theme Semester) Mobile Development **[HBO-ICT]**

Since 2014, Anders Bouwer has been involved in development and coordination of the Minor (or Theme Semester) Mobile Development, intended for HBO-ICT students of the HvA, but also students from other disciplines, and even institutes from abroad. Courses that the lectorate is involved in include Mobile Design & Prototyping and Mobile Society, as well as the Mobile Development project.

Final Bachelor Projects **[Afstudeerprojecten, HBO-ICT]**

Several researchers of the Lectorate are coaching students during their final Bachelor thesis projects.

Final Bachelor Projects **[Afstudeerprojecten, CMD]**

Every semester 4 CMD students are coached by a researcher of the Lectorate in producing their final design projects, and writing their accompanying Bachelor thesis.

Creades, Minor Internet of Things **[HBO-ICT]**

In this minor, students are given an advanced course in design to augment the process in their group project. Karel Millenaar teaches students the use of a myriad of design tools to help students to master their own design process. Creativity, critical thinking and prototyping are a few of the many skills that are being practiced in this course.

Minor (Theme Semester) Game Technology **[HBO-ICT]**

The Minor (Theme Semester) Game Technology is intended for students HBO-ICT specializing in Game Technology, but also open to other students with a strong computer science background. Several researchers (Anders Bouwer, Stefan Leijnen, Riemer van Rozen) from the lectorate are involved in this minor, in particular in the Project Game Technology, the Research Design course, and the Automated Game Design course.

Minor (Theme Semester)
Game Design **[HBO-ICT]**

Within the Game Design specialization of the HBO-ICT programme, the Design Research course (which ran in 2016) involved students doing experimental game research, while using several researchers from the lectorate as research consultants. Since then, the whole curriculum of the minor has been redesigned to be centered around a realistic game design project. Several researchers from the lectorate are involved as lecturers (e.g., in the Research Design course) and were consulted during the development of the programme.

Automated Game Design Course
[HBO-ICT, Game Technology]

In the summer of 2016, the new course *Automated Game Design* was introduced, for students HBO-ICT specializing in Game Technology. This 7-weeks course provides an overview of state-of-the-art uses of AI within game design research and allows students to gain experience with some of the most common techniques in the fast-evolving field of automated game design. The course content is largely based on work done in the RAAK-MKB applied research project Automated Game Design, which was run by the lectorate Play & Civic Media from 2013–2015. See the project webpage for more details about the project: www.automatedgamedesign.wordpress.com The course will be updated based on new insights and results from the currently running Live Game Design project.

User Interaction
[HBO-ICT]

For the first year students Karel Millenaar teaches basic user interaction courses. The students are led through an iterative design process (TMC cycle) where they practice working with design tools to create testable designs for real people.

Minor Applied Game Design **[Communication and Multimedia Design]**

Since 2013, the Lectorate is involved in development and coordination of the Minor Applied Game Design. Researchers give guest lectures on their own game research projects and we coordinate contact with industry partners who are involved in the final game projects for students in the minor. In 2016, industry partners IJsfontein, Lava Labs and Pilotfish worked together with students to create an experimental VR game and educational games for museums.

M.Sc. in Digital Design

The Master's programme collaborates intensively with nine leading design firms: Achtung!, DDB & Tribal Amsterdam, FHV BBDO, Fabrique, MediaMonks, Mirabeau, Momkai, Tam Tam and Woedend!.

The Lectorate is significantly involved in organizing and launching an upcoming M.Sc. programme in Digital Design at AUAS. In 2016, personnel from the Lectorate (Gabriele Ferri, Ben Schouten) participated in writing the Accreditation Dossier. As of January 2017, the NVAO has granted accreditation to the programme, which has also formally received a CROHO number. This indicates that the proposed M.Sc. programme is on track for starting in September 2017.

The ambition is that the M.Sc. will integrate the Lectorate in Play & Civic Media even more in the education activities carried out at AUAS. Ben Schouten has been appointed Scientific Director, and Gabriele Ferri will be Core Lecturer for the Design Research area. In addition to coordination and teaching, the Lectoraat will also provide practical projects for the Master students, thus involving them in Research through Design activities.

The proposed M.Sc. in Digital Design is unique in its use of a Research through Design (RtD) approach in a 1-year professional programme. RtD is an established design research methodology which is typically used in top-level institutions, such as Umeå University or Goldsmiths in London. Our vision is that also design professionals, not only academics, may benefit from the more self-aware attitude afforded by RtD.

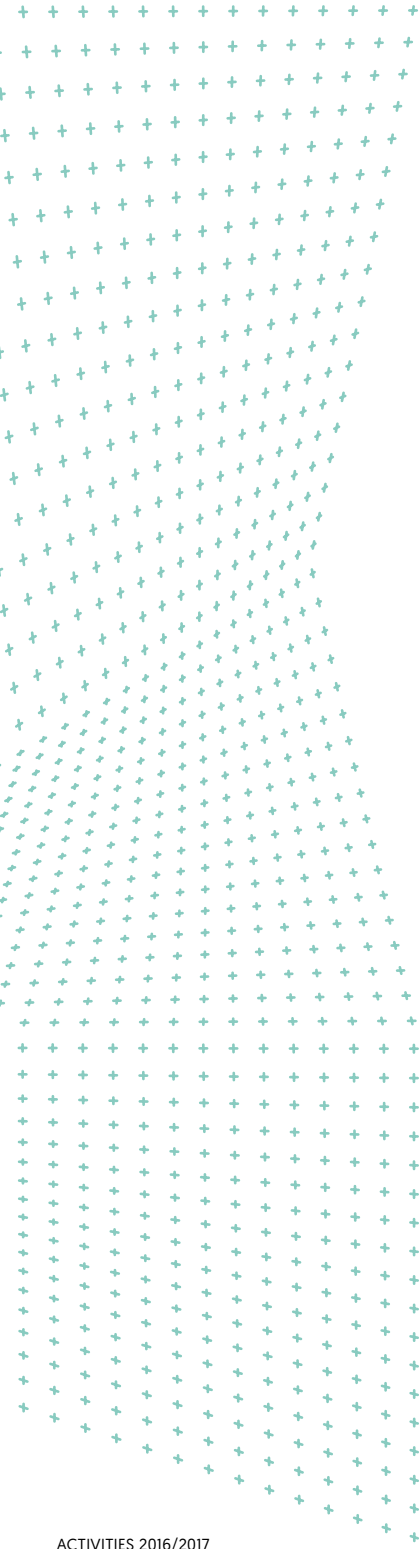
The programme focuses on educating creative professionals who are able to look beyond the boundaries of their own discipline: visionary creatives with excellent technical skills and a fascination with digital craftsmanship. Whether it is climate change, income inequality or refugee flows, our planet faces bigger and more complex challenges. The models we relied upon in the last century are no longer viable. In the era of custom 3d-printed objects and personalized communication campaigns on social media, we need to think in ways that are radically different from the past. As technology evolves faster than ever, we need new designers that can use them consciously and address the grand environmental, social and political challenges we face.

Our students will design practical solutions for crucial issues and create value for people, profit, and our planet. They will also have a clear eye for human values, business acumen, and an aesthetic sensibility. These new approaches to design should enable our society to discover better solutions to 'wicked problems'. Wicked problems are complex dilemmas for which an optimal design solution is not always available, or may reveal other problems. This kind of urgent issues, big or small, are everywhere. Think about patients' needs in an healthcare setting. We need to design not only solutions to assist their everyday lives, but also to create communities to promote empathy and empowerment. For example, how to put social media, the internet of things, and smart sensors to the service of patients, their families, and their doctors? How to produce economic and social value out of these interactions? As a single, isolated solution cannot solve a wicked problem, we need broader economic and societal innovation, which is advanced by a combination of creative skills, technology, entrepreneurship, and design thinking. Digital designers have a unique vantage point to rise to this challenge.






VALIDATION



Validation is a key element of all our research projects. Almost all projects are undertaken in close cooperation with local stakeholders from business, civic society or government. As part of our research projects, we often organize round-tables, workshops and lectures aimed at a professional audience, both to communicate our research findings as well as to collaboratively build a research agenda. With our research we also contribute to The Knowledge Mile community, involving parties from this coalition in our research and outreach. To provide value for the creative industries and civil society, we often collaborate with institutions like Pakhuis de Zwijger and Het Nieuwe Instituut.



Design & The City

The Lectorate of Play & Civic Media acted as the main organizer for the Design & The City event that took place from April 19-22 at a number of locations around the Knowledge Mile such as The Hermitage, WeWork, The Student Hotel and the Reinwardt Academy. Workshops were also organized at the Fab-City Campus.

The event brought together international experts, researchers, designers, educators and policy makers to explore citizen-centered design approaches to the smart city. During our workshops, a round table conference and a session on living lab methodologies, the role of designers was addressed as initiators, innovators, campaigners, connectors, organizers, critics and imagineers of alternative urban futures. In addition, we discussed concrete design strategies that can contribute to more liveable, sustainable and sociable urban communities.

The programme was co-created with numerous external parties. A call for workshops had resulted in 65 applications, out of which 13 were selected, amongst these workshops organized by Waag Society, Kennisland, Het Nieuwe Instituut, The European Network of Living Labs, and various



international Universities (amongst others Aalto University (FI), Aarhus University (DK), Dublin Institute of Technology (IR), IT University of Copenhagen (DK), KU Leuven (B), Northeastern University (USA), Politenico of Milano (IT), Trinity College (IR), University College London (UK) and the University of Sao Paulo (BR)). In addition a number of parallel events were organized, and international renown research labs as the Centre for Design Informatics; University of Edinburgh (Edinburgh, UK), Fields of View (Bangalore, IN), Waag Society (Amsterdam, NL), Ideal Lab (Bergen, NOR), and Kitchen Budapest (Budapest, HU) shared their living lab methodologies with a selected group of 50 participants.

In total around 500 people attended, about half of which were international guests. To further reach out, a special newspaper with essays by all the keynote speakers was published and distributed at locations around The Netherlands as well as online. The well known publicist Dan Hill was commissioned to write an essay based on the conference, that was distributed through Medium.com, as well as on the conference website. The conference website itself was visited by more than 10.000 people, and during the week of the event about 1.000 tweets were sent with the #datc2016 hashtag.





Designers in Residence

In 2016, The Lectorate of Play & Civic Media started its designers in residence programme. In this programme, artists or designers are invited for a period of two to three months to work on a project that is related to the research themes of the Lectorate. This programme has a number of aims. First it aims to strengthen the link between researchers and the design community by exchanging insights, skills and approaches taken to design. Second, the outcomes of the residency are to either inform one or more of the research projects within the Lectorate, or provoke a wider societal debate about some of these themes. For instance, in the former, designers in residence could deepen research themes through a critical design intervention, or by introducing particular methodologies or artifacts that test out assumptions within the research projects. In the latter, a similar approach is taken, but now aimed at audiences outside our lectorate. In that case, the residency is to bring about a discussion or awareness within the teaching community, a wider professional community, the network of research partners or societal stakeholders or civil society at large about an issue or approach in line with the research themes of the lectorate.



Designer in Residence Gianmarco Zaccaria

Gianmarco Zaccaria was the first “designer in residence” invited by the Lectoraat to spend a two-month period (September/October 2016) in Amsterdam to develop a playful intervention on the theme of the circular economy. In his professional practice as interaction designer and critical engineer, Gianmarco had already developed public installations in urban space, such as ‘Urban Spirits’ (Medialab Prado, 2013) and ‘Shadow of Aikia’ (StratoFyzika Collective, 2013). In Amsterdam, his work was complementary to the ‘Games for Cities’ EU COST training school, also on the theme of circularity.

This residency resulted in an extensible boardgame framework titled “OpenResiliency”, composed by a board, a set of laser-cut game pieces and a deck of cards. OpenResiliency is a workshop-game which may be used to concretely demonstrate the dynamics of a circular economy: it tasks players with balancing resources within a city by establishing connections between different initiatives and stakeholders. The game itself is released to the public under an open license, and will be further developed in the future.





Interaction & Games LAB

The Amsterdam Creative Industries Network [ACIN] is a talent-, knowledge- and business network that is initiated by the Hogeschool van Amsterdam, de Amsterdamse Hogeschool voor de Kunsten en Hogeschool Inholland. Connection between research, industry and education is realized in Labs, that co-finance collaborative projects. The Lectorate Play & Civic Media is closely connected to the Interaction & Games Lab. In 2016, two projects of the Lectorate were partly financed by ACIN: Interactive Cinema and Citizen Empowerment. A third project, on VR training for KLM, was realized at the Netherlands Film Academy. The Lab industry leader is television broadcasting company AVROTROS, with whom we collaborated to realize the VR experience *Project Orpheus*. Through the Interaction & Games Lab, contacts with the Dutch creative industries are maintained, for instance by initiating student industry projects for our Minor Applied Game Design. In 2016, the VR Base was installed on the former Marine Terrein. This 'Virtual and Augmented Reality Incubator' aims to unlock the creative business potential of VR and AR in Europe. Lab coordinator Mirjam Vosmeer was invited to join the team of 'VR pioneers' who work together to connect the VR industry with research and educational projects on VR.





PEOPLE

The background of the page is a white surface covered with a grid of small, evenly spaced red dots. This grid is distorted to create a three-dimensional perspective, with lines of dots converging towards a vanishing point in the upper right, giving the impression of a receding architectural space or a digital landscape.



Anders Bouwer is a postdoc researcher in the lectorate Play & Civic Media and lecturer in the Game Development team within the Faculty of DMCI of the AUAS. He has a background in Artificial Intelligence (MSc, Vrije Universiteit Amsterdam, University of Edinburgh) and Computer Science (PhD, University of Amsterdam). His research interests include artificial intelligence, intelligent user interfaces, interactive learning environments, music computing, procedural content generation and automated game design. These themes revolve around how intelligent tools can support people in knowledge intensive tasks, such as learning and design. From 2014 to 2015, he led the RAAK-MKB project Automated Game Design, and he is currently working on the RAAK-MKB project Live Game Design, which aims to develop techniques, methods and tools for game designers to allow live editing of game prototypes.



Marije ten Brink is a designer, researcher at the lectorate Play & Civic Media and lecturer at the Communication & Multimedia Design department of the AUAS. Her research focuses on interaction design to enhance learning and sharing by means of personal, everyday photography. The mobile application Snapphthis is the first applied result coming out of this research.



Gabriele Ferri is a postdoc design researcher. Combining his interests in playful and ubiquitous interactions, design futuring, and location-based experiences, he pursues a research agenda focusing on the use of urban games as design tools to empower minorities. Current research interests include critical and speculative uses of game design, qualitative methodologies for interaction design, pervasive interactions between media, public spaces, and citizens, and participatory workshops for creative futuring. He recently co-edited the volume "Interactive Digital Narratives: History, Theory and Practice" for

Routledge. He holds a PhD in Semiotics (Istituto Italiano di Scienze Umane; Università di Bologna, Italy) with an interest in the qualitative analysis of Human-Computer Interaction.



Martijn Kors is a doctoral candidate at both at the Eindhoven University of Technology and the Amsterdam University of Applied Sciences. His design-research is focused on studying the underlying design strategies of games developed with the intent to shape how players think and feel about issues in reality. In particular, he studies the design opportunities of immersive technologies for persuasive games, by following a Research through Design approach in which knowledge is generated through making practices. Prior to his PhD candidature he received a Master of Science in Industrial Design at the Eindhoven University of Technology, a Master of the Arts and a Bachelor of the Arts at the Utrecht University of the Arts in Game Design and Development.



Genevieve Korte is a research intern at the Lectorate of Play & Civic Media.



Stefan Leijnen works as a lecturer for the Game Development department and as a researcher for the lectorate Play & Civic Media of the AUAS. He has a background in Artificial Intelligence, addressing topics such as emotion in artificial agents, soccer playing AIBO robots, neural networks for symbolic learning, and multi-agent models of cultural evolution. His PhD work (Radboud University Nijmegen) focused on the mechanisms underlying creativity. He has also launched two startups, Leijnen Technology and AI Labs. From 2013 until 2015, he worked on the Automated Game Design project and he is currently working on the Live Game Design project, focusing on the topic of emergence in games.



Karel Millenaar is a game designer and visual designer with more than 9 years of design experience. With his company FourceLabs he has designed games and playful interactions for big commercial companies like Philips and Corio, but also for cultural institutes as the university museum Utrecht. His design experience varies from playful installations to board games and video games and everything in between.

At the lectorate he applies his experience to augment research projects with designs and prototypes. He also lectures design related courses and occasionally mentors project groups at ICT.



Svetlana Mironcika is an interaction designer and researcher in the lectorate of Play & Civic Media where she is creating smart toys that help to screen children motor skills. She has a background in product design (MSc, Eindhoven University of Technology) and specializes in creating interactive products that afford playful interactions for movement experience.



Monique van Reijen is a research manager at the Lectorate Play & Civic Media. She has a background in the Dutch creative industry. In recent years, Monique worked in the serious games industry, holding various positions, including director of a partnership of four leading applied game companies in the Netherlands. In previous years she was internet-director of a group of television production companies.



Luis Rodil-Fernández is an artist, teacher and hacker with a mixed background in computer science, fine arts and music. His autonomous work is concerned with the impact that technologies have on cognition and the human body, with particular emphasis in movement and embodied interfaces. Through performances, installations and social games, his work proposes a critical gaze on human-computer interactions rooted in movement.

He teaches Critical Engineering at the ArtEZ University of the Arts in Arnhem and teaches Engineering Interactions at the Master in Digital design at the AUAS.



Riemer van Rozen is a lecturer/researcher at the AUAS since 2011. He works as a PhD associate at the Software Analysis & Transformation group of Centrum Wiskunde & Informatica (CWI), and as principal investigator and project leader of the RAAK-MKB project Live Game Design at the Play & Civic Media group. He is a researcher in the Agile Language Engineering associate team of CWI and Inria. He lectures at the Software Engineering and Game Development departments of HBO-ICT, and he leads the course Software Evolution in the Master of Software Engineering at the University of Amsterdam. His expertise includes model transformation, software language engineering, live programming, meta-programming, tool construction, procedural content generation, game mechanics and game design assistants. He has worked as a researcher on the projects Early Quality Assurance in Software Production (EQUA RAAK-PRO) and the Automated Game Design (RAAK-MKB), and currently researches technology for live game design.



Ben Schouten was appointed as a lector at the Amsterdam University of Applied Sciences in 2013, leading the Play & Civic Media research group. He graduated from the Rietveld Art Academy in 1983. He found himself interested in patterns and iconography, and discovered his fascination for mathematics. In August 1995 he received a Master's degree in mathematics, specializing in chaos theory. In 1996 Ben Schouten founded Desk.nl, providing innovative internet related solutions. Together with the Dutch Design Institute (Vormgevings Instituut), Desk was internationally acknowledged with a webby award in gaming. In 2001 he received his PhD for his thesis on content based image retrieval and interfaces

that allow browsing & searching for images in an intuitive way, according to human perception. His thesis was acknowledged with a Bronze World Medal for Design in the New Media category, sub-category Information and Education, in New York, USA.

In the following years Ben Schouten started teaching at the Utrecht School of Art & Technology (HKU) in Interaction Design and Gaming. In 2010 he was appointed Full Professor Playful Interactions in Smart Environments at Eindhoven University of Technology.



Martijn de Waal is a researcher in the Lectorate of Play & Civic Media. He has a background in journalism, media studies and practical philosophy. His research focus is on the relation between digital media and public space, with specific interest in civic media and digital placemaking. His PhD thesis *The City as Interface. How Digital Media Are Changing the City* was published by NAI010 publishers in 2014. He is a co-founder of The Mobile City, a non-profit that since 2007 has organized numerous workshops and events on digital media and urban culture, and also co-founded DeNieuweReporter in 2005, a leading Dutch blog on the future of journalism. Before working at the AUAS he was an assistant professor in media studies at the University of Amsterdam. In 2009 he was a visiting scholar at the MIT Centre for Civic Media. Around the change of the century, he worked as a journalist working for a diverse range of Dutch media (de Volkskrant, VPRO Radio, Emerge) covering technology & society.



Mirjam Vosmeer is a researcher in the Lectorate of Play & Civic Media. She has a background in television, media and scriptwriting. In 2010, she presented her PhD thesis on the topic of Videogames & Gender, at the University of Amsterdam. Her current research focuses on Virtual Reality, specifically cinematic VR.



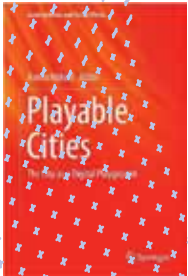


OUTPUT



Academic Publications

- Ampatzidou, Cristina, Matthijs Bouw, Froukje van de Klundert, Michiel de Lange, and Martijn de Waal. 2015. *The hackable city: A research manifesto and design toolkit*. Amsterdam: Amsterdam Creative Industries Publishing.
- Brink ten, M., Nack, F., & Schouten, B.A.M. (2016). The influence of liking and disliking on creative expression in digital photos. In *Proceedings of the 13th International Conference on Advances in Computer Entertainment Technology*. Osaka, Japan. <https://doi.org/10.1145/3001773.3001775>
- Caruso, Giovanni, Riccardo Fassone, Gabriele Ferri, Stefano Gualeni, and Mauro Salvador. (2016). Games on Games. Game Design as Critical Reflexive Practice. *G|A|M|E Games as Art, Media, Entertainment*, 1(5). Retrieved from <http://www.gamejournal.it/?p=2986>
- van Dijk, José, Thomas Poell en Martijn de Waal. (2016). *De platformsamenleving. Strijd om publieke waarden in een online wereld*. Amsterdam: Amsterdam University Press.
- Ferri, Gabriele, Wouter Sluis-Thiescheffer, Dries Booten, and Ben Schouten (2016). Playful Cognitive Behavioral Therapy Apps: Design Concepts and Tactics for Engaging Young Patients. In *Proceedings of the The 15th International Conference on Interaction Design and Children* (pp. 486–498). New York, NY, USA: ACM. <https://doi.org/10.1145/2930674.2930698>
- Kors, Martijn, Erik van der Spek, Gabriele Ferri, and Ben Schouten (2016). Occasionally a Dull Moment. Designing for Introspection and Retrospection in Persuasive Games. *Morality Play 2016, DiGRA/ FDG Workshop on The Design of Games for Moral Engagement*



- Kors, Martijn, Gabriele Ferri, Erik van der Spek, Cas Ketel, and Ben Schouten (2016). A Breathtaking Journey. On the Design of an Empathy-Arousing Mixed-Reality Game. In *Proceedings of the 2016 Annual Symposium on Computer-Human Interaction in Play (CHI PLAY '16)* (pp. 91–104). New York, NY, USA: ACM. <https://doi.org/10.1145/2967934.2968110>
- Kors, Martijn, Karel Millenaar, Erik van der Spek, Gabriele Ferri, Ben Schouten and Tim Marsh (2017, Accepted In-Press). Shaping Attitudes Across Realities. Exploring Strategies for the Design of Persuasive Virtual, Augmented and Mixed Reality Games. In *Proceedings of the 16th International Conference on Entertainment Computing 2017*. Tsukuba, Japan.
- de Lange, Michiel, and Martijn de Waal. (2016). Hacking Buiksloterham: How self-builders are making their city. Paper read at MEDIATIONS: Art & Design Agency and Participation in Public Space, 21–22 November 2016, at Royal College of Art, London, UK.
- de Lange, Michiel en Martijn de Waal. (2016). 'Owning the City: New Media and Citizen Engagement in Urban Design'. Piekarski, Karol ed. *Data-Driven Methods for City Research and Exploration*. Katowice: Institution of Culture Katowice. <http://medialabkatowice.eu/wp-content/uploads/2016/02/Data-driven-methods-for-city-research-and-exploration-web.pdf>
- Leijnen, Stefan & Fjodor van Veen (2016). Arkhanet: Investigating Emergent Gameplay and Emergence. In DiGRA/FDG '16 – Abstract Proceedings of the First International Joint Conference of DiGRA and FDG, Dundee, Scotland: Digital Games Research Association and Society for the Advancement of the Science of Digital Games, August, 2016. ISBN / ISSN: ISSN 2342–9666.
- Leijnen, Stefan, Tom Heskes, and Terrence W. Deacon (2016). Exploring Constraint: Simulating Self-Organization and Autogenesis in the Autogenic Automaton. In *Proceedings of the 15th international conference on Artificial Life*, 2016.
- Pepijn Rijnbout, Mark de Graaf, Tilde Bekker, Ben Schouten (2016). The Introduction of IMO, an integrated model for designing open-ended play. In: *Journal of Entertainment Computing* (2016)
- Salvador, Mauro, and Gabriele Ferri. (2016). 3Cities – Pic Your Story. Il design partecipativo di una ludicizzazione urbana. In M. Bittanti & Emanuela Zilio (Eds.), *Oltre il gioco. Critica della ludicizzazione urbana*. Milano: Unicopli.
- Schouten Ben,, van der Spek E., van Kampen R. Playful Citizen Science. In: *The Playful Citizen: Power, Creativity, and Knowledge*. Amsterdam University Press 2016.
- Schouten, Ben, Gabriele Ferri, Michiel de Lange, and Karel Millenaar. (2016). Games as strong concepts for city-making. In *Playable cities: The city as a digital playground*, ed. Anton Nijholt. London: Springer. 23–45.
- Schouten, B. (2016) Playful Empowerment, the role of game design innovation in participatory citizenship. Joint Conference of Serious Games, JCSG 2016, Brisbane, Australia. Springer Verlag.
- de Smale, Stephanie, Martijn Kors, Alyea Sandovar (2017, Accepted In-Press). The Case of This War of Mine: A Production Studies Perspective on Moral Game Design. In *Games and Culture*, special issue on Morality Play.
- van Veen, Fjodor & Leijnen, Stefan (2016). Diversity Scale: an Evaluation Algorithm for Terrain Generators. In *DiGRA/FDG '16*

- Abstract Proceedings of the First International Joint Conference of DiGRA and FDG, Dundee, Scotland: Digital Games Research Association and Society for the Advancement of the Science of Digital Games, August, 2016. ISBN / ISSN: ISSN 2342-9666.
- Vosmeer, Mirjam, Gabriele Ferri, Ben Schouten, and Stefan Rank (2016). Changing Roles in Gaming: Twitch and new gaming audiences. In DiGRA/FDG '16 – Abstract Proceedings of the First International Joint Conference of DiGRA and FDG. Retrieved from http://www.digra.org/wp-content/uploads/digital-library/paper_101.pdf
- de Waal, Martijn. (2016). 'Welcome to Pokeville' in Jürgen Mayer & Martijn de Waal *Could Should Would*. Delft: Faculty of Architecture and the Built Environment, TU Delft.
- de Waal, Martijn. (2016). 'The City as Interface' in Susa Pop, Tanya Toft, Nerea Calvillo, and Mark Wright eds. *What Urban Media Art Can Do. Why When Where & How*. Stuttgart, AV Edition.
- de Waal, Martijn, Michiel de Lange & Matthijs Bouw. (2017). 'The Hackable City' in *Architectural Design* (2017) 87:1 pp 50–57

Professional Publications

- Toombs, Austin, Gabriele Ferri, Shannon Grimme, Shad Gross, Michael Stallings, Jeffrey Bardzell, and Shaowen Bardzell. (2016). Making a Critical Playshop. *Interactions*, 24(1), 34–37. <https://doi.org/10.1145/3019006>
- Eikelenboom, Twan and Martijn de Waal editors. (2016) *Design & The City Newspaper*. Amsterdam: Amsterdam University of Applied Sciences.

Academic conference talks, panels, guest lectures & keynotes

- Bouwer, Anders (2016). *Intelligent Tools for Game Designers*. Presentation at Nucl.ai 2016 Conference, Vienna, 18–20 July.
- Bouwer, Anders (2016). Invited panelist on *Augmenting Design & Testing with AI-Powered Tools*, Nucl.ai 2016 Conference, 18–20 July.
- ten Brink, Marije. (2016). Paper Presentation. The influence of liking and disliking on creative expression in digital photos. 13th International Conference on Advances in Computer Entertainment Technology (ACE). Osaka, Japan.
- Ferri, Gabriele. (2016) *Stories, Games and Design Fictions. Narrative agency in video games as a resource for speculative design research*. Talk at International Conference on Narrative, Amsterdam, 16 June.
- Ferri, Gabriele. (2016) *Games, Places, Stories*. Presentation at Playable Cities workshop, INTETAIN 2016 conference, Utrecht, 28 June.
- Ferri, Gabriele. (2016). *Playmakers. Il videogioco come strumento di design*. Invited Speaker at Festivalletteratura, Mantova, Italy. 9 September.
- Ferri, Gabriele. (2016). *Macchine Narranti. Videogiochi e letteratura*. Invited Speaker at APICE, University of Milan, Italy, 13 December.
- Kors, Martijn. (2016). Paper Presentation. *A Breathtaking Journey. On the Design of an Empathy-Arousing Mixed-Reality Game*. Annual Symposium on Computer-Human Interaction in Play. Austin, Texas, USA.
- Kors, Martijn. (2016). *Occasionally a Dull Moment. Designing for Introspection and Retrospection in Persuasive Games*. Moral-

- ity Play 2016, DiGRA/FDG Workshop on The Design of Games for Moral Engagement. Dundee, Scotland
- Leijnen, Stefan (2016). Talk *Simulating Self-Organization and Autogenesis in the Autogenic Automaton*. Artificial Life Conference, Cancun, Mexico, 7 July. Workshop Paper Presentation.
- Leijnen, Stefan (2016). Poster *Self-Constraining Deep Neural Networks*. NCPW Workshop, Philadelphia, 8 August.
- van Rozen, Riemer & Tijs van der Storm (2016). *Live Domain-Specific Languages*. Poster presentation at National Symposium Software Engineering The Netherlands (SEN), CWI Amsterdam, 21 January.
- van Rozen, Riemer (2016). *Live Game Design*. Poster presentation at the National Symposium Software Engineering The Netherlands (SEN), CWI Amsterdam, 21 January.
- Schouten, Ben (2016) Playful Empowerment, the role of game design innovation in participatory citizenship. Joint Conference of Serious Games, JCSG 2016, Brisbane, Australia
- Vosmeer, Mirjam (2016). Presentation at Narrative Conference, UvA, Amsterdam
- Vosmeer, Mirjam (2016). Presentation VR research Digra, Scotland
- de Waal, Martijn & Ben Schouten. (2016). *The Hackable City*. Guest Lecture at Northeastern University, Boston, 27 January.
- de Waal, Martijn. (2016). *The Hackable City*. Guest Lecture at University of Athens, Athens 10 May.
- de Waal, Martijn. (2016). Invited panelist Open Innovation 2.0 Conference. Amsterdam, 23 May
- de Waal, Martijn. (2016). Invited panelist at City Leaders' Summit, Media Architecture Biennale 2016, Sydney 2 June.
- de Waal, Martijn. (2016). Invited Lecture / Panelist Book presentation *What Media Art Can do*. Media Architecture Biennale, Sydney 4 June.
- de Waal, Martijn. (2016). Lecture Atelier Co-Design. Straatwaarde Research Project, Reinwardt Academie Amsterdam, 15 June
- de Waal, Martijn. (2016). Lecture *Vervoer in de platformsamenleving*. Boekpresentatie De Platformsamenleving. KNAW, Amsterdam, 1 December.

Professional Lectures

- Kors, Martijn (2016). *Virtual empathy*. Sign of Time #13 / Center for Innovation. Pakhuis de Zwijger, Amsterdam, 23 November 2016.
- Leijnen, Stefan (2016). Lecture *Can Machines Be Creative?* Köln University, Köln, 24 May.
- Leijnen, Stefan (2016). Lecture *Artificial Creativity?* ACAIS Symposium, Nijmegen, 17 May.
- Leijnen, Stefan (2016). Lecture *Deep Learning & Creativity*. Baring Point, Amsterdam, 15 December.
- Vosmeer, Mirjam (2016). Keynote speaker on VR and filmmaking at the Goa Film Bazaar, Goa, India.
- Vosmeer, Mirjam (2016). Presentation Script Academy, VondelCS, Amsterdam
- Vosmeer, Mirjam (2016). Invited panelist on several panels on serious gaming, during India Gaming Roadshow, by invitation of DutchCulture and the Dutch Embassy in New Delhi, India.
- de Waal, Martijn. (2016). Respondent Book Presentation Michiel Schwarz *Sustainist Lexicon*. Reinwardt Academie, Amsterdam, 15 January.

de Waal, Martijn. (2016). Lecture *The Hackable City*. Red Bull Station, Sao Paulo, 15 March.

de Waal, Martijn. (2016). 'Bed Talk' met Ruth Mackenzie (Director Holland Festival) in The Student Hotel, Amsterdam, 15 April

de Waal, Martijn. (2016). Lecture & Organizer of Minisymposium *The Hackable City* University of Athens, Athens, 9 May.

de Waal, Martijn. (2016). Lecture & Organizer of Minisymposium *The Hackable City*. Shenzhen Planning Bureau. Shenzhen, 1 June.

de Waal, Martijn. (2016). Lecture & Moderation Recoded City Pakhuis de Zwijger with Thomas Emracora & Lucy Bullivant. Amsterdam, 14 June.

de Waal, Martijn. (2016). Symposium organizer & moderator *The Hackable City International*. International Architecture Biennale Rotterdam, Rotterdam, June 24.

de Waal, Martijn. (2016). Lecture *Filosofen agenderen de stad – Diner Pensant*. Ruimtevolk & Platform 31, Apeldoorn, July 5.

de Waal, Martijn. (2016). Masterclass *Vastgoed 3.0*. Utrecht, November 2.

de Waal, Martijn. (2016). Lecture & Workshop *Round n Around. Urban Tactics and the Appropriation of Public Space*. Sao Paulo, November 7.

de Waal, Martijn. (2016). Lecture *De Platformsamenleving* at Tetem, Enschede, December 21.

Network

Anders Bouwer was as a reviewer for the ACM CHI 2016 conference.

Gabriele Ferri is Exhibition Co-chair for the upcoming CHI Play 2017 conference,

Gabriele Ferri was in the Steering Committee of the ICIDS Conference series (2013–current),

Gabriele Ferri was in the Editorial Board of G|A|M|E Journal (2012–current), Gabriele Ferri was invited to run a urban game at the Tøyen Replanted Training Workshop (Ideal Lab. Oslo Architecture Triennale, Oslo, Norway),

Gabriele Ferri acted as a reviewer for: CoDesign Journal, ACM CHI, ICIDS, ACM NordiCHI, ACM CHI Play, TOCHI Journal, ACM DIS, Design & Emotion conference.

Martijn Kors is Student Game Design Co-chair for the upcoming CHI Play 2017 conference

Ben Schouten was an advisor for the European Commission on the 'Internet of Things'

Ben Schouten was an advisor for the Dutch Cultural Media Fund, as part of the committee advising on E-culture projects.

Ben Schouten is General Chair for CHI PLAY 2017 (ACM) in Amsterdam.

Ben Schouten is part of the Steering Board for the ACM SIGCHI Annual Conference on Computer–Human Interaction in Play (CHI PLAY), 2016 onward

Ben Schouten is an editor of the International Journal of Serious Games (2014 onwards)

Ben Schouten was a reviewer for the International Conference on Intelligent Technologies for Interactive Entertainment (ENTETAIN 2016)

Ben Schouten was a reviewer for the International Conference on Serious Games JSCG Brisbane 2016

Ben Schouten was a reviewer for the International Conference on Interaction Design for Children (IDC) 2013, 2014,

2015, 2016

Ben Schouten was a reviewer for the International Conference on Computer Human Interaction (CHI) 2012, 2013, 2014, 2015

Ben Schouten was a reviewer for the International Conference on Computer Human Interaction in Play (CHI Play) 2014, 2015, 2016

Mirjam Vosmeer was a member of PhD committee Christian Roth, VU, Amsterdam

Martijn de Waal was a Management Committee EU COST Action Cyberpark (2014–2018),

Martijn de Waal was a Management Committee EU COST Action People Friendly Cities in a Data Rich World (2013–2017)

Martijn de Waal was a member of the Scientific Programme Committee Media Architecture Biennale Sydney 2016

Martijn de Waal acted as a reviewer for the Conference ICity Enhancing Places Through Technology Malta 2016

Martijn de Waal was invited as committee member /examinator for a PhDs at IMinds VU Brussels.

Martijn de Waal was consulted by the Raad voor de Leefomgeving en Infrastructuur for their rapport 'Nieuwe organisatie van markten'

Martijn de Waal was consulted by the editors of a VPRO Tegenlicht documentary on Smart Cities.

Martijn de Waal was a member of the Advisory Board at the Ars Electronica Prize for Digital Communities

Martijn de Waal was consulted by the Programme Managers of De Staat van Eindhoven (a programme run by Het Nieuwe Instituut) on Citizen Empowerment & Digital Media

Awards

Martijn Kors, Gabriele Ferri and Ben Schouten won a Honorable Award for Kors, Martijn, Gabriele Ferri, Erik van der Spek, Cas Ketel, and Ben Schouten (2016). A Breathtaking Journey. On the Design of an Empathy-Arousing Mixed-Reality Game. In Proceedings of the 2016 Annual Symposium on Computer-Human Interaction in Play (CHI PLAY '16) (pp. 91–104). New York, NY, USA: ACM. <https://doi.org/10.1145/2967934.2968110>

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A városstervezés új iránya: a jövő gazdasága. (2016). *Epiteszforum.hu* 22 April 2016 <http://epiteszforum.hu/a-varosstervezes-uj-iranya-a-jovo-gazdasaga>

About the tools, challenges and impact of commoning. *Citiesintransition.eu* 14 March 2016 <https://citiesintransition.eu/publication/report-new-democracy-3-the-cultural-commons-in-the-city>

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- De Zeeuw, Anne. (2016). *Report – New Democracy #3: The Cultural Commons in the City*
- Frearson, Amy. (2016). “Smart technology is a solution looking for a problem,” says Rotterdam Biennale curator. *Dezeen.com* 27 April 2016. <https://www.dezeen.com/2016/04/27/smart-technology-driverless-cars-in-interview-maarten-hajer-rotterdam-biennale-2016-curator-netherlands/>
- Hoeschele, Wolfgang. (2016). Co-Designing the Crowdfunded Sharing City. *Shareable.net*, 12 May 2016. <http://www.shareable.net/blog/co-designing-the-crowdfunded-sharing-city>
- Kon, Pui-Yi. (2016). The Next Economy: An Introduction To IABR — 2016. *Popupcity.net*, 12 April 2016. <http://popupcity.net/the-next-economy-an-introduction-to-iabr-2016/>
- McGinty, Steven. (2016). The Hackable City – A New Dialogue With Citizens. *The Idox Blog*. 9 June 2016. <https://blog.idoxgroup.com/2016/06/09/the-hackable-city-a-new-dialogue-with-citizens/>
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- Rappaport, Nina Inside the International Architecture Biennale Rotterdam. *Archpaper*, 13 May 2016. <https://archpaper.com/2016/05/2016-international-architecture-biennale-rotterdam/>
- The Hackable City Plot – IABR 2016. *De Architect*. 22 April 2016. <http://www.dearchitect.nl/nieuws/2016/04/22/the-hackable-city-plot--iabr-2016.html>



COLOPHON

Play & Civic Media is a research group based at the Amsterdam University of Applied Sciences. It is part of the CREATE-IT Knowledge Centre at the Faculty of Digital Media and Creative Industries.

The Amsterdam University of Applied Sciences has a total of 46,000 students across seven faculties and offers a total of 80 bachelor and master programmes. Its ambition is to train the professionals of tomorrow. Practical orientated research is an important component of its educational programmes. Research at AUAS always addresses real-life world problems from the professional field, and is conducted in close collaboration with both academics and professionals working in the particular discipline.

The AUAS has 250 partner institutes across 50 different countries and contributes to various educational projects such as curriculum development, research projects, student/professor exchanges and work placements within an international working field.

Play and Civic Media

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The Hackable City (p. 74)

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Martijn Kors (p.38; 112-113)

Genèvieve Korte (p. 62; 64)

Svetlana Mironcika (p. 42-44)

Submarine (p. 22)

Fernando van der Vlist (p. 80)

Martijn de Waal (p.26-28)

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Nancy van Asseldonk (p. 60)

Prototypes on p. 46-48 by Bosma, J., Boutens, C.,
Broedersz, J., Dahhani, K., Fan, S., Giling, D.,
Kramer, K., Metselaar, N., Rambelje Garcia, B.,
Robert, E., Sherafati, S., Trirum, T., Veer, M., Wal, G.

Play & Civic Media is an interdisciplinary research group at the Amsterdam University of Applied Sciences that manages research & education programme in the fields of immersive, playful and civic media such as virtual reality, serious games, online platforms and digital placemaking.

Games, playfulness and (digital) storytelling are key aspects in our work, as these have become important features of contemporary digital media. One of our particular interests lies in the notion of playful empowerment. How can the design of playful interfaces empower citizens to improve or maintain the quality of their individual and collective lives?

We favor a 'Research through Design' approach. We try to understand the world around us by shaping it, in close cooperation with our research partners, and always from a humanistic design perspective.



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