

**THE  
PEOPLE'S  
SMART  
SCULPTURE**

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**BEST PRACTICE STUDY  
2014 – 2018**

**THE PEOPLE'S SMART SCULPTURE PS2  
BEST PRACTICE STUDY  
2014 – 2018**

FOSTERING PARTICIPATIVE ART AND COLLABORATIVE  
URBAN ART & CULTURE PROCESSES IN EUROPE'S  
CROSS-CULTURAL CITY SPACES

Co-funded by the  
Creative Europe Programme  
of the European Union



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A

INTRODUCTION

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MORE THAN 1500 ARTISTS  
AND SCIENTISTS  
INVOLVED

The People's Smart Sculpture / PS2

PS2 stands for "The People's Smart Sculpture". It is a collaborative multidisciplinary project co-funded by the Creative Europe Programme of the EU from 2014 to 2018. PS2 fosters participative art and collaborative urban art and culture processes in Europe's cross-cultural city spaces.

It is constituted by 12 project partners in 11 subprojects in 8 European countries that involved as cultural innovators 760 artists, 628 creative & culture professionals and 152 scientists from over 30 countries worldwide.

The ambitious goal of the PS2 project was to develop new perspectives and a new scope for two of the most important topics of today:

1. The future of participatory processes in society and urban development. How can we increase active citizenship and make participation a general culture technique in our diverse societies?
2. The future of urban development itself and the complex challenges of the urban sphere. How can we design the transformation of our living spaces?

For the PS2 project the answers can be found in the creative use and mixture of artistic methods and art-related thinking in combination with digital participation technologies and tools. Therefore PS2 conceded art to a role beyond the exclusive cultural scope. In PS2 art is to be understood as social art.

The approach worked on two levels: the implementation of cultural participation projects by artists, creatives and researchers and the ongoing optimization of the art and participation aspects in these projects through reflection and evaluation in participatory workshop series and events in the 8 partner countries. Diverse groups of people were integrated into a practical dimension of re-design of the urban environment. Thanks to an extensive and committed interaction and collaboration between the 12 partners PS2 produced plenty of remarkable and sustainable results.



This best practice study wants to show the results and how the interplay of digital art/ culture and digital methods can change participation in/for urban development. The PS2 best practice study is to be understood as guide for both experts and citizens. The chapters follow the logic and structure of the project.



The PS2 consortium during the Kick-off meeting in Bremen in 2014. Since then the different subprojects have taken a long journey – one that also welded together the partners itself and their commitment to the goal of PS2

Photo: M2C Institute



Research / Experiment / Re-Design

Chapter B presents a detailed look into the 11 subprojects realized in the last four years. The partnering countries mirror the variety of European culture. From Scandinavia with Denmark, Sweden, Norway and Finland, to central Europe with Germany and Poland, to South and East Europe with Croatia and the Former Yugoslav Republic of Macedonia. This chapter shows the development of the activities, their background and the results achieved.

B



Projection of a modern African painting reflecting on local identity – animated and performed by PS2 artists during the ISEA2018 symposium in Durban / ZA

Photo: Elektro Moon Vision

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D

Provide / Apply / Develop

Chapter D can be understood as an index or a very short encyclopedia of a few of the participative methods developed within the project. We want to give others who are interested in the same topics the opportunity to use these methods, to apply them in new contexts, to develop them further – to do what was one of the strengths of the PS2 project: dare to experiment without precast opinions and formats.



People of different background gather for the „Das Ohr und“ activity in Düsseldorf

Photo: University of Applied Sciences Düsseldorf

Integrate / Open / Respect

Chapter C represents the comprehensive integration of associated partners and other projects into the different subprojects. These represent the same variety of backgrounds as the PS2 partners themselves: in the consortium research institutions such as universities, NGO's and consultants stand alongside cultural players like museums, galleries, and theatres. The articles from chapter C show the work of the associated partners sometimes directly sometime indirectly relating to the topics of PS2.

C

Reach out / Confront / Reflect

Chapter E is a detailed view on the most prominent outreach of the PS2 project, its support and co-organization of the digital art programme of ISEA2018 in Durban South Africa in June 2018. PS2 designed a program in a lab-format for one of the world's most prominent international digital arts and cultural innovation events taking the results of the subprojects abroad and developing a reflection by confronting them again with a different cultural and urban sphere.

The study concludes with a list of publications that originated within the four years of PS2. For the start this Chapter A is about the project's background and its ideas.

E

Why a new thinking for urban development is so important<sup>1</sup>

Today we witness a large societal shift that is driven by the digitalization, urbanization, new forms of labour, climate change and globalization. Especially the urban sphere of the cities undergoes a change in the perspective: What determines the cultural development? Who is responsible for the social infrastructure? Who is eligible for education and integration in a city? What are the new ways of expressing ideas and contributions towards a good and livable urban environment? How are we designing the social through digital art?

PS2 fostered participative art, urban development, and digital culture processes in city spaces. It clustered smart participation activities from all over Europe and designed new art forms, digital strategies, art as methodologies and digital media tools that allow new perspectives and approaches towards urban re-design and the participative cultural evolution of urban spaces. PS2 tried to find answers over the use of social art to create a better social resonance and participation in urban re-design and society. Did we succeed? Can we adapt our artistic methods to future demands? The PS2 project was about cultural construction of future spaces by real people as performative spaces.

In PS2 the employment of new artistic methodologies and digital tools for participatory urban re-design was tested on site and in everyday life situations. That was accompanied by the constant evaluation of those activities in a comparative analysis under the aspect of real transferability to other places.

PS2 addressed tried to address the spectre of a Smart City that is haunting all urban development projects, in a new way. Meanwhile, with the digital media R&D in ICT and their actual cultural development of the last decades, a not inconsiderable

part of the computer science contributes to re-connecting the existing scheme of the scientific, technical areas on the one hand and of the social, artistic, cultural on the other. This applied in particular to an almost infinite number of digital media, digital art, and digital culture projects. While the footprint of algorithms can be found at the latest since the information technology penetration of all work areas of future city development, the spectre of a diremption or disintegration between a technological economy for smart cities and people's free will to design their cities and live in these environments appears. A new critique is needed towards a technical economy whose algorithms can support people in their daily lives but also create a non-official, not well recognized background policy – very potent and effective but not democratically adopted. But: digitalization is nothing new for those who work in their expert field of urban development as urban planners,



1)

The following thoughts are essentially taken from:

Koplin, M. / Nedelkovski, I. / Geiger, C. / Skelton, C. / et al. (2018)

Impact of Social Art in the People's Smart Sculpture PS2

In: Proceedings of the 24th International Symposium on Electronic Art

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The human body as a screen. Guerilla projection mapping as part of the final PS2 project meeting in Berlin / DE

Photo: Martin Koplin

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Video installation as part of the „Move Into The Open Space“ subproject in Gdańsk / PL

Photo: Gdańsk City Gallery

designers, architects, district associations, network companies, energy providers or scientists. They all use digital expert tools and citizens use at least social media and other digital tools in their communication and self-expression. But A) these are all sectoral systems and B) there is no new agora that connects the experts and the citizens for to create a new overview and a new forming of the political will.

It is required to access the full potential of the new capabilities of communication networks, the broad availability of microcomputers, new design and especially young people's e-skills and e-culture to enable people to participate in a smart city context. To increase the engagement of citizens in their urban surrounding, to foster identification with the city they live in, can lead to social development, innovation development, societal integration, democratization and in the end also to more employment and social balance. Participation has to become part of every city initiative today. This cannot be done just by creating new technologies. But it can be done better by using the methods of art that help to involve also groups of citizens that are mostly left out of today's urban decision making.

The PS2 project tried to verify that the integration of digital art tools in urban design and decision making processes can help to realize a new smart participation as a probably necessary cultural technique in Europe's city spaces and how it creates a new social inclusion. Emerging technologies like VR/AR/AI can be used to create artistic and democratic expression. Digital technology is not good or bad per se but needs to be considered in a proper contextual setting for not to support the unsocial aspects in life. Adapting emerging technologies for artistic expressions might bridge the gap between artist and audience and help to better convey the artistic message thus providing new ways of participative development. But it is also necessary to keep the question in mind what happens when artists, technical specialists



and cultural experts apply disruptive technologies to change the public space and fail in supporting democratic participative actions but become a "social weapon".

The PS2 approach blended different levels of access: public participation, collaborative creativity, exploratory- and game-based learning about to change your neighborhood. It integrated digital art, design thinking, science, smart technologies, digital enabling didactics, user culture and motivates a broad dissemination of new skills, design expertise, informal learning and social knowledge. This also contained the idea of the urban environment as communication space between all: citizens, government and other stakeholders. This meant in the context of the need of a highly sustainable cultural development strategy to integrate opinion sharing, digital cross-cultural social inclusion, distinct communication of ideas, performative communication acts, new cultural expressions and explorative and

informal learning capacities. The skills, which were implicitly developed by people while utilizing in the participative art activities could be leveraged as skills for creative expression and social empowerment of participants and their own communities expressing local issues and desires like it was realized in several PS2 subprojects. Skills owned by individuals and groups used in group and societal context.

This might be the base for a new deal between artists, experts, citizens, learners, creators and the government. It is a performative integrated art to combine social and cultural sustainability in the city. On the educational level it can help to improve a large set of important future skills and techniques in handling culture, digital media and ICT, like

3D-modelling and programming, AR, VR. Skills developed through things like online games and social media use during leisure time as entertainment can be leveraged as skills for creative expression and social empowerment embedded in and serving local issues and desires. Social skills are mostly gained "along the way" by learning and applying new strategies of collaboration and participation, and by using non-professional expertise.

The PS2 project has resulted in a European toolbox of staging techniques and technologies to actively engage artist and audiences in complex aesthetic, philosophical and political questions about urban development.

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Urban activism in Zagreb. For the local subproject „Change of Heart“ artists reactivated the center of the Croatian capital with a festival combining digital and other media, like radio, with art

Photo: Sinisa Glogoski

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A child participating in an interactive play developed within the PS2 subproject in Oslo

Photo: Katie Coughlin



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The "Kinetic Stream" offers the possibility to interact with a flow of particles. The Düsseldorf subproject "Trails of Memory..." focused on the application of newest digital technology in social art contexts

Photo: University of Applied Sciences Düsseldorf





B

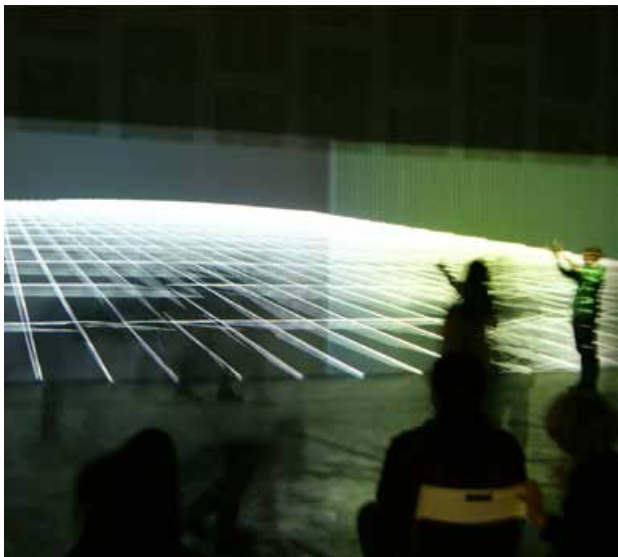
THE SUBPROJECTS

## B THE SUBPROJECTS

How does participation in urban development processes usually work? Who decides what is being built and where does participation step in? What should be the purpose of the abandoned industrial area? What should be considered in the conversion of the former hospital? Who will be using the new playground? Is this the right place for a new refugee home? And what shall we do about the ugly and scary space in front of the main station? These are the regular questions in urban planning where participation of the population is wanted and needed. Of course it is important that public administration is prompting the citizen's opinions. And it is equally important that citizens are given a forum where they can bring up topics and interrogate the planners and officials. People in Bremen are lucky because both things are possible. There are regular town hall meetings that everybody can attend and where people can inform themselves about the latest plans for certain areas, there are meetings where citizens are invited to discuss the drafts for new buildings and you can also attend workshops where the administration invites the population to get creative and propose ideas how to deal with a specific place or to contribute on the new master strategy for the development of e.g. the main station area.

One could say there are solid systems installed and that participation in urban planning is working well in Bremen and that

# EXPRESS YOURSELF / CITY CITY UNIVERSITY OF APPLIED SCIENCES (HSB) BREMEN / DE



all public and private stakeholders (architects, designers, citizens, administration) care a lot about involving people. But who is it that is in fact participating in the workshops and town hall meetings and in which way? Well, in the case of Bremen, it is only a very small group of people that really makes use of the possibilities to participate. The members of this group are usually +50, well educated, well situated financially and already engaged in other contexts that relate to urban planning. Of course this creates a huge problem as it leads to a participation for everybody but not from everybody. There are almost no young people (from small kids to age of 28) making use of the possibilities to participate. Same is true for migrants, for unemployed or people with low incomes. Why is that? One reason

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A white overseas container functioned as a temporary lab for discussion, tool testing and new forms of participating in urban re-design in front of the Bremen main station

Photo: Martin Koplin



is that the formats all follow very traditional principles that are designed and applied top-down by the administration. To be able to participate properly you have to follow the principles and that is not easy because they are not explained and not questioned. Another reason is that these formats are all analogue. Mostly the meetings take place in the city center and not at the places that are discussed and at times when a lot of people are (still) at work or at school. If you are not there you cannot participate and your opinion is not heard. Lastly there is no effective outreach by the organizers to attract people to the meetings and workshops. In most of the cases no one who is not "into it" ever finds out that there had been a chance to see sketches, to meet architects or to discuss.

How can people who are not using the existing formats be linked to urban planning processes?

The PS2 subproject "Express Yourself/city" tried to take another path for citizens' participation in Bremen and identified and tested new ways of participation in urban planning showing how those people who are not using the existing formats could be linked to urban planning processes. To achieve this "Express Yourself/city" used digital tools and technology as well as artistic methods. Over the last 4 years the subproject involved thousands of people in workshops, discussions, symposiums, events and other activities and has shown successfully that there a more holistic involvement of people is possible. That is what we call urban re-design. It is about the actual change of places in the city and at the same time about changing the way people participate. One result of the "Express Yourself/city" project is that it linked itself with all relevant stakeholders that contribute to the current system of urban planning, including the senator (state ministry), the mayor, and the administrator staff in Bremen and confronted them with the described "participation dilemma". At the same time "Express Yourself/city" built contact to all groups that

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Interactive media art as a strategy to interest people in the re-design of their city

Photo: Martin Koplin

are not using the existing possibilities and tried out new digital and artistic methods that proved that people have a great interest and a solid motivation in urban re-design but that they are asked the wrong way. The subproject then took the role of a switch between these two groups. As another result "Express Yourself/city" enabled a re-thinking process within the administration about the structures of participation. City – architecture – citizens – administration – students and former non-participants: after the 4 years of PS2 in Bremen there is a new dialogue between them. The activities of the subproject have also produced very tangible results: the installation of a series of open labs, the establishment of a permanent lab (by M2C), a boost for several digital tools. PS2 has become a real, relevant, long-term player in the urban development in the Free Hanseatic City of Bremen.

The story starts with the two Bremen partners in the PS2 consortium, the City University of Applied Sciences (HSB) and the M2C Institute for Applied Media Technologies and Culture (M2C). All activities in the subproject "Express Yourself/city" prepared and executed collaboratively by them. That is why the two PS2 subprojects based in Bremen worked together closely although following different approaches. The often shared activities multiplied the effects and the effectiveness of the subproject.

It all began with the idea of virtual urban

art as a vehicle that could interest and attract all kinds of citizens to participate in attending, responding and modifying 3D sculptures, linked to real spaces. These may be art works, fictional buildings, provoking sculptures or informative objects. Participants were supposed to use their own devices (smartphones, tablet computers and other) to create and/or modify virtual 3D objects that could be placed into a virtual surrounding or an augmented reality view. These objects were regarded as proposals for a re-design of certain spots in the city of Bremen. The more people participate the deeper and the more controversial – and thereby interesting – the discussion about a place becomes. What the subproject wanted to prove was

## „A NEW DIALOGUE BETWEEN CITIZENS, ARCHITECTURE, ADMINISTRATION, AND FORMER NON-PARTICIPATORS.“

that seeing and creating digital alternatives for a real urban area can establish a new identification with the development of a city (and that means people's homes) as they can slip into an active role. They are no longer just absorbing already existing ideas and play the judge but they develop new ideas. This represents a crucial difference to the old system of participation: peoples' involvement starts way earlier, they start the discussion even if it not part of the cities agenda yet. The aim was to use creativity, art and play, both methods that are not applied traditionally in urban planning, and to provide an atmosphere of experiment, where there is

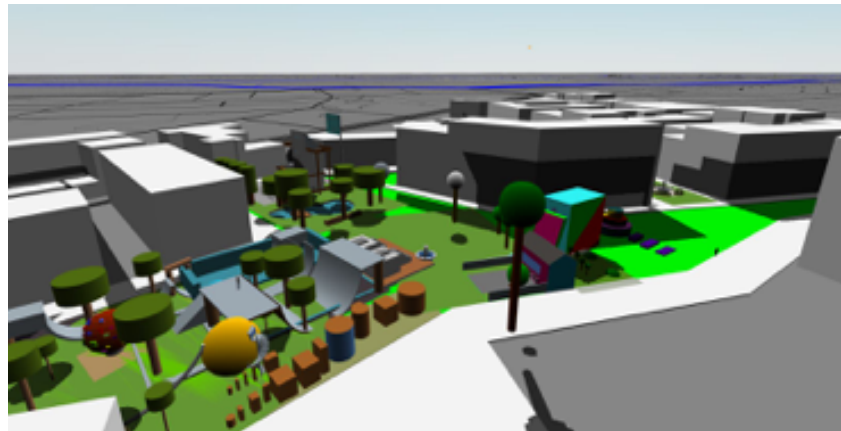
no right or wrong, no realistic or unrealistic. To achieve this goal of course new tools were needed that come without technological barriers so that usage is possible for everybody. So the first phase of the subproject began with the questions: what kind of tools are needed? What tools are out there already that could be used? What role does art play, i.e. what are possible methods for creative action? And what are the use cases/ the interesting spots in the city?

### Betaville – a powerful digital tool to increase participation in urban re-design

Very quick the Betaville system was identified as the most promising tool to work with. Betaville is an existing platform, a mirror world that is developed since 2008 by HSB together with M2C Institute and international partners like the New York University or Gotham Innovation Greenhouse NY. In Betaville the exact virtual counterparts of real cities can be changed by users. Everybody can upload 3D-models and place them wherever he or she likes. To use it outdoors the subproject developed a mobile client that could be used on tablets and that reduces the complexity of the old existing Betaville system. It also

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Interactive media art as a strategy to interest people in the re-design of their city

Photo: Arjtem Disterhof



featured an augmented reality mode to enable users to view their models on site. This Betaville mobile client was tested in a series of 3 creative workshops: a first one with 20 international researchers from the Middle East, North America and Europe on the 24.6.15, all professionals in media science and computing. A second workshop 26.6.15 was held in cooperation with the ZwischenZeitZentrale (ZZZ) at the WurstCase (a former sausage factory changed into a temporary creative hub) involving creatives, urban planners, artists, architects, designers. This workshop also provided a first methodological setup that was used frequently in the duration of the subproject: the open lab format. A third workshop on the 18.7.15 involved around 60 school kids. They were asked to think of new digital tools that they would like to use to change their city.

The ideas from these workshops were integrated in a larger event on the 12.9.15. "Express Yourself/city goes Sternenklause" combined the Betaville mobile client with an artistic project on a former bar in the Rembertiviertel, a district that was destroyed in the 1960s to make place for a highway and a huge roundabout. In this urban art event citizens had the chance to view the 3D-model reconstruction of the old bar Sternenklause in its old location through the AR-mode of the Betaville mobile client and to express their wishes for the re-design of the area using the tablet.

The workshop phase and the first field test provided valuable insights for the following development of the subproject. It became clear that the very different stakeholder groups that "Express Yourself/city" tried to reach required a differentiation of the tools. The mobile client proved to be good to attract people for the topic but to really work on the re-design of a place and to express ideas properly the functionality of the original Betaville system was more adequate for the purpose of the subproject. The problem still was the complexity and the availability.

In the following second project phase HSB and M2C worked on the development of a Betaville web client. This new client featured the possibility to integrate and show complex self made 3D-models and it could be reached from everywhere without installing any program or software. From there a methodology was developed that was successfully applied in over 20 workshops until today involving mainly young people but also other important focus groups like migrants or refugees. These workshops have produced hundreds of 3D-proposals as alternative designs for over 10 different spots in Bremen among them the Remberting area, the old harbour district Gröpelingen, or the Hulsberg area, the largest inner city conversion area in Bremen.

### The Public Urban Lab – one week full of activities

One spot was the the main station area in Bremen. This is were "Express Yourself/city" scaled up the open lab format to a large participatory event week. 20.6. – 25.6.16 the so called "Public Urban Lab" turned the square in front of the main station into a forum for urban art, discussion, participation and learning that was open for all citizens. It featured a program with 19 public presentations, 3 art events, 3 workshops and 329 active participants. The tools developed within "Express Yourself/city", like Betaville, but also tools from other stakeholders, like HSB student groups or the PS2 subproject in Helsinki were used 174 times. Thousands of interested pedestrians floated in and out the white overseas container that was used as the "Public Urban Lab". The subproject received huge public recognition, among the population and of course among the highest level of deciders in the city administration. The discussions that started during the "Public Urban Lab" week meant a huge step forward in reaching the goals set for the subproject.

In the following third phase of "Express Yourself/city" HSB and M2C continued to



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Opening a permanent space for activities in "Express Yourself/city": the "PS2 Digital Impact Lab"

Photo: Harald Rehlin

install open labs in different contexts, in schools but also as during the opening of the P5, a maker space and sports venue in the city centre in November 2017. "Express Yourself/city" designed the opening using the open lab format, i.e. showing different digital tools that can play a role in urban re-design, bringing in an international perspective by inviting international experts from the US, the Netherlands, Spain and more, and by using interactive media art as a gateway for people to get interested in urban development. In the case of the P5 opening it was the Polish-Hungarian media art duo Electro Moon that was present with the huge, 20 meters wide, installation "Waves".

Resulting from the feedback on the "Public Urban Lab" and the different open labs, it became clear that the methodology and the tools used in "Express Yourself/city" were extremely successful in giving the discussion on participation in urban development a new

direction. One key factor for the success was the low level of accessibility to the 3D-modelling and 3D art since most of the participants involved in the activities were reverting to their tacit knowledge from everyday smartphone use, gaming, online surfing, etc. But the first two phases of the subproject also showed that the readiness for participation and the overall topic of urban re-design were very different from one district of the city to another. In highly developed, prosperous, more central parts of the city or in well-equipped secondary schools the 2 or 3 days of the open lab format were able to produce great results.

But in other parts of Bremen, namely the west of the city, the old harbor workers district, the goals of "Express Yourself/city" could only be reached by a permanent presence of the project in form of a location where trust was an important factor and where people could learn about participation, art methodologies

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and urban development and grow into the estimated role of urban re-designers over a longer period.

### The PS2 Digital Impact Lab – Creating a sustainable change in the participatory urban re-design

This led to the design and installation of the "PS2 Digital Impact Lab" that started its work in April 2017. The "PS2 Digital Impact Lab" is located in Gröpelingen, a district of Bremen that has to face huge infrastructural problems: high unemployment, low quality of schools, massive fluctuation of inhabitants, a high crime rate and more. All this created a bad reputation and people living in the district feel left out alone and underprivileged. For "Express Yourself/city" there was no better place to start a permanent lab for urban re-design because it is here where people could profit the most from a new confidence and a new voice in the city. Supported by the Senator for Building, Environment and

the larger companies, over schools and other educational institutions, to providers of social services like the German Red Cross, and small and medium entrepreneurs like a local fish food shop, not to mention all neighbors, artists and activists. It hosted participative digital art activities trying out different all the different approaches on changing urban re-design that were developed in the "Express Yourself/city" subproject and developed new ones. Over 150 participation activities were implemented and thousands of people of all age and background were reached. The program was organized around urban art actions, workshops series and open lab days. The "PS2 Digital Impact Lab" featured 3D-modeling with Betaville but also digital art, robotics, AR and VR activities for local people and organizations that was lacking such a creative space. It featured programs and digital art activities especially for girls and women where they could learn about the digital sphere and start programming website for the district. The lab also focused on refugees. Young people from a German learning class from a nearby vocational school were trained as so-called "Digital Scouts" for the district. We supported them to transfer their digital tacit knowledge to teach elderly people that lived in a newly built senior residency how to use the smart home technique that was newly installed in the building, for to live there more comfortable and enjoy to use it. A group of kids from the neighbourhood used the online game Minecraft to build a virtual version of Gröpelingen. The result is a unique digital map from the perspective, since they decided to integrate only those buildings and places that were important for them. The results of the Minecraft Gröpelingen group were presented as one example of good participation of young people at a large meeting in the Bremen town hall in context of the Bremen 2030 future strategy.



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Examples for the work of the "PS2 Digital Impact Lab": presenting a Minecraft version of the district of Gröpelingen

Photo: Olga Galashevich

Traffic of Bremen, a location was found and transformed into a modern creative space with computers, large, flexible working stations and white boards. The "PS2 Digital Impact Lab" also had large white walls and a window front that is inviting and ideal for exhibitions and projections.

Over 1,5 years the "PS2 Digital Impact Lab" developed into a stage where all PS2 activities in Bremen came together. It connected with all relevant stakeholders in the district, from

With its activities the "PS2 Digital Impact Lab" has built a reputation as leading player for urban development in the west of Bremen. In the last months of the PS2

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Offering new  
experiences with self  
made VR glasses at a  
village fair

Photo: Martin Koplin



project the activities of the lab reached out on other parts of the city again. In a Betaville workshop series together with school kids from the “Oberschule Schaumburger Straße” “Express Yourself/city” developed a dozen of new ideas for the design of the green areas in the new Hulsberg district. The new Hulsberg is the largest urban re-design project in Bremen at the moment. The central hospital undergoes a complete renovation and makes room for a new district in the centre of Bremen with over 2.000 new accommodation units. That the “PS2 Digital Impact Lab” was officially asked by the public administration and the company developing the project shows the grown importance of the new digital art strategies for participatory urban re-design in Bremen. The subproject has managed to make the virtual tangible. In another project the “PS2 Digital Impact Lab” gave school kids from the Gröpelingen school “Oberschule Ohlenhof” the chance to use digital tools to design the entrance of their new school building that will be build from next year on. The architect has already agreed to adapt the proposals of the students in the final realization.

The PS2 subproject “Express Yourself/city” had a huge impact on the urban development and the way participatory projects are designed in Bremen. It has exceeded its goals by far. That is why the “Digital Impact Lab”, as the strongest result of this subproject, will continue its work after PS2. In future the lab will play a key role in the hole region addressing the influence and implications of the digitalization on our society, on our work and of course on the way we change our urban sphere.

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## B THE SUBPROJECTS

From cultural activism to a think-tank / do-tank in urban planning

The PS2 partner city of Bremen featured two subprojects that stood in constant exchange and complemented each other. "The Public Space as Shared Museum", implemented by the M2C Institute for Applied Media Technologies and Culture followed an artistic approach whereas the "Express Yourself/ city" subproject run by the University of Applied Sciences (HSB) focused on a more technical and didactical axiom.

"The Public Space as Shared Museum" took an interesting sometimes labyrinthine journey starting from very general, abstract questions on the role of art in public space and ended with very concrete outcomes. The subproject established methods and accesses that use artistic views and thinking to activate people for creativity, learning, art making, for engaging in social and urban development contexts, and for claiming a new self-confidence that helps to define a position in society, a mindset namely that helps to understand the complex social and technical developments triggered by the digitalization. In doing so "The Public Space as Shared Museum" slipped into a role that can be seen as both a think tank but also a do-tank for art in public space.

At the beginning "The Public Space as Shared Museum" aimed at the identification

# THE PUBLIC SPACE AS SHARED MUSEUM M2C INSTITUTE FOR APPLIED MEDIA TECHNOLOGY AND CULTURE BREMEN / DE



of relevant questions on the role of art in public space and the future of public participation. Therefore a series of meetings in the format of Salons was started. Salons as they were held in the 18th or 19th century have a long tradition in Europe. It is a gathering of experts and professionals in a private relaxed atmosphere. There is no specific topic set, it is a brainstorming with open end. For the first meeting, the Salon A in September 2015, members of all relevant stakeholder groups, like artists, art curators, creatives, researchers and urban designers met. As venue for the Salons M2C installed the temporary "PS2 Gallery" in a central and prominent location, the former Gallery Hertz that is still in use for the exhibition of political and engaged art and was the space of the official Picasso gallerist for Germany.

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Artist Ursula Scherrer  
Participant of the Sound  
and Space and Color  
Workshop enjoying the  
multimedia map of the  
Gröpelingen district  
developed in the  
activity

Photo: Jan-Phillip Ley

This formed the ideal surrounding for the development of questions and of a strategy how to address them. Later in in subproject the "PS2 Gallery" functioned as exhibition space for art activities that resulted from the initial Salon meetings. Very soon two questions rose as the most crucial ones when thinking about the role of art in public space:

1. In how far is public art exploiting art itself? Is art that is exhibited or created participative with the public only a vehicle that contributes to a certain agenda that is not art driven? And: is it still "real" art then? Or isn't this delimitating the freedom of art?
2. If art represents an appropriate way to address and map social and cultural friction, how can these artistic articulation become effective in public space? And derived from that: what real impact can art have on changing problematic, delicate social and the re-design of urban spaces?

### Working on tipping points

Having identified the two most interesting strings for the "The Public Space as Shared Museum" a plan evolved around the investigation of art in the described problematic areas of a city, in this case Bremen and the role of citizens as producers/ consumers of this art. The term tipping point (de: Kippunkt/ Umkip-Punkt) was chosen to describe the places focussed by the subproject. How is a tipping point characterized? It is a materialistic or abstract cultural or daily-cultural configuration in real space, which is characterized by their fragility and therefore, systemically and cognitive psychologically speaking, bears (as yet unknown) the potential for an early change in the situation in itself. A tipping point may also be a focal point, it is locally often referred to a gap, problem, as an object of cultural, intercultural, societal and social conflict, upcoming contradistinctions or can

be interpreted as a special local chance. The focus lies on dimensions that are affected by transformation processes in the city that emerge the disappearance of art and culture in public or cultural disconnectivity. Concerning the role of the local citizens "The Public Space as Shared Museum" assumed that if the artistic participatory interventions would unfold a real impact on the tipping point locations then local citizens will pick the artistic procedure and thereby become artists themselves. That meant a break with the traditional art that is mostly shaped by academics and intellectuals (especially in the case of media art and digital art). In "The Public Space as Shared Museum" art is attributed the role of a tool that makes the requirements, wishes and ideas for the public space visible.

M2C, supported by its strong local network of artists and creatives, started to identify certain tipping points and developed a procedure how to address them. Selected artists (or groups of artists/creatives) were supposed to start the artistic confrontation and interpretation with a tipping point situation. A public participation activity was implemented by M2C and the artists in the

**„A ROLE THAT CAN BE SEEN AS BOTH A THINK TANK BUT ALSO A DO-TANK FOR ART IN PUBLIC SPACE.“**

specific space. This processes resulted in participatory artworks that invites people (e.g. local people) and provided a reflection about the situation or a creative cultural solution for the cultural/aesthetical problems/

chances of the tipping point. The artwork was afterwards exhibited at the place of origin or was perceivable at the place of origin by useful sorts of media but exhibited at the PS2 Gallery and the later in the PS2 Digital Impact Lab. Repeating this method at several tipping points all over Bremen resulted in a participatory chain of artworks that invited people (e.g. local people) and provided a reflection about the situation and the potentials of creative solutions.

A first series of events – experimenting with places and topics

On 18.12.15 a first art event took place. For the “1st Welcome to Bremen Tandem Slam” “The Public Space as Shared Museum” invited people to a cultural slam night to the Lift Café Bremen. 20 participants and 100 visitors saw performances of (poetic) texts, music and performances developed in artistic workshops the weeks before. The event showed different perceptions of the urban space of Bremen from a combined refugees’ and a local citizens’ point of view. As part of the event young media designers Tolga Özer and Johan Luziv (Bremen) invited the visitors to take part in an interactive participatory photo installation showcasing private impressions of the Bremen urban space. The event left a great impact on the cultural scene in Bremen. All slam poetry events in the region following the “1st Welcome to Bremen Tandem Slam” involved from this time on refugees and topics of different cultural perspectives as a motto on the in their program. In the first event the inspiration come not so much from a tipping point but from a tipping situation. It was the peak of the refugee migration of 2015 that reached Germany and other European countries. Here a great welcome culture was confronted with a great denial and fear among people.

The second event in February 2016 then picked up a real space. “The Public Space as Shared Museum” developed a program around the Walle Center, a small shopping



← The Syrian refugee Gorg Al Shhadh performing a poem about his flight and his view of Bremen during the “1st Welcome to Bremen Tandem Slam”

Photo: Martin Koplin

mall in one of the poorest areas of Bremen, the Bremen West, that also bears the highest cultural diversity. The subproject invited two international artists, Ursula Scherrer (New York) and Flo Kaufmann (Solothurn), to play out a participative performance together with the visitors of the Walle Center. “Post-Monochrom” brought together the new phenomenon of selfies with the cyanotype, one of the first techniques of photography. Motivated by the artists visitors took selfies, which were immediately developed and exhibited as Cyanotypes at the “Wallerie” gallery space in the mall. For the participants the event created new views on their live and their urban environment of the district.

Over 50 Cyanotype pictures were produced that day. All of them were exhibited in the following months at the “PS2 Gallery”. In September 2016 the Cyanotypes were given back to the people. The restitution of the photos to the participants was an important part of the “Post-Monochrom” event since it followed the assumption of the subproject on the role of citizens. What started with an unmeaning selfie that were used by artists came back after a few months transformed into real artworks making them artists themselves.

In June 2016 “The Public Space as Shared Museum” tackled a third tipping point, the main station area. It used and co-organized

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→ Impressions from the art event „Post-Monochrom“ at the Walle Center shopping mall. Participants could take selfies

These were developed with the old technique of cyanotypes

Photos: Ursula Scherrer



the “Public Urban Lab” planned by the other Bremen based PS2 project “Express Yourself/city” as a stage to invite various artists to present their work in public space to the everyday pedestrians coming in and out the main station. The great majority of people in this place had no affinity for art or have never been there to consume art. But in the “MyMatrix” participatory digital urban art activity by media artist Wolf Nkole Helzle (Mehrstetten) pedestrians were confronted with the possibility to upload pictures of everyday situations taken with their smartphones or other cameras into a growing Bremen-Matrix set up by Helzle. In another format, “ask your town” by Doris Weinberger (Bremen), pedestrians got into interaction with each other. Doris Weinberger shared out posters that ask questions on the urban development and living in Bremen and other European cities. These posters were to be redistributed all over the city by the pedestrians.

A second series of events – How to create real engagement from non-artists

All these artistic interventions brought good results for the initial questions asked in the subproject plan. But it was still difficult to really motivate participants to continue the art work as a tool to re-design their urban surroundings and leave a real impact on the city. Refugees, random pedestrians, school

kids, they were all interested, but proper interaction was mainly driven by art oriented people.

With the installation of the “PS2 Digital Impact Lab” through the M2C Institute a possibility arose to take the most promising methods and tools used in the tipping point activities so far and apply them in a tipping point area over a larger period of time.

A very successful event was the creative media art activity “Sound & Space & Color of Gröpelingen” in November 2017. The two media artist and musicians Stéphane Clor and Jan-Phillip Ley developed a place making technique where places in the district that are related to positive or negative feelings are mapped visually and acoustically. The participants, a group of 10 people from the local neighborhood and with very different backgrounds went on a walk to these places and took photos and audio recordings. The subjective impressions were then sampled in an installation where the images and sounds appear as projection on the roof and the floor of the “PS2 Digital Impact Lab” layering up to dense curtain of attitudes towards the district.

Another event that engaged the local citizens of Gröpelingen in a very different way was the participative installation “Ab\_Fall” that took place in June 2018. Ursula Scherrer (New York City), Flo Kaufmann (Solothurn) and Ludger Hennig (Bremen) worked together with pupils of the New High School Gröpelingen and set a strong signal against the omnipresent garbage problem in the west of Bremen. The artists and pupils took two days to walk through the district to collect waste, scrap metal and old electrical appliances found in the streets. On the square in front of the local library a sculpture was built participatively with the collected material. The residents were encouraged to engage in a dialogue about the problem and the throw-away society. The reactions were extremely diverse but overwhelmingly positive: Excited discussions, irritated looks, amazement, amusement and encouragement. “Ab\_Fall” hit a nerve.



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Artist Ursula Scherrer examining the participative installation „Ab\_Fall” that addressed the pressing issue of waste in the Bremen west

Photo: Ludger Hennig

→

A visitor of the „Luminale” light festival waiting for his message to appear on the façade of the main station Offenbach

Photo: Lorenz Potthast



From Summer 2017 on, we continued to use the “PS2 Digital Impact Lab” as venue for the participative art activities, events and exhibitions during “The Public Space as Shared Museum”.

Reaching out – “The Public Space as Shared Museum” goes Luminale Offenbach and ISEA2018

In the final phase of the subproject “The Public Space as Shared Museum” took its activities abroad and got the chance to co-create and co-curate the “Luminale” for Offenbach. The Luminale is the biennale for light art and urban design in Frankfurt and Offenbach in March 2018. Furthermore, PS2 developed a huge artistic and creative program as a PS2 special for the 24th International Symposium on Electronic Art (ISEA2018) in Durban, South Africa.

For the „biennale for light art and urban design”,

called „Luminale“, the subproject worked together with a citizens’ initiative for the re-development and re-use of the main station in Offenbach. The main station in Offenbach is a tipping point par excellence. Since a new railway connection has made the station superfluous it is subject of constant debate. The initiative “Hauptbahnhof OF” wants to turn the station into a place for participatory action, art and cultural innovation. For one night “The Public Space as Shared Museum” brought its tipping point experience to the station and transformed it into a temporary digital art lab. Media artists Lorenz Potthast and Tim Georg Heinze (Xenorama collective, Berlin, Postdam, Bremen) used the hole front of the building for an interactive projection. Visitors could become part of the installation by sending messages that were projected on the building answering the question: “what is your connection with this place?” The media artist duo Elektro Moon Vision (Elwira Wojtunik and Popesz Csaba Láng, Krakow),



who worked together with “The Public Space as Shared Museum” already with an installation in Bremen, showed a piece of their work as well as the light artist Franz Betz (trafolab - LichtKunstLabor, Hannover). The actions carried out by these artists and the information talks by the PS2 members at the “Luminale” meant a huge step forward for the “Hauptbahnhof OF” initiative in reaching their goal of a new cultural use for the main station Offenbach.

This experience showed that the way tipping points were addressed by “The Public Space as Shared Museum” easily can be transferred to other places and situations. In 2018 the subproject got the great chance to take its experiences even further and bigger: The PS2 project was invited by the ISEA International to contribute to the ISEA2018 in Durban, South Africa, with a special PS2 Lab consisting of art events, talks, guerilla actions, digital interventions, and workshops. The ISEA (International Symposium on Electronic Art) is one of the world’s most prominent international media arts and digital innovation conferences and meant a huge stage for the PS2 project to test whether its methods and tools could be used in a completely different urban sphere than the ones in Europe where they were developed. “The Public Space as Shared Museum” and its leader M2C Institute took the role of a curator of the lab program that was called “The People’s Smart Sculpture @ISEA2018”. Over ten days in July 2018 “The Public Space as Shared Museum” and M2C organized the implementation of more than 15 conference talks, 10 digital art workshops and 11 digital art activities in the context of the people’s participation in their development of the urban sphere.<sup>1</sup>

Next to the overall curation of the PS2 Lab @ISEA2018 „The Public Space as Shared Museum” also implemented two activities initially. The first one was a digital guerilla art projection project that was named „The Public Space As Shared Museum” after the subproject. It was implemented by a

team with Popesz Csaba Láng, Elwira Wojtunik-Láng (Elektro Moon Vision), Lorenz Potthast (Xenorama), members of the M2C Institute Martin Koplín and Stephan Siegert together with the local Durban artists of the “Amasosha Art Movement”. It consisted out of a series of activities at different venues in Durban, the Denis Hurley Center, the BAT Center, the Durban Art Gallery and the City Hall. The second one was called “Tent Vision”. Therefore the three Bremen artists Jürgen Amthor, Marion Bösen, Patricia Lambertus performed their participative art work in public space and exhibited what was created together with by-passers and artists from Durban as a „re-survey” of urbanity as a social and cultural space with art as a medium of exchange between the spheres and people.

#### Sustainable results

“The Public Space as Shared Museum” fully achieved its goals. It formed a chain of art and creative (e.g. conceptual and social) interventions as an experimental, social and location-based art in public space involving the topics of digital art, human interaction, participation and modern citizenship or on what the artist bring into it. “The Public Space as Shared Museum” also integrated dimensions of gamification into participative digital art activities, involving eEntertainment and mobile games. The sub-project invited people and started a reflection process about the situation and the potentials of cultural solutions, creating an informal knowledge acquisition and exchange for artists/creatives about participatory art practice, the integration of local people and creative role changes (artists/creatives as co-curator, knowledge provider, consultants) that fostered new activities and cooperation continuing the work of “The Public Space as Shared Museum” after the end of the PS2 project at the PS2 Digital Impact Lab Bremen.

The activities were performed by international and national artists in close connection with the local citizens of different parts of Bremen.

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For more information on the PS2 Durban special see Chapter E in this publication.

The events addressed people of all age and background. Especially young people, participative artists and creatives with a migrant/refugee background in Bremen got engaged and developed a new artistic voice in addressing issues related to the urban space. The outcomes are sustainable partnerships with dozens of stakeholders from art, education, administration, culture and a series of art inventions resulting in innovative artworks that provide insights into problematic tipping point situations in Bremen. The subproject supported collaborative learning processes and served as an attractor for new audiences beyond the traditional art lovers.

“The Public Space as Shared Museum” successfully raised awareness for important societal topics such as digitalization, waste, sustainability, active citizenship and showed new ways of expressing these topics by using digital art and analogue methods. The subproject had a great influence on several tipping points in the city of Bremen, especially the West of Bremen and the Gröpelingen

district. Here “The Public Space as Shared Museum” was able to set new courses and perspectives on an area that suffers from deindustrialization, unemployment, crime, and a bad reputation and supported the raise of creativity and art in the district. The art activities carried out were displayed and connected to the “PS2 Digital Impact Lab” and the “PS2 Gallery” and reached a great number of people of all age, culture, and profession.

The experiences made with the two specials at the “Luminale Offenbach” and the “ISEA 2018” in Durban widened the horizon of “The Public Space as Shared Museum” enormously. By applying the tipping point method in other parts of Germany and also in South Africa proved the value and effectiveness of the followed approach. In future the link to the “PS2 Digital Impact Lab” also ensures that the developed network and the chain of tipping points will be continued.

■

## B THE SUBPROJECTS

The Bitola subproject developed a virtual platform for co-creation in urban art and planning, titled 4D Virtual Urban Art.

The 4D Virtual Urban Art fosters participative art and collaborative urban art & culture processes in Europe's cross-cultural city spaces. The approach works on two levels: the implementation of participation projects and the evaluation of these activities in a cross-cultural comparative analysis and for the aspect of real transferability (co-creation). The goal of the project is a "smart urban development" designed by citizens which profit from the interplay of culturally different approaches.

The 4D Virtual Urban Art is a solution based on a precise 3D model of the proposed urban environment, in which the users can explore and suggest changes of the areas they live in and upload their ideas to the online database. The decision making process of urban art, urban development and planning is closely connected to the history of the selected areas and their cultural heritage value, but it is also influenced by plans for future development projects. Thus we will support the citizens with the historical information and the cultural value of the diverse interpretations and cultural expressions.

Adding the dimension of time (3D+time=4D), the users can explore their habitat and receive time related information on certain

# 4D VIRTUAL URBAN ART NI INSTITUTE AND MUSEUM BITOLA AND GAUSS INSTITUTE BITOLA / FYROM



objects or areas. For example, the user can "travel in time", and see historical data about the area of interest, which can be inspiration for the suggested future solution.

### Current Practices in Urban Planning

When we talk about urban planning and urban art interventions in the public space they are usually realized by architects licensed as urban planners. Usually the planners that will intervene in a selected area/ space are chosen by local authorities in public competition (open tenders). Very frequently the best tenders (as a rule lowest price is key criteria) are companies/ experts with little or non-existing

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Proposal submitted for reshaping Bitola downtown by two recently graduated architects

Photo: Dejan Tomski & Mila Rorich

knowledge about the area that should be reconstructed (its history, traditions, life style of inhabitants, etc.).

This causes situations in which the planners who propose a reconstruction of some urban area are guided only by professional norms and regulations (and unofficially political or business interests). They are unaware of the spirit of the respective urban area. The spirit of any urban area is mainly shaped by its inhabitants (citizens). The cities exist for the citizens and it is their right to participate in the processes which shape their community and environment. The spatial and urban development make up the spatial dimension of the overall societal development, which is why the discussion about spatial and urban development is in fact a discussion about the society we would like to live in.

Due to our experience and the conducted research within the PS2 project (elaborated below) shows that in Republic of Macedonia, regarding urban planning:

- Citizens are inadequately and untimely informed
- Citizens are being consulted only formally and in the final phase of the preparation of urban planning documents
- Citizens hardly understand the planned development and its' consequences
- There are no user friendly IT tools for citizens' participation in urban planning

Thus we developed a Virtual Platform for co-creation which enables active participation of the citizens in the urban planning. Through this platform the citizens can comment online (give positive and negative comments) on current situations in their urban habitat as well as on the suggested changes with new

or amended urban plans. But not just that: They can suggest ideas and start initiatives what they want to see in their habitats. With this approach of giving voice to the citizens in the whole process of urban planning, the authorities can make SMART decisions and bring urban plans according the needs of local population (citizens).

The Virtual Platform links technology and culture in a participative approach. The 4D Virtual Urban Art case study contributes to innovation and participative creativity in the urban art and art and planning sector that will create spill-overs on other sectors.

### Why citizens' participation in the urban planning

Traditionally the processes of knowledge transfer are based on the principle of ONE (or few) to MANY (or all). For example, when someone writes a book or presents a lecture, in that book or lecture he/she/they share(s) his/hers/their knowledge and ideas learned from LIMITED sources. Although these sources may be a quite large, it is still limited number. Even the high level experts have the knowledge acquired on the basis of a limited number of sources. For example, read 1,000 books, studied 10 years at 3-5 universities, attended 100 conferences etc.

Similar is situation in the area of urban planning and urban development. When developing an urban plan, a proposal to rebuild or beautify parts of the city is relying on the ideas and knowledge of a limited number of experts (the urban planners). Regardless of the amount of knowledge and ideas that they possess, still a limited number of input parameters affect the knowledge and creativity of the experts. As in the case with the writing of books, in this case too, the experts have acquired their creativity based on their talent and the (limited) number of sources (books, projects, lectures) that influenced their professional development.

Contrary to the processes in which we have limited number of sources is Crowdsourcing.

Crowdsourcing is the process of getting work, usually online, from a large number of people. The word is a combination of the words ‚crowd‘ and ‚outsourcing‘. The idea is to take work and outsource it to a crowd of workers. The most famous example would be of course Wikipedia.

In Wikipedia knowledge is shared from ALL to ALL. The role of experts in Wikipedia is to refine knowledge. But the process of refining the knowledge is not controlled only by a few experts, but in the process of refining it is a participatory approach too. Those who are identified as experts can „discuss“ whether knowledge shared by a user is adequate and relevant. On this way knowledge is shared (theoretically) from ALL to ALL. In Wikipedia it is shared explicit knowledge. Explicit knowledge is what is documented or codified and can be transferred easily to others. The processes, procedures, journals, manuals, drawings or any such artifacts come under explicit knowledge. But in urban development in order to capture the spirit of the specific area beside the explicit knowledge it is important to capture the tacit knowledge of the citizens living in the area. This knowledge cannot be learned from the books; it is accumulated by the citizens living in the area on the basis of their everyday life experience. Tacit knowledge is what people carry in their minds and we find it difficult to access. There are times we are not aware of the knowledge we possess and also how valuable it can turn be if shared with others. The transfer of tacit knowledge mainly happens through personal contact and trust but this is considered to be very valuable. Many times this is not shared, primarily because we are unable to communicate all we know.

For the PS2 subproject 4D Virtual Urban Art we believed that the opportunity for everyone to be able to share their ideas is of great importance to the participatory approach in urban planning. Similarly to Wikipedia, the role of the experts – here the urban planners is to refine ideas from the citizens.

In addition, in the case of urban planning the word ALL means all residents (current and former) of a region, city or urban quarter. In the case of urban planning, the term ALL has not universal significance because it is hard to believe that a resident of Jakarta, Indonesia would be interested in the urban development of the city of Bitola in Macedonia. However, the sharing of ideas from everyone (from a particular area) to ALL (in that affected area) gives a new dimension of participatory urban planning.



←  
Screenshot of the platform for crowdsourcing in urban art and planning

How authorities currently see participation of the citizens in the urban planning

In the history of urban planning in the former Yugoslav Republic of Macedonia since its independence, citizens' participation in the decision-making process is extremely sporadic, insufficient and attempts for inclusion of citizens' have mostly been unsuccessful. In most cases, citizens' awareness of the existence of a certain urban plan which directly affects the quality of life in their community usually occurs after the entire procedure for the adoption of the plan is over and it is already in the phase of implementation. At that point, citizens have very limited options to act, so they usually end up organizing protests, blockades and disabling the contractors to start building. The most recent example in this direction are the protests in the Municipality of Karposh in the City of Skopje from 2016. Citizens were dissatisfied with the detailed urban plan in Karposh 3 which would replace the

parks and green spaces with parking lots for the newly planned objects in the area. However, such actions almost always end up unsuccessfully.

Urban planning in in the former Yugoslav Republic of Macedonia is regulated with the Law on spatial and urban planning, with three Laws being adopted up to date after the independence of the country - in 1996, 2005 and the newest one in 2014. Even though each following law is more detailed and voluminous than the preceding one, in terms of the procedures for adoption of urban plans, it remains mostly in status quo as far as the opportunities for citizens' participation are considered. Even certain additional instruments put at citizens' disposal (which haven't been a part in the previous law) are put in a manner that does not allow a substantial influence of the citizens themselves.

One of the novelties in the existing Law on spatial and urban planning is article 21, which obliges the municipalities to publish at least two public calls per year, for the delivery of initiatives for urban plans by interested natural or legal entities. Even though such a tool is a great opportunity for citizens themselves to initiate new or change existing urban plans, the way it is being set up does not guarantee that a given initiative will be realized, regardless of its content and support by the citizens. One, problem is financing. Municipalities require proposals for changes in the urban plan initiated by a third party. For a group of citizens to find the funds for financing a proposal for amendment of urban plan is very hard. Furthermore, the citizens are poorly informed about the calls.

According to the Law on spatial and urban planning, the municipalities are obliged to conduct a public presentation and a public opinion poll when proposing a detailed urban plan. Municipalities have to make a public announcement via the electronic system e-urbanism.mk, along with an announcement in at least two printed media, at least three days before the conduction of

the public opinion poll. This legal solution for the announcement of such activities is one of the most important reasons why the citizens are being disabled to participate in the urban planning procedure. Firstly, the publishing in at least two printed media (which as a rule also in this case means two local media with low circulation) is not at all an efficient method which would reach out the affected citizens by the given urban plan, and inform them about the public presentation and poll.

Furthermore, the three-day deadline from the publishing of the information until the date when the presentation is being held, is too short for such information to be properly spread among the citizens and for the citizens to adjust their schedules so they can attend the presentation. The latter plays a significant role, because municipalities have the tendency to hold the public presentation in working hours, when the citizens are at work too and it is harder for them to attend. Another common practice is to hold the public presentation in the holiday and vacation periods and citizens' attention is not as directed onto the everyday happenings in the community.

The public presentation is defined as an expert presentation of the plan organized within the frames of the public opinion poll, lasting one working day. However, in practice the public presentation never lasts more than 5-10 minutes when the planner briefly lists certain data about the plan which is mostly technical and has no meaning or significance for the citizens with no expert urbanistic knowledge. The plan itself is presented two-dimensionally in a format that is not understandable for the citizens, disabling them from realizing what the plan would mean for the community they live in. With today's development of ICT and urban planning tools it is practically incredible that the legislators have not considered presenting the plan with 3D technology which is understandable both for experts and laics in architecture and urban planning.

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We can conclude that in the former Yugoslav Republic of Macedonia, according to article 3 from the Law on spatial and urban planning, the preparation, adoption and implementation of urban plans is defined as a matter of public interest. The public interest in the adoption of a certain urban plan is articulated by the state organs, the local self-government and other included subjects, in accordance with the law. However, the first and foremost to assess and judge the question of what is the specific public interest, are the citizens of the affected settlement. Unfortunately, currently authorities and other stakeholders (businesses, professional urban planners etc.) do not recognize the citizens as factor for articulating public interest. From the above presented analysis of the current Law for spatial and urban planning and its implementation it is evident that authorities and other stakeholders (businesses, professional urban planners etc.) see the citizens as unwanted witnesses in the process of urban planning.

The best way to articulate the citizens' attitude on what is the public interest when adopting a certain urban plan, is to provide opportunities for their direct participation during the entire procedure, along with instruments and "weapons" for their ideas and opinions on the public interest in the urban development of their community to be directly included in the urban decision making.

#### What are results of current non-involvement of the citizens in the urban planning?

The above analyzed current legal framework and the actual situation of participation of the citizens in urban planning is verified through a survey realized as part of the PS2 subproject in Bitola by Gauss Institute in December 2015 among citizens in the former Yugoslav Republic of Macedonia, about civil involvement in urban planning. The institute therefore surveyed a representative sample of 1287 citizens. Age distribution of the surveyed citizens was: 31,5% from 18-34

years old, 63,1% 35-64 years old and 5,4% over 65 years old.

According to the survey among citizens, the majority of citizens (42,6%) believe that local authorities often do not make urban plans in the interest of citizens and 27% agree that local authorities never make it.

The lowest percentage (ONLY 1,6%) believes that local authorities always make urban plans in favor of the citizens. This indicates that citizens have an extremely negative attitude towards decisions, i.e. urban plans by local authorities and consider that they are not in the interest of citizens. As for the openness of local governments, again the highest percentage (42,5%) believes that local authorities are not open to the opinions of citizens in the process of urban planning and again the lowest percentage (1,4%) believes that local authorities are always open to this issue. So, the position of the citizens is very negative towards openness to the authorities for their remarks and comments.

But when it comes to issues that concern their participation, citizens are extremely inactive i.e. 80,1% have never attended a public meeting of the Commission for urbanism in their municipality. Despite expressing high mistrust to the local authorities in adopting urban plans, as demonstrated by the responses to the first question, the citizens still do not show initiative to attend the process itself.

Regarding the submission of remarks 37% said they have submitted comments/ remarks i.e. 63% said no. Of those who have submitted comments, even 90.3% claimed that their comments were not accepted.

Overall, the survey among citizens strengthened the fact that they are dissatisfied with urban plans and consider that local authorities are not acting in their interest. But they are not sufficiently active or attend public meetings and do not submit enough comments and remarks to express their dissatisfaction. A large percentage also

believes that the authorities are not open for their comments and remarks and usually reject their comments, which may be the reason for the lack of motivation for further participation.

#### Virtual platform for civil activism in urban art and planning

On order to demonstrate a good practice for citizen's involvement in urban art and planning PS2 subproject 4D Virtual Urban Art created a web based software – fully operational and accessible through www and social media. It can be used by citizens to submit and share ideas for a better urban living. They can criticize certain locations and projects. They may applause good urban solutions and initiated projects. They may suggest solutions for improving their urban communities. Thus this tool creates

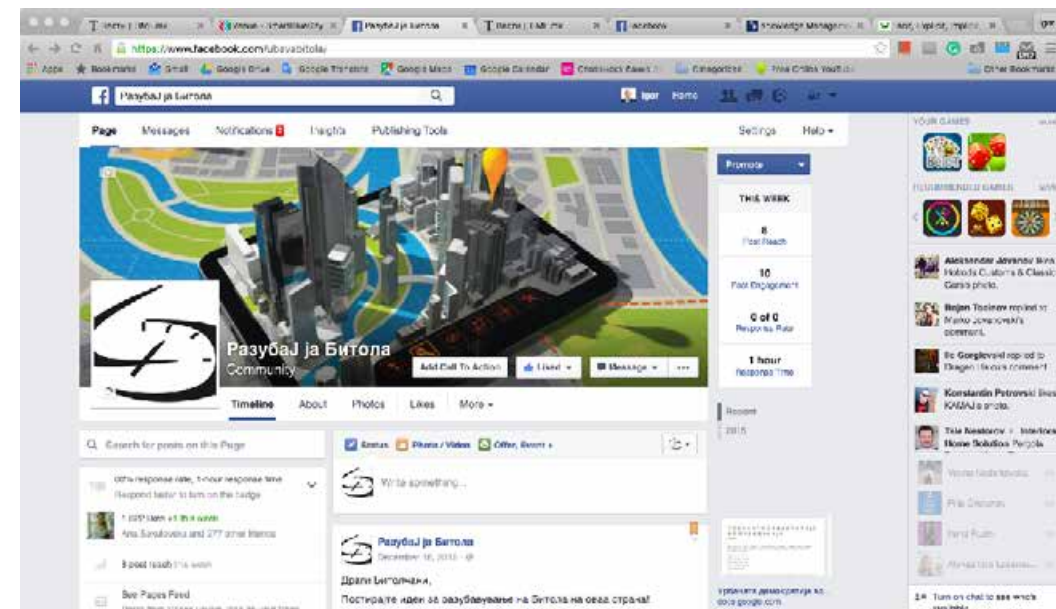
an environment for urban development crowdsourcing. It functions as an example how the existing governmental e-urbanizam.mk portal should function if we want real participatory urban art and planning for the former Yugoslav Republic of Macedonia.

The platform is accessible through web ([www.urbandialog.net](http://www.urbandialog.net)) and is integrated with Facebook (<https://www.facebook.com/urbandialog.net/>).

Users can register, view proposals and comment through Facebook. It supports publishing of text, 2D images, videos and 3D models in .kml/.kmz format. The platform is organized in layers.

The users of the platform can post their ideas in several layers based on their experience in the urban art and planning or from their experience of living in the affected area etc.

↓  
Screenshot from the Facebook page urbandialog.net



When posting on the platform the users can declare themselves as

1

- Expert for architecture/ urban art and planning
- Citizen directly affected by location about which submits idea
- Citizen who want to contribute to more beautiful city (not living in affected area)
- Visitor with positive attitude who wish to share his/hers ideas, experiences

The users can chose between three types of posts

2

- Reports of non-functional locations, buildings, urban installations, objects etc.
- Suggestions for improvement / beautification
- Praise for good practices: resolved locations, buildings, urban installations, objects etc.

Furthermore, the users can post their comments as

3

- 2D proposals: images and text, and video (optional)
- 3D proposals: kml/kmz format currently is supported

**„CITIES EXIST FOR THE CITIZENS AND IT IS THEIR RIGHT TO PARTICIPATE IN THE PROCESSES WHICH SHAPE THEIR COMMUNITY AND ENVIRONMENT.“**

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Every post on the web platform is synchronized with the Facebook page and vice versa. The synchronization with the social media (Facebook) was very important for the success of the project, because the experience showed that it was much easier to attract visitors to interact through Facebook rather than through a specific web page. All received proposals and comments were shared with local authorities as a part of the subproject. This scenario for co-creation tried out in the project was based on the following two iterations in the process of urban art and planning.

1

2

- |   |   |
|---|---|
| 1. Local Authorities have some idea(s) for reconstruction of the parts of the city they publish the proposal(s) on the developed platform in the format easily understandable for the citizens. | 1. Citizens start initiative for rehabilitation some dysfunctional area – they launch Facebook campaign and use web platform to share their ideas and make “pressure” on local authorities. |
| 2. Citizens and experts comment on the proposed solutions, but also modify them or even propose new ones.   | 2. Local authorities analyze citizen’s initiative.  |
| 3. IF (comments >= positive) THEN GOTO 6  | 3. IF (initiative = feasible and legal) THEN CONTINUE / ELSE Explain why it is rejected.  |
| 4. Authorities analyze responses from experts and citizens and propose improved solutions....   | 4. Authorities create proposal about initiative.  |
| 5. GOTO 2   | 5. Citizens and experts comment on the proposed expert solutions, but also modify them or even propose new ones.  |
| 6. END -> Implement proposal  | 6. IF (comments >= positive) THEN GOTO 9  |
|   | 7. Authorities analyze responses from experts and citizens and propose improved solutions....   |
|   | 8. GOTO 4   |
|   | 9. END -> Implement   |

Next steps - sustainability

Our intention is to extend the virtual platform with an augmented reality app for smart devices. With the app the users can explore their habitat on site and receive time related information on certain objects or areas. For example, the user can "travel in time", and see historical data about the area of interest, which can be inspiration for the suggested future solution. Also users could explore the future of the area, get information if there are legal restrictions of what can be built in that area, or even how the area will look after implementing some urban art or construction project (by inserting virtual objects in video footage of the real space).

→  
Preview of the AR App currently developed in the 4D Virtual Urban Art project

Photo: GAUSS Institute



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↓  
Participatory workshop with children at the Institute and Museum Bitola on urban re-design of old buildings in Bitola

Photo: IMB Bitola

The development of the AR app built the last phase of the subproject 4D Virtual Urban art and currently under way. It is supposed to be ready until end of 2018, first half of 2019. It is based on the following techniques:

- AR aligning and serving rich media content
- Data Filtering and Flow Optimization trough
- GPS Location Filterin
- User Orientation Filtering
- User Movement Prediction Filtering
- User Preference Filtering
- Non repetitive content optimization
- Content Storing
- Engagement trough interactive tools
- Active Viewer concept trough interactive Games and Quizzes



Conclusion

The co-creation approach of the PS2 subproject 4D Virtual Urban Art was implemented in the city of Bitola (~ 80.000 inhabitants) as a pilot region. 73 proposals (19 of experts) for reconstruction/ reshaping specific urban areas in Bitola were proposed during the duration of the project. There were simple proposals as texts or images but also in the form of 3D models. Approximately 700 comments and discussions were collected on the platform.

All received proposals and comments were shared with local authorities. We believe that through operating the platform the authorities will recognize that their decisions for SMART urban development should be based on voices and ideas of the crowd (regardless how naïve or professional they can be). There are no bad and good ideas, only ideas and lack of ideas.

We also believe that the developed virtual platform enables hearing the voices of the crowd. The success of the virtual platform accompanied with other measures could spark changes in legislation and practices in the former Yugoslav Republic Macedonia towards participatory urban art and planning.

■

**B THE SUBPROJECTS**

The PS2 subproject “Cube-x Journey to Abadyl/wanderlost” took place in two countries, Denmark and Sweden. The cooperation between the Kristianstad University and the international performance space Warehouse9 in Copenhagen examined and discovered unknown and/or hidden cultural layers and visual experiences in a living city environment. Envisioned as a city-walk that through different cultural and social experiences could open up the participant’s eyes for new impressions and thoughts.

The key to this is through involvement, to give the participators means to re-discover, to re-experience their city.

The project was a result of a series of internal and public workshops during a three-year-long period in the framework of PS2, ending with public events in April/ May 2017 and October 2017 in the cities of Kristianstad and Copenhagen. The project included workshops, artist’s collaborations, interactive participatory setups in theatre and performance spaces and digital interaction research.

We called this theatre and performance project “The Journey to Abadyl”. Here we drew knowledge, methods, and research from our work in the collaborative network PRAMnet, a multidisciplinary network for media arts professionals. For the project we developed the concept of a virtual city) to put

# CUBE-X JOURNEY TO ABADYL / WANDERLOST KRISTIANSTAD UNIVERSITY AND PRAMNET – WAREHOUSE9 KRISTIANSTAD / SE & COPENHAGEN / DK



forward models for engaging participation in an interactive mixed reality space.

“Cube-x Journey to Abadyl/wanderlost” addresses the growing complexity of life in today’s city spaces and the imminent challenges to the development of the urban environment. The subproject thereby focusses closely on the aim of PS2 to explore the possibilities of participation that will become a smart culture technique as a result of the ongoing digitalization of society.

Our presumption and artistic credo for this project stemmed from reflections around the contemporary culture in our western society

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– we live in an age of global mobility, people move to dense city areas to work; people are fleeing from war and terror; the old world melts together with the new and we as democratic citizens are trying to find our role in this urban territory. Therefore, we chose a metaphoric title that reflects this complexity: “Cube-x Journey to Abadyl/wanderlost”. Cube-x is a combination of a cube, an almost perfect form, strictly regulated. The X-factor stands for the unknown, for the search of a logic, or an order. Abadyl is the title of a painting by Michael Johansson made in 1987. It is the combination of the words abstrakt (abstract) stad (city) and akryl (acrylic paint). It now lends its name to the project City of Abadyl, a virtual city space that is a continuously evolving platform for staging both immediate and long-term projects ground for art practice, interaction design and technology development. Finally Wander comes from the need to relocate and re-establish families and social connection, lost from the emotional feeling of being displaced both by growing mega-cities and alienating architecture and urban planning.

Social structures, neighborhood engagement, local identities and “smart” algorithms on the internet that feed “filter bubbles”; all this are affected by the transformation of our cities and living blocks. Our public cities are designed and also re-designed for commercial needs and for people to commute to and from work and living areas. Consequently, our cities once integrated with social and commercial functions are now more and more dis-integrated and segregated. The more we impose planned structures on our cities the more we seem to alienate the foundations of the cities; its people, its inhabitants. As the architect Rem Koolhaas (1985) wrote in the essay *Imagining Nothingness*:

*“Where there is nothing, everything is possible. Where there is architecture, nothing (else) is possible.”*

In our research and workshops enabled by the PS2 project we have both questioned

and developed strategies for how “The Smart Sculpture” can be created and manifested in a city space. To be more precise, we used the “Fieldasy” method to ask ourselves how we can design an open artwork that uses cultural artifacts and activities to create a field of impressions and expressions, of engagement and active reflection for an audience. Fieldasy is a process for engaging multiple perspectives in the creation of a world, and the mapping of its virtual space, by extracting artefacts and stories through the developed scenarios, partitur and game-boards. In the end, we developed something that we could not have imagined beforehand, a mobile exhibition format that through its use of technology, art, and a city space can facilitate a storyworld in which both producers, performers, and participants can imagine the world and our relations anew. This process has led to the development and design of three main formats (The Portals, The App, The Guides) and a process for how to set them up and make use of them in a cultural event. The format and the process are as follows.

## “HIDDEN CULTURAL LAYERS AND VISUAL EXPERIENCES IN A LIVING CITY ENVIRONMENT.”

The project examines and discovers unknown and/or hidden cultural layers and visual experiences in a living city environment. We envisioned the project as a city-walk that through different cultural and social experiences could open up the participant’s eyes for new impressions and thoughts, addressing the growing complexity

←  
The Guides  
from the App

Photo: Thore Soneson

of life in today's city spaces and meet new people. To play with the production of space on all three levels; the 'perceived space', 'conceived space' and 'lived space' Lefebvre (1991) we identified the need to re-discover the city space and the familiar places and thereby open up for citizens to renew their view and expectations of what the common spaces are, who lives there and how the city could be imagined. What they could develop into. Having worked together for the collaborative work "Journey to Abadyl we had a common ground from which we could draw knowledge, especially using methods from our research and workshops, staging participatory media and working with digital mediated designs and artistic productions. We developed scenarios for "Cube-x Journey to Abadyl/wanderlost" using both insights and production experiences to the device the three main formats – The Portals, The App, The Guides. These formats are to be seen as placeholders, metaphors for the actual artworks, participatory walks and site-specific digital media we produced together with invited artists and interaction designers.

Each of the three focuses on aspects of participation – via visual and tactile artworks, via physically experiencing the city and using dynamic digital media for smartphones.

As researchers and artists our agenda differs from a contemporary participatory culture where artists, actors, and performers often are called upon to create artworks that question, debate or otherwise focus on contemporary social and political issues (instrumentalized art); our agenda is focused on developing artworks through setting up processes and creating open-ended reflections for both the user and the producer.

This combination of mind and matter, of active reflecting and re-examining a known environment clearly shows that the tactile, social and the intellectual complement each other in a storyworld like "Wanderlost". In the series of performance workshops and cultural events held in Copenhagen in the environment around Warehouse9 our PS2 subproject engaged performance artists and digital designers in the development

of new ways of engaging audiences in 1 to 1 performances, collaborative creative processes and site specific staging of the results.

We believe that this open-ended approach to participatory art has a cultural and personal quality worth considering in urban planning and design workshops. Getting lost CAN create meaning - but it needs firm directions!

Cube-x Journey to Abadyl / Wanderlost

After the conceptual work we focused on drawing up strategies for the public event that took place in both of the partner cities and to test out ideas about audience participation in "Cube-x Journey to Abadyl/wanderlost". For Kristianstad we, first of all, decided to use Swedish as the main language for the event, the invited international artists should be presented in both English and Swedish. We mapped out the inner city, framed a section of the town taking into consideration the walking distances and the possible places for displaying exhibitions, to organize guided tours and hosting the workshops and events we planned. An important factor was the accessibility and openness for participation, we wanted a mixture of established art venues and unexpected areas to create a curiosity and an "interference" with the familiar and regular

As part of the PS2 project and together with students from our Digital Design program at the University of Kristianstad we exhibited an assignment called "Non-Places = Icke-Platser" at Kristianstad Center for Contemporary Art in 2016, a mapping of the "left-over" and "in-between" spaces in the town with photographs and sketches, design proposals to revitalize the areas. Through this, we established a positive relationship with this institution and were able to exhibit a Virtual Reality artwork and arrange a workshop during the final event in their space. The city of Kristianstad and their local business organizations were briefed on the event

and decided to support us with accessible and temporarily empty stores. Both the communal housing company ABK and the central shopping mall Galleria Boulevard gave us access to their available stores and helped us to communicate the event through their channels, their newsletters, and their public billboards.

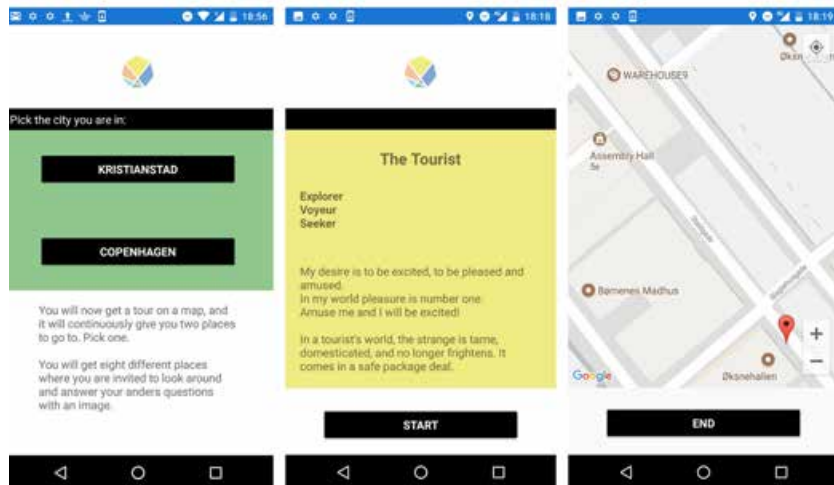
Together these stores and art venues created a groundwork for mapping out the "Cube-x Journey to Abadyl/wanderlost" events in the areas where people meet, stroll around, go for shopping and for taking a walk through the pedestrian areas of central Kristianstad.

For the event in Copenhagen, we decided on another set-up for "Cube-x Journey to Abadyl/wanderlost" at Warehouse9. The live-art scene is a performance center in a former meatpacking district where the topics for the local communities are more focused on social issues, gender, and alternative lifestyles. Here the invited artists were acting as Guides, the artworks and workshops were located in Warehouse 9. More on this later in this chapter.

The App "Cube-x Journey to Abadyl/wanderlost" and The Guides described below were setup only in Kristianstad, while most of the artworks were exhibited on both locations.

The App

The first format for participation we developed is the app Cube-x Journey to Abadyl/wanderlost that invites participants to a journey, a hike in their own everyday environment to support a reflective walking experience, moving through a city space to notice what they have already seen and to sharpen their attention about the familiar and ordinary places and things. In 1 very similar way three events at WH9 served the same purpose. Here the popular online game Minecraft was used. The meatpacking district was rebuilt digitally in the game and instead of only reflecting on the surrounding



←  
Screen images from the app Cube-x Journey to Abadyl/wanderlost - in Swedish as all texts in the app and the Guides



→  
The city of Kristianstad,  
still image from the  
VRproject  
“Genius Loci”  
Photo: Thore Soneson



environment the participants here also could actively do changes, intervene and create new proposals for the area. A prototype of the app was just ready for the event in Kristianstad and tested out during the event. Initially the experience of perception through walking is built upon a larger tradition in both literature and art. In her book, “Wanderlust” Rebecca Solnit gives several examples of the walking experience.

*“Walking ideally, is the state in which the mind, the body, and the world are aligned, as though they were three characters finally in conversation together, three notes suddenly making a chord. Walking allows us to be in our bodies and in the world without being made busy by them. It leaves us free to think without being wholly lost in our thoughts.”*

The interactive element in the GPS-navigated “Cube-x Journey to Abadyl/wanderlost” app are walking points. When you are in the range of one of these interactive points a question/challenge is posted on the mobile screen where you are e.g. asked: “What is unfamiliar and/or alien here?” You reply by taking a picture and posting that in the app. After the interactive walk, the users have re-discovered and re-experienced the streets and blocks in their neighborhood and receive a feedback from the app with the images and captions they experienced and reflected upon. The app can be re-used and re-explored several times, it opens up with an introduction where you meet one of seven Guides and the questions/challenges you receive are randomized from an online database so each interactive walk will never be the same.

### The Guides

The second format for participation in the PS2 subproject “Cube-x Journey to Abadyl/wanderlost” are The Guides. These seven different roles were developed to host our scenarios. The roles were played out by real

persons who could improvise around their “persona” during the walks through their respective perspectives.

Their overall mission was to create an interactive experience for the participants to re-discover and re-examine the city on all scales - as a citizen, as a visitor, as members of the community. Each one of The Guides had its own specific experience and perspective on the world and based on their own assumptions they would give their own special tour for the assigned participants to experience. They had an active role, improvised and encouraged discussions and exchanges of opinions and views. Below is an example of one of the Guides - The player - written by Åsa Maria Kraft, translated by Marie Karlevas Fredriksson:

*“What are the qualities at play through history constructing spaces and who is invited?”*

#### The Player

*I want to change the rule. Is it already changed? Well, then I want to change the change. Back to the rule. So that I can change the rule, because that is what I want. I play.*

*I play to be outside, above. I want to think that I think outside and above. The Box, where the others are. I refuse to be pigeonholed.*

*I play. Sometimes good, sometimes bad. Perhaps I don't have anything to do. Perhaps I'm bored. My rules are the only ones that can change the play. I'm the one who is outside, above.*

*I'm a cloud. Outside above, I float. Below are the others and they are not me. I am the cloud, I make it possible for every drop to stick to me, allowing itself to be a part of the milky white fog.*

*I am the one who plays in order to change the play. Because then I know I'm the one who plays best.*

The Guides were inspired by the sociologist Zygmunt Bauman. In his essay “From Pilgrim to Tourist - a short history of identity” he proposed that modern individuals possess a set of characteristics that form their identity.

*“Identity entered modern mind and practice dressed from the start as an individual task. It was up to the individual to find an escape from uncertainty ... putting the individual responsibility for self-formation on the agenda spawned the host of trainers, coaches, teachers, counselors and guides all claiming to hold superior knowledge of what identities could be acquired and held.”*

From this view of modernity and identity Bauman extracted the following personas – The Stroller, The Vagabond, The Player, The Tourist – to which we added The DoGooder, The Creator and The Homey. In the “Cube-x Journey to Abadyl/wanderlost” app, the user is given challenges through the perspective of one of these seven Guides based on their characteristics.

For the specific role as Guides we assembled a group of stage performers, storytellers, and actors with a diverse background and a keen interest and motivation for taking on the challenge. To coach this team, communication designer Marika Kajo set up workshops and rehearsals to prepare and train the seven participants into what we called “inspirational improvisers”. During these workshops, they were briefed by local historians and artists with experience from the field of stand-up comedy and roleplaying games.

They were also supplied with a written scenario and an inspirational “script” in the form of a collage mixing reflective thoughts again inspired by Bauman’s essay and interfoliated with impressions of exploring an unknown city and walking the streets in different characters. This “script” was assembled, as in this example for “The

Vagabond”, from the Bauman essay and from remarks and lines written by filmmaker and script writer Thore Soneson for the Virtual Reality piece “Genius Loci”:

*“No one can control me. I do not obey any laws. That's why the modern world is afraid of me./ In our time the neat streets turn mean. / Factories vanish together with jobs. / Skills no longer find buyers. / Knowledge turns into ignorance.”*

### The Portals

The third format for participation in “Cube-x Journey to Abadyl/wanderlost” are The Portals. Their aim is to engage participants in the discussion of how we can develop the digital and physical city of the future: Are we creating the city together or are we mere consumers of an environment designed for us? Each Portal actively involves people in a process where they gain insights in what it means to live in a city and are confronted with questions about democracy and engagement, about contemporary media and our lives in present “Metopia” as some critics label our internet social culture.

To the “Cube-x Journey to Abadyl/wanderlost” event in Kristianstad we invited artists and performers to create and to take part with artworks that focus on social and cultural issues shaping the present city life and citizenship. The result was a mixed reality exhibition space containing documentary digital film footage, sound, physical objects,

virtual reality, computer-generated art and hidden messages that formed and set the agenda for our common space and life.

The spaces in Kristianstad used for these artworks ranged from the Shopping mall Galleria Boulevard where "Beyond the smart world", a work about digital theft and social activism was displayed, to the Center of Contemporary Art with the Virtual Reality experience "Genius Loci", to the unknown non-places of the city and an empty store with a soundscape of the city called "Fictioning". One of the spaces was used as a meeting spot for the Guides and the participants. Here we exhibited a digital 3D work visualizing "Ideal Spaces" designed by artists and futurists. Special video walks with personal stories narrated by citizens were available for loan. The Danish group CoreAct invited the audience into their performance installation „My Table, is your Table“ a coffee feast playing with the idea of the private vs. the public space, inviting people to participate but instead of a traditional topic, the conversation is based around identity and nationalism.

Altogether these Portals formed a visual and mediated stage where the audience could experience both physically and in the imagination aspects of being a citizen in both a global and extremely close local setting. Confronted with the media worlds changing the representation of man and his reality, people were given the opportunity to reflect on consequences of the growing social media reality seen in relation to the actual physical environment around us.

#### Future city Lab Copenhagen

In Copenhagen and for our last public event, we tried another set-up of "Cube-x Journey to Abady/wanderlost". Here all of the different parts of the work of the artists was located in Warehouse 9 and by using the spatial configuration of that space we could rely on the configuration to navigate the visitors through its different workshops, performances, and



artworks over the four days the event run. Here we more thematically curated the artworks, including photos, video, prints, sound and interactive video installation. We arranged open workshops for reusing and re-designing clothes as well as performance and party arrangements including our second Minecraft sessions that re-created buildings and citizen spaces in the area of Kødbyen; digital media workshops with a focus on revitalizing the social awareness in the central area "Meat District" (Kødbyen).

In October 2017 we had the final event in which we tried to transfer and use experiences from all of our workshops and events and do a full presentation of "CUBE X - Digital City Scapes. +500 participants". A performance installation about democracy and urban development, where the audiences were invited to create visions of the city's future architecture and development in the Minecraft design game and take a bicycle ride in VR through an ideal space. Here the audiences were invited to first visit the independent FUTURE CITY LAB, a research organization which explores new forms of co-existence. Here the fictional elements were much more present, and the visitors could try-out, discuss and participate in various digital artworks and performances guided by artists and guides, where they will create and

↑  
Portal at Galleria  
Boulevard  
Photo: Michael Johannson

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↓  
CubeX /  
Future City Lab /  
Mobela c / City Lab  
/ Vr biking Utopias /  
vjing cityscapes / The  
Oracle and 3d printed  
objects from workshop  
proposals  
Photo: Michael Johannson

explore virtual and actual urban landscapes. The ability to present the installation "CUBE X - Digital City Scapes. +500 participants" during "KulturNatten" was a unique opportunity to reach audiences of all ages and to engage them in a dialogue about the development of their own neighbourhood, the city of Copenhagen, and to question the notions of city development in general. KulturNatten is a large cultural festival in Copenhagen taking place annually since 25 years. In the last 20 years the district of Kødbyen has undergone a rapid change from being a place for processing of meats and food to becoming a new vibrant cultural area with restaurants and creative businesses. This has had an effect on the demography of the area, the social structure and also the type of businesses who can survive the accelerated gentrification. In the "CUBE X - Digital City Scapes. +500 participants" performance event we made it possible to experience the effect of many of these new developments and visions for future cities as well as the inherent problems and dilemmas, such as visibility and safety in public spaces for marginalized groups in the LGBT+ communities.

Through its innovative artistic approach on the perception and re-design of urban space the "Cube-x Journey to Abady/wanderlost"

subproject has created great sustainable effects in Kristianstad and especially in Copenhagen: After the four years of ongoing workshops and public events in the PS2 project the artist driven venue Warehouse9 has been able to engage actively in this debate also in direct negotiations with cultural decision makers and urban developers. This has had a direct influence on the fact that Waerhouse9 in 2017 obtained a 10-year contract with the city of Copenhagen to operate as an artist driven venue and also to receive a grant in 2018 to develop mobile urban garden elements to configure the outdoor spaces in collaboration with artists and audiences.



**B THE SUBPROJECTS**

As one of 11 partners in the PS2 project, HSD has been implementing the goals and vision of the project through the work of its Mixed Media and Visualization department over the last 4 years in the PS2 subproject "Trails of Memory..." The work was carried out by a group of media experts, computer scientists, designers and artists working under the name of MIREVI team and inspired by the power of joint creativity and intrinsic motivation.

The initial concept for our PS2 subproject was built around two main topics and methods: 'Making Things Tell' and 'Trails of Memory'. While the first relates to technologically enhanced objects that tell a story, interactive objects for well-being and projection mapping that enhances objects employing a digital skin, the other focuses on projects about people, memories and public space that are realized with the help of different mixed media tools. In our work, mixed reality is used as a digital tool that either mediates existing art or produces new forms, most often resulting in a combination of both approaches. There were several small-scale projects realized in the last four years that either emerged out of these two initial interests or as a result of collaborating with one of the PS2 project partners. Here we will present some of the most successful examples that could be used as best practice cases and be easily adapted to other contexts.

# TRAILS OF MEMORY... UNIVERSITY OF APPLIED SCIENCES (HSD) DÜSSELDORF / DE



Video-Tagging

Video-Tagging is a research-project developed and led by Anja Vormann and Gunnar Friel in collaboration with students from different international design institutes. The main idea of the project is to comment places with videos by linking them with a historical content, criticizing some aspect of it, making the places more personal, or by adding layers of fiction, wishes or utopia to them. The main goal is to change the daily understanding of these places and to reclaim public space through the principle of Video-Tagging. The location-based videos are used to address subjective narratives, in this way developing methods for an alternative city structure and

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urban planning. Each student deals with one certain place in the city and tries to identify with it. They project own ideas, historical vignettes or written stories onto the place in order to enhance it with new dimensions of city-experience. This kind of intervention augments users' perception of the respective place and offers a more critical view on a certain topic.

Video-Tagging can be seen as a new way of giving citizens a voice for expressing their city experience and of developing a new way of designing and reflecting our living space. Due to the influence of capitalism, European cities experience an unbalanced development based on consumption. The public space, which was originally created for exchange and for experiencing different and unfamiliar influences, is losing its particularity to privatized and globalized selling points. As a result, diversity is disappearing, which is why the Video-Tagging project strives to gain back the multiple perspectives and to archive them in the city by means of a location-based principle.

Apart from the student works, the concept was used for individual artistic interventions by Zoya Laskowski, who referred to historical facts attached to certain places in Düsseldorf, and Anastasia Treskunov, who augmented the city according to her personal experiences and memories. The



application is multilayered and video-based using GPS data for locational information while the framework is transferable to any other city. For further development, there are suggestions for making the application accessible to everyone, so that all citizens could participate in shaping their city.

Trails of memories...

At their favorite urban places equipped with a dedicated memory station, people can leave personal memories via their mobile devices. At the stationary devices, memories are recorded using audio (speech messages, music), images (photos, graphics), video clips or text messages and stories respectively.

For the PS2 subproject the MIREVI team developed an app for the old town in Düsseldorf that shows location-based video footage from the 1920s until today. The videos originate from private archives of citizens of Düsseldorf. Not only architectural history is shown, but also the everyday life and family life of the past including activities like bathing in the Rhine, a picnic in the park, carnival celebrations, soccer or the famous 'cart wheelers'.

Beside the visual events, audio stories narrated by contemporary witnesses can be retrieved. The app was designed and programmed by Christian Mayer and Zoya

← →  
Examples of video tagging project within "Trails of Memory..."

Photo: Hochschule Düsseldorf



Laskowski and was created in the course of the seminars by Prof. Christian Geiger, Prof. Anja Vormann and Prof. Alina Huldgtren in collaboration with the Filmmuseum Düsseldorf and the newspaper Rheinische Post Düsseldorf.

Playback is a location-based application designed by Zoya Laskowski, which enables an augmented reality city walk into the past. The application is separated in two topics: 'culture/history' and 'infrastructure'. The concept was developed for people who are new in Düsseldorf and for residents who want to know more about the past. However, it is also adaptable for students and location-based learning. A significant task of the project was the collection of video footage and photo material. The application contains about 40 movies received from Düsseldorf residents and the Filmmuseum Düsseldorf. In order to collect the material for "Trails of Memory", the team wrote several letters to citizens, asking for old footage and memories. Additionally, we obtained photographs from the city-archive.

#### G:RASS

The growth of digitization and the GPS function of mobile devices opened numerous possibilities for making cities playable and able to be experienced in a completely different way. This also creates a potential

## „ A NEW POSSIBLE INTERPRETATION OF THE URBAN SPHERE.“

for shaping the city without changing it in real life.

In collaboration with the Günter Grass Gallery in Gdansk, the PS2 subproject "Trails of Memory" developed a location-based augmented reality application. We used new technologies to bring information from the books and the bookshelves out to the people. In his 'Danzig Trilogy' the German author, artist and Nobel Prize winner Günter Grass describes places of his hometown and how they used to be in the beginning of the 20th century. By using this source, we created eleven stations in the city and designed them in a special way using illustrations, photos, quotations and sound recordings. With the G:RASS-app, the city becomes surrounded by his passages and artwork and the visitors can explore Gdańsk from the artist's point of view. The starting point is the Günter Grass Gallery where visitors can download the app or borrow a tablet.

A dog acts as the main protagonist and virtual tour guide, which is a reference to Grass' work. When you wake him up, he leads you to certain places in the city. Every time you reach a new place, an augmented reality function activates. As a result, you see your surroundings but also illustrations and pictures, and hear quotes from the work and life of Grass. Both the real and the virtual world become connected, so you can experience the city through the author's eyes and learn more about the history of Gdansk.

The success of the application is based on the outstanding interdisciplinary collaboration between programmers, designers, art historians and literature experts. For all the additional information we needed for the

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app, we collaborated with institutions based in Gdansk. For example, the choir recordings were produced by the official choir of the city of Gdansk and for the station where Grass describes the amber market we used photos of an amber sculpture created by a contemporary local artist. Therefore, the app also expanded a network with other cultural institutions in the city. Finally, it also serves as a great example of cooperation across borders, between Gdansk and Düsseldorf, the city where Grass studied and started his artistic career.

The aim of the project was to represent Grass' work in a playful and entertaining way and let the user experience Gdansk from a different perspective. Using this technology we extended the gallery into public space by placing information throughout the city and also connecting it with the work of other institutions. In regard to future development, we are also considering the digitization of different analogue archives, so that they are not left forgotten in competition with new mass information. The G:RASS application is one of the good examples of the PS2

project for a new possible interpretation of the urban sphere.

#### Kinetic Stream

Exhibition design is abundant with interactive content and new media. However, just very few of them mirror real interactions that people have with their surroundings. Invited by the Children's Museum in Oslo, the Düsseldorf subproject "Trails of Memory" improved a kinetic stream installation specifically for children's use in a museum context. Kinetic stream is a projection mapping installation that resembles a waterfall and which reacts to users' natural body motion and presence of 3D objects in the digital landscape by changing the direction of the stream, similar to the natural behavior of fluids. The collaboration with the PS2 partners in Oslo and the work with children as a specific target group, offered a chance to transform this artistic media installation into an educational one. By implementing, testing and improving a pedagogic concept, a simple interactive installation turned into a specific learning environment.



Trails of Memory app  
developed for the  
PS2 subproject in  
Düsseldorf

Photo: Hochschule Düsseldorf



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Children in Sentralen  
cultural center playing  
with the Kinetic Stream  
installed by HSD

Photo: Hochschule Düsseldorf

To make it more nature-like, the first version of installation was enriched with water animals and interactive sounds. Children were intuitively interacting with the landscape and experimenting by introducing additional elements. Their behavior and reactions were used as a great input for developing a second, improved version that intended to warn the users about the changes that arise from excessive intervention in the natural flow. When there is too much people or objects inside the stream, the water loses its transparency and the animals draw back. To revive the nature, the visitors must now step out of the stream, rest on the stumps on the shore and observe its recovery. The aim is to illustrate real consequences and induce conscious acts in interaction with real nature.

Knowing that one learns and memorizes content through own actions, we used the potentials of the immersive and interactive digital content for a sustainable learning effect. The Kinetic Stream is a perfect result emerging from the synergy and knowledge of different project partners within the PS2 consortium. In addition to the substantial improvement of the installation, the Children's museum in Oslo got the chance to attract a broader audience with an interesting and innovative content.

The Düsseldorf subproject "Trails of Memory" tried to raise crucial questions about the impact of urban art in the digital era: However perishable and ephemeral on brick and mortar, we are wondering - can virtual tools reproduce the contested terrains of the city walls while avoiding the controversies often attached to it? Can the virtual walls be vandalised? Can the virtually extended space be appropriated? Or do you just want to play? The MIREVI team and the HSD will continue their works that were initiated or taken to a new level by PS2 trying to find answers on these questions.

**B THE SUBPROJECTS**

In “Young Expressions – CityKids”, the PS2 Oslo subproject, two institutions, the University of Oslo and the Oslo Children’s Museum, engaged in two different cultural practices. First and foremost, we focused on children’s engagement in cultural and civic issues, as well as their creative explorations and expressions. The goal was to expand children’s engagement in the city on a larger scale, through in-person, hands-on activities in a cultural setting in Oslo Children’s Museum events. The second practice was to present critical and expressive forms of technological exploration, broadly focused on how we experience and engage with technology in our daily lives.

Approach and Process

“Young Expressions – CityKids” moved continuously in multiple overlapping cycles of design research starting with exploration of technology as a design material and possibilities of catalyzing participation, shifting to situating design ideas in particular settings to engage children and local citizens with socio-cultural issues and emerging technologies, and ending with dissemination of our reflections and knowledge, through public talks, creative and academic workshops, and articles published in leading conference and peer-reviewed journals. Each cycle that the subproject and specific design concepts moved through examined specific socio-cultural and technological

**YOUNG EXPRESSIONS – CITYKIDS UNIVERSITY OF OSLO & STIFTELSEN OSLO BARNEMUSEUM OSLO / NO**



issues in depth, but also explored a breadth of issues related to smart participation by engaging in a wide range of explorations and design concepts.

More concretely, the “Young Expressions – CityKids” was carried out in the form of creative explorations and interventions by designers, artists and researchers which were subsequently exhibited as interactive installations in a range of public settings including the “City Kids” events at Sentralen, a large culture house in a former bank building in the center of Oslo, at the Department of Informatics at the University of Oslo, the Norwegian Museum of Science and Technology and various other venues such as technology and culture

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Setup from Share  
Infinity Oslo 2016

festivals like maker faires, galleries, a design festival and academic research conferences. One of the most important and sustainable participatory engagement formats that emerged out of the PS2 subproject in Norway was “CityKids”, a vibrant arena of interactive installations organized by Oslo Children’s Museum with numerous hands-on activities for children, focused on positive learning experiences through play, explorations and developing mastery.

Use of media technology

The subproject installations were based on new and emerging forms of media technology, including machine learning for voice and text generation, image interpretation, face identification technology, physical and embedded computing technology, sensors such as Arduino, NFC (Near Field Communication) and Raspberry Pi, wearable computers, Kinect full body tracking, and projection mapping for creating immersive virtual reality experiences.

Event and Project Details  
(Best practice activities)

While the process and approach largely remained similar, thematically, “Young Expressions – CityKids” worked with three main, often overlapping areas:

1. Forms of participation mediated by technology through a range of designed and exhibited design concepts.
2. Critically exploring smart and intelligent technology as a new and emerging design material.
3. Exchange and development of artistic practices and knowledge around designing artworks to engage and enable diverse kinds of participation.

Forms of participation mediated by technology

To explore the diverse forms of participation that can potentially be mediated by technology, we initiated a series of design explorations in collaboration with local creatives and artists enrolled at the Design, Use, and Interaction program at the University of Oslo. All the design projects started with preparatory research, including formal ethnographic and informal research with children and exploring potential design concepts with technology.

The design concepts were continuously critiqued by the core project team and were prototyped using relevant technological components with a focus on durability (because of their intended use with children). The prototypes were evaluated and exhibited at various public events such as CityKids and dagen@ifi, the open house at the Department of Informatics at the University of Oslo. These events included installations for children based on cutting edge technological prototypes, for example, drawing with sound, littleBits creative workshops, and large installations dealing with socio-cultural issues such as migration, environmental sustainability and creative and artistic engagement with a particular emerging technology. The following design projects were completed as a part of the subproject:

„OUR EXPLORATIONS HELPED US TO UNDERSTAND SMART TECHNOLOGY AS A DESIGN MATERIAL.“

<u>Design Project</u>	<u>Team Members</u>
Eco-agents	Ingrid Smørgrav Viddal, Lone Lægneid, Magnus Søyland, Ingeborg Eilertsen
Games for Civic Engagement	Håvard Øya, Vegard L. Svendsen, Max Tomren
Interactive Art	Ewa Kabza, Tom Abelsen, Bente Bratvold, working with art of Croatian artist Djenana Cicic Voljevic
Un-branded	Hanne Borgersen, Madeleine S. Bekkevold, Mai Thao Nguyen
Team Aftenposten (Si ;D)	Daniel Lange, Thea Snilsberg-Søfting, Markus Knøsen, Kathrine Tangård
CityKids - Interactive Game	Anna Sofie Schei, Maria Louise Stolinski, Ellen Katrine Sveen, Sissel Kvalvik
CityKids Inspiration	Nora Tessem, Torbjørn Vik Lunde, Katrine Dåstøl
Conversing with Machines	Fredrik Glendrange, Tideman Tronerud, Adrian Haga
Emigrate to Axzaylia?	Masa Zivkovic, Mike Chris, Borisa Barisa
Vitensenter	Anna Maria Bukalska, Harald Maartmann-Moe, Jon Even Thorjussen, Maria Ødegaard
Climate your way	Patricia Zemer, Isra Barzinje, Helin Tahsin
Sound and Music	Olav Johan Ekblom, Lasse Karlsen, Petter Haugen Andersen, Marius Høgli Aasarød
MusicalMoves	Klaudia Çarçani, Veronika Hansen, Harald Maartmann-Moe, including dancers Emma Khei and Sephira Bjørndal
Do It Yourself or Do It Together? (DIY Skateboard communities)	Oskar Galewicz
Hearsay	Sumit Pandey
EyeSpy	Sumit Pandey
EyeSpyTV	Sumit Pandey

CityKids

CityKids events formed a major part of the PS2 subproject in Oslo in facilitating, curating and providing an inspiring public arena for exhibiting many of the subproject installations by artists, creatives and students and for conducting workshops with littleBits makerspaces for a large public of children and families.

During the early stages of the subproject, Oslo Children’s Museum was invited to partner with “Sentralen”, a new culture house in downtown Oslo, to establish an active and vibrant cultural arena for local families with young children. Through close cooperation with Sentralen’s production team, the name “CityKids” was chosen to represent an urban and international setting for public events

for children. This name fit well with our PS2 subproject focus as well, and we began using “CityKids” for many of our subproject events instead of “Children’s City Tapestry” or “Young Expressions”. Sentralen opened in March 2016 with PS2 installations as part of its cultural content and is currently Oslo’s most visited culture house with a reputation for high quality, innovative cultural events. Between March 2016 and April 2018, we organized 14 CityKids weekend events with PS2 installations and workshops as part of a larger content, focusing on participatory methods for engaging the public. The target public is children ages 1-8 and their families. While children are the main focus, we welcome visitors of all ages to the events. Over 6000 Oslo children and parents have engaged with PS2 subproject technology-mediated interactive installations during the 4

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Subproject installations  
at CityKids at Sentralen  
culture house  
“Sound and music”  
“Climate your way”  
Photo: Ingrid Viddal & Katie  
Coughlin



years of the project. Children create and lead their own experiences in these multi-sensory activities which stimulate their interest and desire for learning.



CityKids is one clearly successful and sustainable result of the PS2 Oslo subproject, and we plan to continue the development and growth of this public platform even after the conclusion of PS2. CityKids serves a public need for exhibiting works by artists and creatives using emerging technologies and is an exciting arena for discovery and creativity. Below is a selection of pictures from subproject installations, both from the Department of Informatics and from independent artists and creatives invited by Oslo Children's Museum.

Smart and intelligent technology as a new and emerging design material

An important thematic area explored in the subproject "Young Expressions – CityKids" was the consideration of smart and intelligent technology as a design material through speculative and critical design projects. Currently, smart consumer technologies are primarily described in terms of their utilitarian and functional characteristics such as context-awareness and proactive feature behavior. From a design standpoint, this offers a set of technical features that can be incorporated within artefacts but does not help critical and exploratory engagement or understanding of the design space for other potential functional possibilities. For the subproject activities we therefore engaged in speculative and critical design projects to explore these spaces.

Our design process was exploratory and iterative and started with looking analytically at commonplace experiences and breakdowns with voice-based smart consumer technology. We started by reflexively articulating our own experiences along with collecting newspaper/mass media reports of this technology in use. It helped us generate probable design concepts and what-ifs that were situated in



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Subproject installations at CityKids at Sentralen culture house  
"Banana piano"  
"CityKids Inspiration"  
„Maestro"  
Photo: Ingrid Vididal & Katie Coughlin

a logical and familiar reality. This familiarity is an important consideration for speculative design, since the designed artefacts may appear odd, but still need to feel probable, to challenge preconceptions and allow alternate understandings of technology to emerge. We engaged simultaneously in hands-on material exploration of networked technologies and machine learning. This process was similar to sketching with code, in that it involved experimentation with machine learning as a means of exploring it. This gave us real and perceivable experiences with the technological material, which informed potential design concepts. Two main design concepts were created as a part of this thematic area: Hearsay and Eyespy.

Hearsay is a design proposal for a smart voice-activated lamp that is 'always in conversation'. It generates quirky and whimsical responses while incorporating transparency in its aesthetic and interaction.

Eyespy is an interactive installation that captures and displays networked camera feeds from across the world, intercut with a local camera feed that captures the viewer. An algorithmically generated, textual interpretation of the activities and interactions in the feed is also overlaid on the displayed feed.

Our explorations and design concepts helped us to understand smart and intelligent technology as a design material and socio-cultural implications of (often implicit) machine participation in everyday lives. The concepts offered a useful way of understanding these implications (beyond utopian and dystopian visions) by allowing for reflective engagement with the materials of this new space. By incorporating elements of transparency and discovery both as a formal and an interactive quality, we tried to explore the design of layered and personal artefacts. On the other hand, while the concepts highlight the extent of machine intrusiveness in everyday life, they also intend to make gaps in machine understanding and

interpretation more transparent and create a reflective space around humanized and always-on forms of intelligent technologies.

Parts of this section are adapted from

Pandey, S. (2018). Framing Smart Consumer Technology: Mediation, Materiality, and Material for Design. *International Journal of Design*; Vol 12, No 1 (2018), 37–51.

Pandey, S., & Culén, A. L. (2017). Hearsay: Speculative exploration of intelligent voice based interfaces (Vol. No. 7 (2017)). Presented at the Nordes 2017: DESIGN+POWER, Oslo: Nordes. Retrieved from [http://www.nordes.org/nordes2017/assets/pictorials/nordes17f-sub1008-cam-i26\\_PANDEY\\_v2.pdf](http://www.nordes.org/nordes2017/assets/pictorials/nordes17f-sub1008-cam-i26_PANDEY_v2.pdf)

Pandey, S., & Culén, A. L. (Forthcoming - 2018). Eyespy: Designing Counterfunctional Smart Surveillance Cameras. *NordiCHI 2018*, Oslo, Norway)

Exchange and development of artistic practices and knowledge (Artists and creatives (and scientists) in action)

Over the course of the subproject "Young Expressions – CityKids", we conducted multiple academic and creative workshops and 'jams' to facilitate free and creative exploration and the exchange and development of artistic practices and knowledge. Through academic workshops, such as those held as a part of ECSCW 2015 in Oslo, and NordiCHI 2016 in Gothenberg, we explored concepts and strategies related to socio-culturally engaged and technologically mediated participation in collaboration with local and international artists and researchers. Academic conferences were particularly relevant venues for such discussions, both during and outside the workshop settings since they presented a point of confluence for cutting edge international research and practice. We facilitated two creative workshops: one conducted with artists and designers at the Visuelt festival 2015 in Oslo, exploring littleBits for creative expression, and a second at the Department of Informatics in



2018, exploring potential ideas for engaging children with sustainability. In contrast to academic workshops, these workshops were more hands-on and constructive, and playfully and critically explored possibilities for the expressive, reflective, and more participatory use of technology.

Finally, we also hosted two artist jams in "Young Expressions – CityKids": (1) Share Infinity Oslo 2016, related to reconfiguring architectural spaces using projection mapping, full body tracking, and generative music, and (2) Cultures of Machine Participation in 2017, exploring implicit machine participation in everyday life and issues of privacy, tracking, and alienation through the creation of speculative scenarios and design concepts related to intelligent surveillance cameras.

In addition to facilitating topical discussions and helping explore new conceptual and creative directions for engaging and activating children and adults for the topics of participation in urban space and the future of smart city thinking through emerging forms of technology, the workshops and jams also helped foster broader connections among participating artists and researchers. In this sense, the workshops and jams also helped particularly artists to exchange and develop their skills and grow their creative network and reach.



Effects, Interactions and Socio-political relevance

With the combined focus of design projects on emerging technologies and current public issues such as environmental sustainability, subculture communities, economic and cultural differences and immigration, the designed outcomes/installations were highly concerned with issues of urban culture, participation and community building while also having a critical take on the effects of emerging technologies, both semi-autonomous and networked, on everyday lives. We took care to ensure that no one was excluded from participation on the basis of ethnicity, social status, gender, ability or any other basis for exclusion. The events were purposefully kept public and open to the general public to engage a wide variety of audiences with the installations.

Meaning for the European level

The desire for creative exchange of experiences and learning among the European PS2 project partners made it possible for "Young Expressions – CityKids" subproject installations to travel between countries and contexts such as with our speculative exploration of surveillance technology being exhibited in open cultural settings at the City Gallery in Gdansk, and an immersive projection mapping

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Eyespy in an exhibit setup at dagen@ifi and skaperfestivalen 2016 & textual interpretations generated by the intelligent algorithm used by Eyespy

Photo: Sumit Pandey

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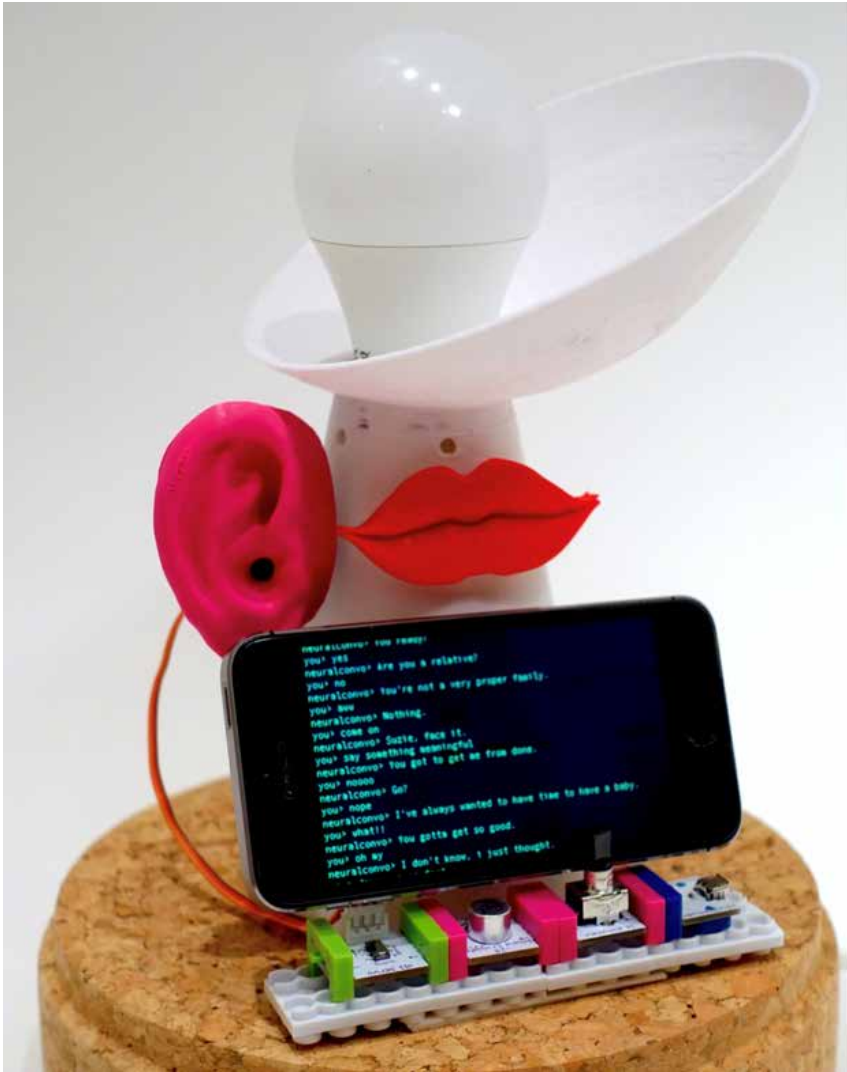
The Hearsay prototype

Photo: Sumit Pandey

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Artists making drawing machines in a littleBits workshop at Visuel 2015

Photo: Sumit Pandey & Alme Leora Culén



installation from Düsseldorf being exhibited at a CityKids event to engage children with new and highly engaging technology. The Oslo subproject therefore also presents an example of a bridge between practice and research-oriented exploration by highlighting a productive form of academic-creative and entrepreneurial partnership for the larger European context.

for speculation expands the design space of potential intervention into cultural participation such as counter-functionality, diegetic prototyping and tangible, subversive interventions in urban spaces and pop-up interventions.

#### Best results and sustainability

CityKids events, hosted by Oslo Children's Museum, developed into a „cultural incubator“ for student artists to experiment and develop speculative and installation art proposals and to exhibit them in a public arena with hundreds of visitors per day. The PS2 project facilitated the further development of a mutually productive partnership between the Department of Informatics and the Oslo Children's Museum which will continue even once the project has concluded, providing an active public venue for emerging artists and designers and providing children with culturally engaging artistic and high-tech cultural installations. Best practices were explored through a workshop format. Discussions and activities explored diverse methods that are presently used in conjunction with participatory models and forms of cultural and civic engagement as well as new technologies of participation.

Of particular interest were temporality (duration of engagement), outcomes (short and long-term, for researchers and youth) and the roles of digital means to scaffold participation, co-creation, or artifacts resulting from such participatory activities. First, our findings point to the potential for increased sustainability and impact through repeated events which are believed to be essential for increased impact.

Second, open explorations, as we facilitated using machine participation, are important in developing critical and grounded approaches to connected and semi-autonomous forms of emerging technologies. Third, allowing



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From the Cultures  
of Machine  
Participation jam

Photo: Alma Leora Culén

**B THE SUBPROJECTS**

The main idea of the "Move into the open space" subproject implemented by Gdańsk City Gallery for PS2 was to direct our attention to artistic activities of various sorts taking place in the public space. We did that in several stages. First of all, we presented artistic projects in form of traditional exhibitions, whose point of departure was the field work realized by authors in different places of political, sociological and historical interest.

We compared artistic case studies from different cities and countries to see what experiences of space are shared, and which of them are different and why. The most important for Gdańsk's historical and cultural landscape was the project carried out by a local photographer – Michał Szlaga – presented as a launching event for the Gdańsk PS2 project. The artist took the position of a researcher himself, going out of his studio, in order to experience the space, where different histories and interests overlap. The outcome of his work may serve for further discussions and observations conducted in broader groups of interest, from average visitors of the exhibition, to researchers of various specializations concerning monument preservation, sociology, or political studies to name but a few. In this way art acts as a lab or data bank that triggers or delivers consecutive analyses.

**MOVE INTO THE OPEN SPACE GDAŃSK CITY GALLERY – GDAŃSK GALERIA MIEJSKA GDAŃSK / PL**



**Perception Walk**

Going further out of the safe and known gallery space into the public space required broadening the scope of audiences, tools to address them, and partners to exchange experiences with from different fields. In order to do so we decided to develop the expertise used by individual artists in the abovementioned exhibitions, into a "perception walk". It is a popular tool used in anthropology, whose aim is to perform a walk in a selected venue (be it a museum or an area of the city), aimed at a particularly profiled observation making, based on a subject of interest. The profile could entail history, urban planning, water tracks, soundscapes – basically anything that the

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Michał Szlaga, The Gate, photo exhibition, 2015

Photo: Michał Szlaga

parties agree upon beforehand. The goal is to perceive the chosen space from a specific point of view that perhaps had not been taken into account before, and that is relevant to broadening the knowledge and awareness of particular areas of interest. The underlying aspect of the "perception walk" method is participation.

Each person taking part in the event becomes simultaneously its co-creator. The professional background is not as relevant as is spontaneous and honest feedback from the engaged audience. Certainly, such events need to be monitored, hence Gdańsk City Gallery assumed the natural role of the organizer, supported by multiple partners from different professional domains providing expertise to each of the events.

**G:RASS App**

The aim was to develop a mobile application taking on a journey through the Gdańsk of the author and artist Günter Grass, who was born in the city. And so, for the development and implementation of the app, called G: RASS, the subproject "Move into the open Space" worked closely together with the PS2 partner HS Düsseldorf. The app allowed for not only the integration of different actors representing various professional approaches, but first and foremost the immersion of the user of the app to move in between the past and the present by experiencing a gyroscopic trip supported by VR feed overlapping the

actual view experienced by the user during a physical walk through the city to places playing important roles in Grass' works and personal life.

The multi-sensory experience of sounds, literary fragments, old images, music pieces, etc. triggers the user's comprehensive sensation of the space as it is now and as it might have been in the past, which is very important considering the debate about the cultural local identity that has become a strong issue in the local political discourse.

**Gdańsk "walkability"**

As the mobile G: RASS app can be experienced not only individually but also collectively, another project emerged in the subproject "Move into the open Space". It was implemented together with architects and urban planners from a local NGO, called Inicjatywa Miasto and the Gdańsk University of Technology, and encouraged the group experience. Here the creative role is further handed over to the participants, as it is them who choose particular places of interest, and it is mainly them who refer to them in a creative way. Within PS2 subproject in Gdańsk two major walks were realized in 2017 and 2018. They were inspired and included in an international framework of the "Jane's Walk" movement which takes place at the beginning of May every year all over the world. It stems from the activities of Jane Jacobs, the author of the famous book "The Death and Life of Great American Cities", whose main objective was to make big cities pedestrian-friendly. In order to commemorate her contribution to the increase of the "walkability" of the cities, citizen-led walks are organized all over the globe. The first two editions of the Gdańsk walks were initiated in partnership with above-mentioned institutions, however year by year, the citizen input is growing. It is not only the feeling of local pride and knowledge to share that motivates the participants to become active actors of the event, but also the possibility of creative and individual



G:RASS mobile app

Photo: Bogna Kociumbas



perception of the common public space seems to be an attractive encouragement, which on the long run should result in the intensified interest and emphasis on the decision-makers preoccupied with different areas of the public space.

Active citizenship through art

The process of activation of a local community is of course a long-lasting one. Especially taking into account the Polish society, whose passiveness in the realm of public space had been encouraged and cultivated throughout the many years of its communist regime, where the notion of public space was either non-existent, or strongly controlled. That is why art projects enhancing it were developed on a regular basis during the four years of PS2 in Gdańsk. One of them was the Inspirations Bank (also with a large contribution of partners from Gdańsk University of Technology working with architecture and urban planning). The Inspirations Bank is another project using both the "perception walk" tool, as well as online possibilities. It is a web archive, where creative feed from users of public space is being collected. For the beginning, an outline of an area of interest was proposed in the course of creative workshops. The participants came out with ten locations of interest to work on. The creative data basis concerning them was collected. In the next stage of project development further contributors were encouraged to re-discover the selected spots with the use of different perspectives, for example all five senses. A sensual "perception walk" was carried out, and the creative feedback sent in by its participants will serve as a data bank for international artists to refer to them in a form of creative installations realized in the city space in the next years. In this way the audience not only becomes decision-makers and/or experts as to which aspects of the city space are considered inspiring, but also assumes the position of co-creators of the artistic image of their own city shared with an international creative community. The



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Jane's Walk – Crossing  
the Bridges, 2017

Photo: Izabela Uhlenberg

internet of course makes the whole project more transparent and freely accessible to all interested parties.

Building confidence

Addressing the subject of public space seems to be still quite a challenge in Poland, first of all because there is no long-term tradition of citizen usage of the public space out of their own spontaneous and creative accord, and secondly, as the level of participation of Polish citizens is still something to be worked on. Building confidence in the relevance of one's personal engagement, convincing the audiences that it is up to them to shape the public space that surrounds them and that they do have an important voice in a public debate about the ideas of their city's image, seems to be a long and slow process. The activities carried out within the PS2 subproject "Move into the open Space" have given a strong contribution to this process and initiated new ways to activate the citizens of Gdańsk for the topic of participation in public space. The described process needs to be personalized by each individual. By testing and installing new methods and techniques "Move into the open Space" functioned as a door opener or megaphone to a more personal approach in how people could address the topic. The tool to support it is art. A creative approach, enhanced by mutual learning and exchange of experiences, will not only bring the possible future decision-makers together, but will also ensure their active role in shaping the space in which they live.



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Jane's Walk –  
Fizz Powder on the  
Tongues, 2018

Photo: Bogna Kociumbas



”OUT OF THE  
SAFE AND  
KNOWN GALLERY  
SPACE INTO THE  
PUBLIC SPACE.“

## B THE SUBPROJECTS

### Making Museums attractive for young people

The main goal of the PS2 subproject, carried out by the Metropolia University in Helsinki, called "The Neighborhood Living Room" has been to study methods how a museum – in this case "The Museum of Technology" in Helsinki, Finland – could function as an integral part of the community that at the same time offers an emotional and participatory experience for the (young) residents.

Based on our goal and target group we have done several experiments during the project in order to reach our target group and engage participants.

### Interactive Game

Our experiments began using Metropolia's own students (being youth themselves) as the main source of ideas. Students of Metropolia's performing arts study program organized an interactive game at the Museum of Technology. Three characters called Sauna-Reima, Hysterical Henna and Mikko Mechanic were walking around the museum's exhibition area. The audience – consisting of media engineering students – was divided into groups and sent off to find these characters. Each character had a story to tell and a mystery to solve. For the right answers groups were given points and the one who scored the most was the winner of the game. Päivi Rahmel (performing artist) was coaching the students.

## THE NEIGHBORHOOD LIVING ROOM METROPOLIA UNIVERSITY OF APPLIED SCIENCES HELSINKI / FI



### Demonstration of ideas at a local Festival

For the next phase in "The Neighborhood Living Room" Media Engineering and Sound Design students innovated new ways how the Museum of Technology could attract youth. Some of the ideas were: 3D-modelling and 3D-printing of museum's artefacts, mobile navigation, game of endangered sounds, interactive storyboards, redesign museum's website, etc. These ideas were demonstrated as a part of the largest event that takes place in the neighbourhood regularly: the Arabia Street Festival 2015. As a part of this process we used several artists: Samy Kramer (media artist) brought in new ideas how to engage people, Päivi Takala (sound artist) was coaching

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Installation with  
reflector material by  
Kristiina Tuura and  
Metropolia students

Photo: Aura Neuvonen

sound design students, and Psyke and Mion (graffiti artists) were involved in attracting youth in our stand.

### Designing participatory and interactive exhibition techniques

During autumn of 2015 Metropolia students of the Film and Television Sound and Script Writing department worked together with the staff of the Museum of Technology to brainstorm ideas for participatory stories for the museum's next permanent exhibition "Tekniikan maa - Techland" that opened in 2018. The exhibition highlights the role of technology, industry and innovation in the construction of the 100-years of Finnish independence. The exhibition reveals the influence of technology on daily life, work and the environment, showcasing the past, present and future of technology and industry. The script writing students went through the exhibition script and did research for over 90 stories behind Finnish inventions. The students then wrote narratives based on the real history of technology in Finland and together with the sound design students created demos of participatory and interactive exhibition techniques that included sonic storytelling. Some of these ideas were used in the final permanent exhibition in 2018.

### Building a 3 day pop-up radio

In spring 2016 the Museum of Technology's contribution to the Arabia Street Festival was a festival pop-up radio. "The Neighborhood Living Room" engaged Metropolia's Media Production students and Media Engineering students built a temporary radio studio in the lobby of the museum. The engineering students built a streaming system for the museum that included secured streaming and YouTube video streaming.

The content of the 3 day pop-up radio was designed together with the Metropolia students, museum staff members Marianna Karttunen and Riina Linna, Arabia Street Festival producer Siiri Krouvila and Arabia

Youth Center teenagers with their leader Antti Mähönen. The radio show contained interviews of the museum staff, expert interviews introducing topics presented at the museum, live reports and interviews from the festival, live interviews of the local people, pre-recorded content created by the members of the community like to Paavali church and Artova association.

The Arabia Youth Center children participated in the hosting, live reporting and social media content creation with the help of the Metropolia students. They brought up the topic they found interesting and built stories of it. The Metropolia students learned the theories and methods of community media and were asked to implement these in the cooperation with the youth and the locals.

The pop-up radio studio accessible and visible for all the visitors of the museum. The main target was to experiment how the museum's premises could be turned into a "Neighborhood Living Room" where young people could be creative and free to participate in the event. Additionally they were asked to participate in the content creation of the radio. The radio was broadcasted in FM in Helsinki area and streamed worldwide. Some parts of the pre-recorded materials were given to the museum for future use in their exhibitions.

### Christmas lights and reflectors

The Museum of Technology arranges a Christmas light workshop for children and families every year. In December 2016 the workshop was arranged and designed together with "the Neighborhood Living Room" and media production students of Metropolia, the museum staff and artist Kristiina Tuura. The topic of the workshop was "Jouluvaloja ja heijastimia", "Christmas lights and reflectors". Reflectors are a Finnish invention and an important security item especially for children during the polar night. Therefore it was a suitable topic for both the museum and our target group.

The students and Kristiina Tuura created two craft workshops, an educational exhibition and an installation of reflectors. In the exhibition children could listen to short educational and interactive audio stories about the history, importance and technology of reflectors.

The students had created the stories based on their research of the topic and a visit of a local reflector factory. In the workshops families crafted their own reflectors from leftover reflector material donated by a local reflector manufacturer and small Christmas lights from electronic components. The same reflector oddments materials were used in the installation created by Kristiina Tuura. In her installation the visitors experienced a starry, dream-like room that exemplified the functioning of the reflectors.

Kristiina Tuura was responsible for the installation and gave the Metropolia students an opportunity to participate and learn about her artistic process. The exhibition and the workshops were one of the most popular events in the museum that fall.

Media art installations - Making fire in VR

In a next step "The Neighborhood Living Room" involved six young media artists and offered them a space in the Museum of Technology. Their task was to bring media technology based installations into the museum in order to increase interaction between visitors and museum artefacts. These artists created four different installations:

1. Neanderthalensis by Victor Pardinho and Mathijs Provoost

A virtual reality interactive experience where the participant could light a fire in a VR situation by using only primitive gestures and virtual tools. It sought for an absurd paradox between high technology and primitive heritage.

2. Strings by Juan Camilo Sánchez Carranco and Alex van Giersbergen

Virtual structures in a 3D space that the visitor could manipulate. By carefully touching the strings the visitor interacts with, gestures and sound processing based on natural physical movements are implied and created music. The piece triggered the visitors to interact in a free playful way since no specific movements were designed that force the user to behave in a specific way.

3. The Garden of Eden by Viktoriya Korshunova

Nowadays, artists create most of the performances/installations for the audience. But what if the audience had a possibility to interact with the installation itself and feel what an artist does, express their own story through sound and vision? The installation asked one question: How did Adam and Eve feel when they were born? Through an interactive space visitors could answer the question via artistic vision with the help of digital tools.

4. Appulse by Bryant Hoban

The body and immediate environment were used to create pulses that were received via a microphone and interpreted in PureData, augmenting common finger snapping, or everyday foot tapping, into a new sonic experience.

These media installations contrasted strongly with the old 19th century turbine hall where they were installed. The artworks were experienced by museum visitors including visiting school classes. In addition, we organised two mini-workshops for international and national creatives in order to share ideas how the museum could benefit from young artists and how young artists could benefit from museums.

Soundscapes

The PS2 subproject in Helsinki then turned to what became its main piece of work: The soundscape project. The target of the project was to create a sustainable and versatile technology and workshop model targeted to young people that the museum could offer for school groups.

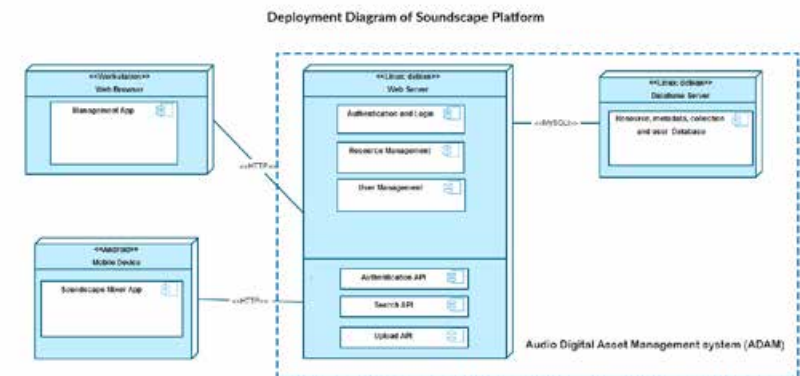
The Soundscape project examined ways of learning about sounds, hearing, listening and the sonic environment by using various participatory methods. The idea was to introduce the changes in the sonic environment that the development of technology has caused. During the workshops, the participants created soundscapes with the mobile application tool 'Soundspace' and the Audio Digital Asset Management System developed at Metropolia UAS for "The Neighborhood Living Room". The young participants were introduced to the concept of the soundscape, the structure of soundscapes, and the significance of soundscapes. The participants then listened together to the created soundscapes and discussed them in order to allow all participants to share their experiences and opinions. The soundscape workshop and the tools created for it offered

the young people a possibility to participate in a conversation about the nature of the urban sonic environment, its changes and its future.

The soundscape platform and the workshop methods were developed side by side during the project by the Metropolia students. In order to test and develop the tools and the method, different workshops were conducted at the Helsinki Museum of Technology and Bokvillan, the Arabic Neighborhood Associations café and community centre, but also in PS2 partner cities, e.g. in Bremen at the Public Urban Lab or in Gdańsk at the Galeria Günthera Grassa. For the soundscapes an audio platform developed at Metropolia University was used, which is a distributed system consisting of an audio digital asset management system (ADAM), a management application, and mobile applications. ADAM contains functionalities to manage assets and provides an interface for the management of the application and the mobile application online.

The management application is more or less an administration console to manage assets and users. The Mobile application in this context works as a soundscape mixer application.

→  
The Soundscape platform



Creating a soundscape workshop method

As the target of the project was to enhance the knowledge and understanding of the locals about their sonic environment by using the mobile tools created, it was necessary to develop a workshop method that would work with the mobile tool. The workshop starts with a short communicative lecture about soundscapes and their basic structure. The concept of soundscapes was not expected to be common to all the young participants. The workshop follows a „Think - pair - share“ collaborative learning strategy (TPS) in which participants work on a problem given by the instructor first on their own, then in pairs and finally all together in a larger group discussion.

2. Each group recorded their own audio stories, listened stories from other groups and took notes about stories and related emotions.
3. Most impressive stories were listened by all and discussed.

As a part of the workshop we defined the pedagogical objectives as following. Participants were to understand that:

For creating the soundscapes the participants were divided into pairs and given a task to create a soundscape with the mobile tool. Working in pairs and discussing with a partner enhances participation, focuses attention and creates positive interdependence. We gathered feedback data from all the workshops and developed both the application and the workshop method based on our observations and analysis of the feedback data. At the end of the PS2 project the application is stable and reliable and the workshop method has been shown to work in every circumstance we've taken it into. The museum of Technology has developed an audio library and created new versions of the workshop for different purposes.

Storytelling by sharing sound

As part of the occupation with the soundscape topic we have developed a storytelling workshop format for students within "The Neighborhood Living Room" subproject. The outline of the workshop was as follows:

1. Introduction to workshop objectives, storytelling and audio story sharing tool. After this students were divided into groups.



←  
The starting page of the soundspace app

→  
Overview of audio story platform

- Sharing a memory or story about yourself could open a new angle to one's personality or strengthen the existing view of one's personality
- sharing ideas is an important part of learning
- Emotions are dependent on context and person

We were using our audio platform as a vital part of this workshop. The new elements are a story sharing and a NFC (Near Field Communication) Writer mobile application.

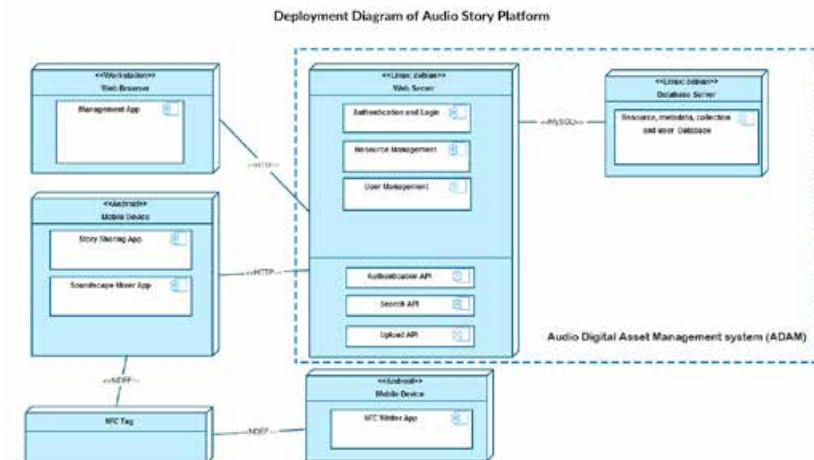
The NFC writer application, which is targeted to the museum staff, provides a way to write a user id, password, a collection id, and an artefact title into a NFC tag that is attached to the museum's artefact. The application contains simple encryption functionality, which is used to encrypt the user id and password. The user id and password are

needed for the communication with the management system ADAM. The collection id is a link between an artefact and a related audio file collection in ADAM.

The story sharing application is launched automatically when the visitor touches the NFC tag with her NFC capable Android phone. The application reads user id, password, collection id, and artefact title from the NFC tag and decrypts user id and password. Now the applications have all the information in order to communicate with ADAM and find the artefact related stories. The museum visitor can listen to the audio stories related to the artefact. He or she can filter the stories based on the emotion indicators. The visitor can also record the story and define which type of emotions this story contains.

Soundscapes as a way to trigger emotional engagement

We have organised two storytelling workshops, one in Poland at our PS2 partner institution,





the Gdańsk City Gallery, Poland and another one in Espoo, Finland. During these workshops we were measuring the level of engagement using an engagement instrument regularly used at Metropolia University. For this purpose we have applied the student engagement structure in order to find out the level of engagement in workshops where our audio platform is a vital part. By observing participants and utilising a questionnaire developed for this case it was possible to measure the level of three engagement components. The behavioural engagement finds out the positive conduct and involvement in learning and academic tasks. The emotional engagement concentrates on participant's affective reactions. The third component, cognitive engagement focuses on attention to task, task mastery, a willingness to go beyond what is required and a preference for challenging tasks.

If we look at the behavioural engagement first, we will see that students in both workshops were putting effort and paying attention to the workshop most of the time. In both workshops participants reported that their mind wandered during the workshop on occasion.

For the Espoo case this could be explained due to waiting periods as some students were progressing much faster than others. In Gdansk students were waiting due to upload problems. The only exception is the question: "I just did enough to get by". This exception was potentially explained by translation error. All in all we could see that students were behaviourally engaged most of the time in both workshops. Emotional engagement related answers indicated that students were most of the time happy, excited and enjoying themselves. Only occasionally they felt bored in Gdansk. Thus, emotionally they were very engaged. Our observations also confirm the behavioural and emotional engagement. There was a difference in cognitive engagement in Gdansk and Espoo. In Gdansk they paid less attention to

tasks relating to larger context, which might be at least partially explained by the age difference. In both workshops participants paid attention to task and to task mastery. The level of challenge for completing the tasks was not high. As a whole participants in Espoo were cognitively engaged most of the time, while participants in Gdansk were cognitively engaged only for some of the time.

## „PARTICIPATE IN A CONVERSATION ABOUT THE NATURE OF THE URBAN SONIC ENVIRONMENT.“

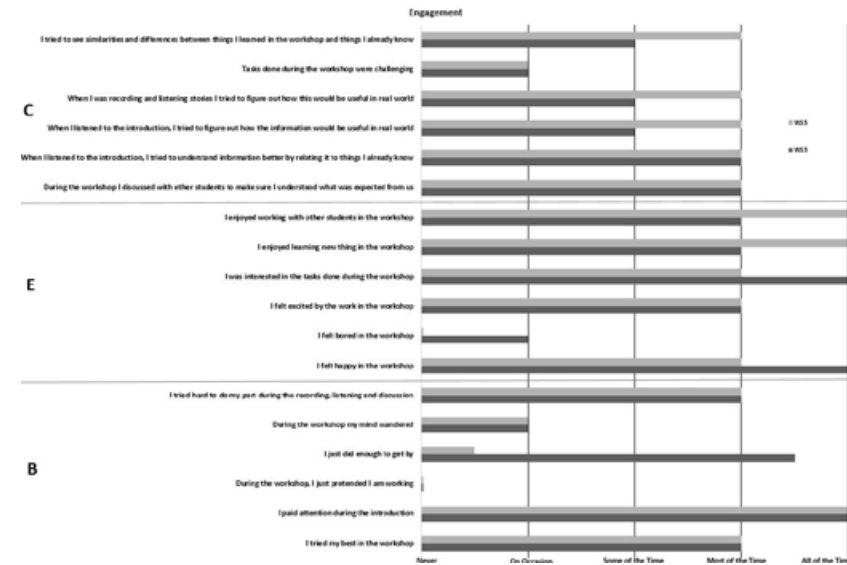
### Reflecting Bokvillan

In the final phase of "The Neighborhood Living Room" we wanted to enhance the cooperation with Artova, the local residents association. Artova hosts the Arabic neighborhood cafe and community centre Bokvillan. We arranged the exhibition "Ars Memoria" in Bokvillan with cooperation of the PS2 partner Gdańska Galeria Miejska from Gdansk. Marta Wróblewska curated the exhibition featuring works of the two Polish artists Małgorzata Żerwe and Agnieszka Piasecka.

In Ars Memoria Małgorzata Żerwe played with invented and real personal stories with the use of aptly combined objects either found on flea markets, or accidentally discovered ones on forgotten country roads or in the old attic of a friend's house. The collages and objects form a bizarre yet very poetic collection of curiosities, uncovering dreamy stories to fantasize about. Agnieszka Piasecka's photographs take the viewer out into the city space. The traditional

73—  
74

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Storytelling workshop engagement



cyanotype photographic technique blurs the real landscapes with a fairy lapis lazuli haze, dematerializing them almost into a mysterious fantasy, one is invited to participate in. Again, the viewer receives only fragmentary images forming parts of the story to be filled in with one's own imagination.

The exhibition was designed for Bokvillans space and reflected the historical area and stories around it. We arranged an opening of the exhibition where we invited all the local actors and residents. In the opening the artists presented their works and two Estonian bands, "The Lepnurm Quartet" and "The Curly Strings" performed. The exhibition was open for public for four weeks.

We invited a local scout group to visit the exhibition and combined their visit with the soundscape workshop. We presented the concept of soundscapes and the application

and asked them to create soundscapes for Agnieszka Piasecka's photographs. We ended the workshop with a joint discussion about foreign places, unknown worlds and imaginative soundscapes. In doing so this last workshop picked up all strings of activities that were conducted within the last four years of PS2 in Helsinki. "The Neighborhood Living Room" ends with a lot of sustainable results and outcomes. With the subproject we have shown how one possible way to increase the role that a museum can play in a local community can look like.

## B THE SUBPROJECTS

### The Upper Town – a place devoid of real life

Until the 1990s Zagreb's Upper Town was a lively part of town with lots of social activity and services that were part of everyday life. Today, it seems to be just another scenic, tourist-attraction-laden heart of a Central European town. Since the independence of Croatia, it became the "administrative" part of the city where the Croatian Parliament and Government are based, and its everyday social life gradually died out. State institutions, museums, unused public and deserted private locations are common in its picturesque scenery but seem devoid of "real life" and storytelling capacity. Tourist guided tours, protests and summer festivities are the events that bring people to the Upper Town streets, while the everyday life of its inhabitants remains hidden behind the closed windows, old gardens and curtains, making the layers of social memory and present life mostly invisible.

For the PS2 subproject in Zagreb, called "Change of heart", the Museum of Broken Relationships's (MoBR) took its methodology to the open-air and based its activity on three important aspects of the museum's success - participation and interactivity of the audience, the attention and recognition gained both from local community and international audience, and the power of the Museum's concept for conveying the symbolism of changes. The "Change of heart" subproject

## CHANGE OF HEART THE MUSEUM OF BROKEN RELATIONSHIPS ZAGREB / HR



was initiated as a research and art project with an intention to create an emotional map of Zagreb's Upper Town by searching and reinterpreting personal memories and revealing the forgotten history of the Upper town spaces. This kind of approach was seen more as an intimate than scientific one, blurring the boundaries between facts and fiction and between personal and collective.

### Initiating processes of proactive identification

The project activities were based in workshops, lectures, research and artistic interpretation, artistic interventions and installations, focusing on sound and memories, urbanism and architecture, and

75–  
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Opening the doors of  
the Upper Town for new  
formats of participation

Photo: Museum of Broken  
Relationships

everyday life of the Upper Town citizens. The whole city quarter was conceptually perceived as an open forum museum, a polygon for the adaptation, broadening and implementation of practices designed to stimulate the "impartial" visitor/citizen to enter the proactive processes of identification, self-reflection, identity building and intercultural understanding. The practices performed by curators in collaboration with artists, researchers, school pupils, students and citizens were mainly designed as a trigger for more open, dialogue driven practices, based on two key axis: storytelling and emotional mapping of the Upper Town, all of which were finally shared through a community Radio station, developed and set-up exclusively for the "Change of heart".

The first project activities started in 2015 with two different directions of interest which joined their paths in one final subproject event - sound and memories on one side and urbanism and architecture on the other. The activities were building up on the results, networks and creative output of every new realized action throughout the subproject. The content of each participative action and artistic production was emerging organically from the newly set networks of people, local dynamics and individual interests.

The initial creative impetus was also instigated through numerous interviews with local residents, as well as through findings of the archive research made by curators in the Museum of Broken Relationships, both used a source of inspiration for later artistic interpretations.

### Two collaborative workshop series

"Making the Invisible Visible: Sound Reconstructions of Memories in the Upper Town" was the first series of workshops led by Pavlica Bajsić (sound artist and radio-phonic theater director) and Ljubica Letinić (sound artist and radio journalist). Here 13 young authors and students united their shared passion for the exploration of sound and the

medium of radio with their critical view on the societal change and immutability of their city quarter. What started with close listening to the soundscapes of the Upper Town, slowly took a specific direction of interest for each of the participants and resulted in individual sound pieces about people, spaces and events in the Upper Town. The results of their common work made the pulsating spirit behind the somnolent Upper City walls audible, permeating the whole project with a meaning of the sound and the curious medium of radio.

„EMERGING  
ORGANICALLY  
FROM THE NEWLY  
SET NETWORKS  
OF PEOPLE.“

The second collaborative workshop series "Architecture for Beginners: Emotional Urban Planning" dealt with the topic of urbanism and architecture and was led by Mari Jaakonaho (ARKKI, School for Architecture for Children and Youth, Helsinki), Kristina Careva (Lecturer, University of Zagreb, School of Architecture) and Jana Šarinić (Lecturer, University of Zagreb, Faculty of Humanities and Social Sciences). The workshops targeted the youth group of 15-20 year-olds, current and former pupils of the Upper Town's highschool, and were realized as an addition to the official high school curriculum of sociology and art education. The initial approach encouraged the pupils to rethink and express their personal impressions and feelings about the everyday life in the Upper Town through essays and photographs. The main intention was to bring to consciousness the messages and meanings they can draw from their daily surroundings, which are in their age usually unquestioned and taken for granted. The most active and interested individuals took part in the

emotional mapping of the Upper Town where they transferred their feelings and experiences of the Upper Town space into an alternative and completely individual map legend. This sort of interpolation of the PS2 project activities in the standard educational program can serve as a successful example of cooperation between very different social players for the benefit of the citizens, in this case the youngest generation of politically and socially responsible ones.



←  
An emotional map of the Upper Town – result from the second Change of heart workshop series

Photo: Museum of Broken Relationships

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Starting a 24 hours radio broadcast to win the hearts of the Zagreb citizens for the Upper Town

Photo: Museum of Broken Relationships

The “Change of heart” subproject workshops were just a first step in a long-term collaboration that gradually formed a core group of interested artists, curators, researchers, students, pupils and citizens, which continuously gathered and worked on a public presentation of their results and ideas. The event took place on Sunday, May 15th 2016, when “Change of heart” invited people to renew their relationship with Zagreb’s heart-shaped centre. Through a whole-day program, the citizens were reminded that the Upper Town is much more than a tourist attraction or a political hub and inspired to experience this part of their city in a different way. There were 45 artists participating in the program (among them 10 foreign and 20 young unconfirmed artists) which in this way got an opportunity to freely create and connect on European level.

Broadcasting the Upper Town – a 24 hours radio experiment

The main activity of the “Change of Heart” event was a 24 hour guerrilla community radio – a one day initiative that marked the 90th anniversary of one of the first European radio broadcasts that took place in the Upper Town. At the same time the event presented the creative work of the young authors and students gathered around the PS2 subproject. This artistic intervention questioned if the radio as a public and artistic resource can act as a mediator in the revival of the relation between the citizens of Zagreb and its Upper Town, as well as of the Upper Town with itself. What kind of

changes occurred when the political power shifted to the St. Mark Square and how has this transformed the social life of the Upper Town? The radio program was a blend of archival and newly produced material on the topic of the Upper Town and was used as a dissemination platform for the outputs of all the project activities – 3 art performances, 2 exhibitions, an organic food market, a Pop-up Restaurant on 4 locations, a creative children’s workshop, 2 sound walks and 3 participative events, all of which took place in the Upper Town squares, streets and unused spaces.

For the purpose of the event and under the flagship of the PS2 project, the MoBR established a cooperation with other Upper Town institutions like Meteorological and Hydrological Service and Zagreb Observatory, as well as with local restaurants, cafés, and a group of local organic food producers. They all in their way contributed to the success of the “Change of heart”, creating a feeling of neighborhood communion that bases its collaboration and trust in the shared care

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Impression from the Change of heart audio workshop

Photo: Museum of Broken Relationships

for the city. This kind of collaboration would rarely take place under the circumstances in which each of these institutions usually functions. This can be regarded as one great effect of the PS2 project because it directly contributed to this synergy.

Taking over Palace Dverce – for a real change of heart

By questioning the unused potentials in the Upper Town space, the project touched upon the inevitable sociopolitical question of public property which is out of use, the buildings and spaces which gape empty for years and are left to gradual decay. With an aim to encourage discussion on the potential and future development of this neighborhood and to open the debate in professional and public discourse, the “Change of heart” invested considerable effort to present the artistic results in some of those spaces and to shed light on their deserted state. By opening





↑  
Artists, Curators,  
Researchers, Students,  
Pupils and Citizens  
formed a core group of  
change-makers

Photo: Museum of Broken  
Relationships

the door of one of these upper city areas (Demetrova 18) and including the space on our one-day event map as an exhibition location, we feel that we have succeeded in pointing out the neglected Upper Town spaces in the public custody and sensitized a considerable part of public for this problem.

The whole-day program ended with a big interactive performance called “Social Muscle Club”, realized by a group of international artists with a motto of changing our usual habits of thinking and doing and training our “social muscle” ([www.socialmuscleclub.de](http://www.socialmuscleclub.de)). The event was attended by over 100 people from different backgrounds and interests with an idea to meet and support each other in a society in which one often feels alone. The Upper Town citizens, artists, tourists and random passengers gathered in the Palace Dverce, a property of the City of Zagreb, usually used for gala banquets, mayor’s receptions and other representative purposes organized by the mayor and the City Council. The opportunity we were given in such an important space, shed a bright light on the efforts made in the months that preceded. Even if only for a moment and in a symbolic way, it was finally a sign that through the PS2 project in Zagreb art and culture can take over the most prominent place in the public life of a city.

C

ASSOCIATED PROJECTS & PARTNERS

C ASSOCIATED PROJECTS & PARTNERS

Epica Foundation - La Fura dels Baus is a center of innovation and research around the connexion between Art, Science and Technology with two main objectives:

1. To catalyze the innovation and research processes by the interrelation between those disciplines, having art as the vehicle not as the only objective
2. The creation of new knowledge and its transfer to civil society, maximising research and innovation impact

Throughout nearly 40 years, the world-known theatre company La Fura dels Baus has developed a method that goes beyond individualities and that is articulated around collective work and the combination of talents from different disciplines for disruptive innovation.

The Epicalab combines the characteristic know-how of La Fura with the knowledge of different experts around a wide range of disciplines, such as between many others, neuroscience or citizen science. It involves technology providers along with research centers or cooking innovation departments and combines them all with traditional and digital arts.

EPICA LAB LA FURA DELS BAUS & EPICA FOUNDATION BARCELONA / ES



The Epica Foundation identifies with the concept of „sandbox“, understood as a space to genuinely experiment, test, rehearse, practise and attempt for research and innovation processes. As a consequence, we propose art as a vehicle to convey this symbiotic generation of knowledge between the coming experts and the in-house creativity.

For us, art offers the perfect scenario that allows science and technology to step out of the laboratory and, at the same time, it functions as the most convenient tool for knowledge transfer to civil society.

To sum up, Epicalab is based in three axes:

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Image from the workshop Epica i Singular where diversity and knowledge transfer lead the learning methodology

Photo: La Fura dels Baus & Epica Foundation

1. It is a laboratory/playground to experiment where mistakes are allowed. It is a win-win space in which collaboration is not ephemeral, but needs to be transferred
2. All collaborations within Epicalab have an imminent return in the shape of knowledge. This also facilitates the testing of technologies within society. For us, art is the vehicle for knowledge transfer. This is why the collaborations we established with different stakeholders are presented in a final public performance/exhibition. The creativity, research and innovation and its associated knowledge must get out from the laboratories
3. We use deadlines (public presentations) in order to speed up collaboration and the process of decision-making. Epicalab's aim is not to be a development space but to serve as a validation and experimentation space. The importance of iterations materialize as this is a risk-free space

How does Epicalab formalise its savoir-faire?

On one hand, the center capitalises this polyvocality through the project of the Epica Knowledge Center. It is a multidisciplinary learning methodology oriented towards performing arts that combines the established language of La Fura and the collaboration of external agents that contribute with their know-how and knowledge in different areas. The duration of processes can last from 2 weeks to 6 months and at the end, the team work is conceptualized in a public performance.

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Image from the final performance made with the Berlin International University of Applied Sciences (BAU)

Photo: La Fura dels Baus & Epica Foundation

On the other hand, Epica Foundation has established many collaborations with other creation centers and universities like the Berlin International University of Applied Sciences (BAU) or international cultural entrepreneurs.

The nature of these collaborations is to share the knowledge between both entities. Students are welcome to play an active part in the installations of Epicalab where a theme is proposed to be worked on. The methodology is often the same. The first days are dedicated to work around the cohesion of the group. Next days are used to generate teamwork among the students and to divide the responsibilities. Throughout the days, visits of experts are included. The final presentation is an opportunity to see all the work done during the experience.

Besides, Epicalab has initiated nourishing relationships among stakeholders in different areas of knowledge. One good example is the collaboration between Mugaritz, one of the best restaurants in the world that fusions gastronomy and innovation, the Berklee School of Music, the Polytechnical University of Catalunya (UPC) and Barcelona Supercomputing Center. These links encourage interdisciplinary work and the adaptation of the creative process to real cases, thus being cultural products or new experiences for creative industries.

In conclusion, Epicalab and the Epica Foundation founded a living space for creation, validation and transformation in which ideas and talents converge to rise to new ways of designing, creating, doing and thinking. The Epica Knowledge Center doesn't only aim to stand out as an artistic center of research, but to become a



reference in the fields of technology, science and business around creative industries. It tries to be a place in which culture drives the research and innovation and in which every collaboration has a direct return at a city level.

The methodology of the Epicalab is based on diversity, multidisciplinary, creativity, and polyvocality. It opens the path to new ways of research by developing and experimenting with the creative process.

Find more information on:  
[www.epicalab.com](http://www.epicalab.com)

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The work processes at Epicalab culminate with a public performance in which to test the results of the experience

Photo: La Fura dels Baus & Epica Foundation

↓  
Process of ideation between representatives of Mugaritz and Berklee School of Music at Epicalab

Photo: La Fura dels Baus & Epica Foundation



C ASSOCIATED PROJECTS & PARTNERS

The goal of the Swedish Institute (SI) is to spread information about Sweden outside the country and to promote Swedish interests by monitoring and analyzing Sweden's relevance in other countries. It focuses also on strengthening talents, opinion-formers and decision-makers in other countries by organizing exchanges with other countries and by developing and maintaining networks for lasting international relations. It is a public institution that finances projects in different areas of public life, especially in culture, education, and research.

In the project "Fostering Urban Democracy through Participatory Urban Art, that was funded by SI, the Kristianstad University worked together with the PS2 project partner Gauss institute from the former Yugoslav Republic of Macedonia (FYROM). The projects' objective was to contribute to the deepening of the democracy process in FYROM through fostering innovative approaches that can empower participatory democracy with a special focus on the urban art and urban planning. Supported by SI a group of Swedish researchers and artists travelled to FYROM bringing their ideas and practice of participation in the area of both art and design. The aim was to present these ideas and to raise awareness about other forms of urban and public methods. The exchange wanted to show how to conduct art projects with a focus on involvement and participation, where the processes itself is as

**FOSTERING URBAN  
DEMOCRACY THROUGH  
PARTICIPATORY URBAN ART  
THE SWEDISH INSTITUTE  
STOCKHOLM / SE**



important as the actual artwork. The cooperation tried to show that the participatory process alone can be understood as an artwork in itself and that the involvement of people conducting and participating in these participatory processes is a value even if an urban art project leaves with no physical effects in the respective area.

Find more information on:  
<https://si.se/en/projects-granted-funding/fostering-urban-democracy-through-participatory-urban-art/>



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The Dollhouse,  
by Nils Petter Löfström  
and Erik Westman  
2015

Photo: Michael Johansson



Workshop preparation  
in Bitola 2015 with Nils  
Petter Löfström, Erik  
Westman and Åsa  
Maria Bengtsson

Photo: Michael Johansson



Participating  
partners Bitola 2015:  
Erik Westman, Michael  
Johansson, Igor  
Nedelkovski Åsa Maria  
Bengtsson, Nils Petter  
Löfström

Photo: Michael Johansson



C ASSOCIATED PROJECTS & PARTNERS

The Kristianstad Center for Contemporary Art is part of the Kristianstad Regional Museum and the mayor art venue in the region of Skåne.

The Regional Museum can be found right in the center of Kristianstad and next to the popular Center for Contemporary Art the museum complex also contains the Café Miró and, a short distance away, the Film Museum, with the oldest intact film studio in Sweden. The Regional Museum of Kristianstad also includes the Åhus museum, the Railway Museum and three open-air museums. The museum is known for its expertise in heritage protection and archaeology.

It was one of the main partners for the activities within the PS2 subproject "Cube-x Journey to Abadyl/wanderlost" through the whole project period. It supported and promoted most of the subproject activities in Kristianstad. During 2014 and 2018 three exhibitions related to PS2 were shown there. Next to a series of workshops the Kristianstad Center for Contemporary Art was also one of the main venues during the wanderlost workshop and exhibition in April 2017.

The Center worked together with the subproject in the virtual reality experience "Genius Loci" about the unknown non-places of the city and in hosting the workshop "Fictioning". The Danish group CoreAct invited the audience to the Kristianstad

# KRISTIANSTAD CENTER FOR CONTEMPORARY ART KRISTIANSTAD / SE

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Center for Contemporary Art for their performance installation „My Table, is your Table“. For the performance the group set up a coffee feast playing with the idea of the private vs. the public space, inviting people to participate but instead of traditional topic, the conversation was based around identity and nationalism.

The Kristianstad Center for Contemporary Art also gave the PS2 subproject "Cube-x Journey to Abadyl/wanderlost" access to their local network of artists and companies that were later invited and brought into the subproject on different levels and thereby played a huge part in making the subproject so successful.

Find more information on:  
<http://www.regionmuseet.se/english/kristianstad-center-for-contemporary-art.html> &  
<http://coreact.dk/en/projekter/my-table-is-your-table/>



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Students and artists at Kristianstad Center for Contemporary Art the non-places exhibition

Photo: Michael Johansson



←  
Students and artists at Kristianstad Center for Contemporary Art setting up the non-places exhibition

Photo: Michael Johansson



C ASSOCIATED PROJECTS & PARTNERS

Evolution of the project

The Mobile Game Lab (MGL) was initiated by the PS2 partner City University of Applied Sciences Bremen (HSB). The MGL addresses topics from the field of mobile gaming technologies in teaching, research and training. It offers activities for school kids age 10 and up, students and the general public. Initial activities were organized at the City University of Applied Sciences Bremen, at partner schools and at larger events like the IdeenExpo, a large fair for children and young people in Hanover, Germany that wants to create interest in technology and natural sciences.

In 2013, the concept of a permanent presence of the Mobile Game Lab at a central location in Bremen in the former "Post Office 5" was developed in cooperation with colleagues from several faculties of the HSB and external partners and a funding for a start-up phase was secured. A three-year build-up phase was planned in order to realize a permanent offer of the MGL-activities at Post Office 5. Therefore the MGL stepped into a cooperation with the Sportgarten e.V., an association that provides sports infrastructure (especially for skating, climbing, football) for underprivileged children, and the FabLab Bremen.

The renovation works at the "Post Office 5" were repeatedly delayed and the MGL-

# MOBILE GAME LAB CITY UNIVERSITY OF APPLIED SCIENCES BREMEN / DE



activities continued to be held at a variety of locations at schools, at the HSB and at fairs and other events. In November 2016 the Post Office 5 (P5) opened with the help of the PS2 project partners HSB and M2C Institute. Since then the Mobile Game Lab has a permanent location at the P5 where most of the activities are organized, most of them in close collaboration with the P5 partners Sportgarten e.V. and FabLab Bremen and with the PS2 project.

### Activities of the Mobile Game Lab at the Post Office 5

In cooperation with the Sportgarten e.V., four school classes are taught weekly as part of a Sports and Media module. Another class

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Figure 11 Laser cutting and 3D-printing technology plays a great role in the conceptualization of games at the MGL

Photo: Mobile Game Lab



receives weekly lessons with a computer science focus, including Android app and game development.

Once a week the Mobile Game Lab hosts an Open Lab Day. On this day, interested people from a large variety of backgrounds can use the equipment, software and expertise of the Mobile Game Lab to work on their own projects or to receive help in the self-study of computer science, game development, etc. Participants range from refugees, over students to pensioners. They are supported by the MGL staff.

As another weekly appointment, the "Post Office 5" facilities are used for the e-sports team of HSB. The team trains and analyses their past matches during this time. The E-Sports events are very well received by the students of HSB.

The computer science teachers of the Bremen secondary schools showed a great interest in a teacher training. As a result the seminar leader for the Department of Computer Science at HSB made several excursions with her teaching students to the MGL and educational workshops have been developed for teachers by the Mobile Game Lab.

The regular events with schools are very popular among students and teachers and appreciated in their content. However, the experiences of the last years have also



shown that participating schools are facing major problems to make even small financial contributions. Cost-covering contributions are not realistic.

The Mobile Game Lab has also collaborated with the PS2 project on several occasions, including workshops, the hosting of media artists from the PS2 project in the Mobile Game Lab and the development of joint research and funding proposals.

While the activities of the Mobile Game Lab are highly accepted by all stakeholders involved the financing of the on-going operation presents a major challenge. Many of the most popular activities, e.g. those with refugees and schools address groups that cannot afford cost covering charges and sponsoring is limited. Given that the rental costs at the Post Office 5 make up almost 50% of the running budget it is likely that that the permanent presence at the P5 cannot be maintained and that the Mobile Game Lab will have to host its activities in another location. One solution seems to be a collaboration with the Digital Impact Lab that was developed within the PS2 project.

Find more information on: <https://mobilegamelab.de/>

C ASSOCIATED PROJECTS & PARTNERS

Paradise-Park-Kitchen is based on the simple idea of people getting in touch with each other by cooking together. The get-togethers are documented by photo and video. The participants are filming, cooking, talking and finally enjoying good food and a lot of personal stories so that the events become multimedia food events in public space.

The concept was developed by Laura Oldörp as part of the Paradise-Park working group at the University of Applied Sciences in Düsseldorf (HSD). Paradise-Park was founded in 2016 by design students under the patronage of Prof. Anja Vormann and Prof. Britta Wandaogo and functions as an editorial department for the HSD radio station. The research activities of Paradise-Park all experiment with social and cultural design in public space.

A central role in every experiment plays the „Ü-Wagen“, an outside broadcast van that streams the activities on the radio frequency and that is also working as an observation platform for the activities. The „Ü“ (short for Übergänge = transition) also stand for the aim of Paradise-Park is to find new contexts in communication, digitalization and society that translate the transition from analogue to digital. The interdisciplinary working group involves local stakeholders and develops new forms of speaking of, acting in and designing for public space.

# PARADISE-PARK-KITCHEN PARADISE PARK DÜSSELDORF / DE



Unlike the private one, public space comprises city marketing, traffic and other functions and is dictated by laws concerning the city structure. The Paradise-Park-Kitchen aims at connecting the private act of cooking with the public space to create a new dimension of space (third space). Participation and exchange become the main topics, while private and public places overlap to form something new.

For the events a kitchen is built up in a public square or a pedestrian street and people are invited to cook together. Cooking in general is a very personal, communicative and cultural happening. Eating habits and tastes are deeply connected to traditions and also personal

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Guests of the Paradise-Park-Kitchen event “Cacik and Tzatziki” that tried to establish a new form of dialogue for the Cyprus conflict  
Photo: Paradise - Park



memories. A small chat about a dish or a recipe can unfold into a dialogue which leads to overcoming cultural boundaries. People from many different nations come together and bring something new to the city – not only by talking, but also by acting through the exchange of sensual experiences like eating, tasting and smelling. Language barriers can be overcome by establishing cooking as the common language all participants. Due to the documentation by the “Ü-Wagen”, the project becomes a performance in public space.

Every action is individually developed and adapted to different places, people and situations. The documentation, which was originally only executed by the team, is now also carried out by the participants. The project is constantly growing thanks to the exchange of recipes and cookbooks based on the participants’ contributions. Previous events are shown in real time at other stations,

so that the concept gains an additional dimension. It becomes an exchange of different places and experiences.

One example illustrating the Paradise-Park-Kitchen concept is the “Cacik and Tzatziki” event that had the Cyprus conflict as a topic. Cyprus is an island still divided between Greek and Turkish groups. The situation is deadlocked, a reunification of the northern and the southern part is not in sight. The cultural and personal exchange between the two populations only happens at a minimum level, old enemy images are still very alive. The idea behind the “Cacik and Tzatziki” event was to use a dish that exists in on both sides but with a different name, Cacik in the Turkish part and Tzatziki in on the Greek side, to start a dialogue about the political situation and to establish a cultural exchange. Realizing the similarities and small differences in the preparation and presentation of the dish could lead to a better

understanding of the other side. The event took place at the Oberbilker Markt a public square in Düsseldorf in the center of an area where a lot of people with Turkish and Greek background live.

At the beginning of the project the citizens living around the square are asked to contribute family recipes – restaurants and local cultural institutions collect them in a catalogue. At the Oberbilker Markt tasting stations are set up. Everybody is invited to taste the different versions of the dish. The participants write down their associations, memories and thoughts and add them to the archive. At a second stations people were cooking together. Info sheet provide information on customs, history, and (food-) culture of Cyprus.

All activities are documented by the „Ü-Wagen“ with interviews, film, and recordings. The event showed that a dialogue focusing of memories and tastes cannot solve a conflict as complex as the one in Cyprus but it can help to start a new form of cultural exchange by the common language of food.

Find more information on:  
<http://paradise-park.de/paradise-park-public-kitchen/>



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People cutting fruits  
at a Paradise-Park-  
Kitchen cooking event  
in public space

Photo: Paradise - Park

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With the "Ü-Wagen",  
a fully equipped  
broadcasting van  
all activities of the  
Paradise-Park activists  
are documented

Photo: Patrick Kruse



C ASSOCIATED PROJECTS & PARTNERS

A multidisciplinary research laboratory on human perception of objects, spaces and media environments – Best-practice on “Human-Centered-Research”

Idea, structure and research subject

As part of the University of Applied Sciences Ostwestfalen-Lippe (OWL) the “PerceptionLab” is one of four unique research focuses within the Detmold School of Architecture and Interior Architecture. A joint of professors and researchers from the different departments of Architecture, Interior Architecture and Mediaproductio are working on the topic of human perception of objects, spaces and media environments, following the idea of “Human-Centered-Design” which puts the people into the center of all research and teaching activities.

Founded in 2008 the “PerceptionLab” connects experimental research with a pragmatic orientation towards practical applications. It consists of at least twelve researchers from the fields of architecture, design, scenography, as well as media science, engineering and medicine under the lead of co-founder Ulrich Nether, professor for ergonomics and product development at the University of Applied Science OWL. The Lab faces the question of how subjective, taste-specific ratings of spatial situations and buildings can be converted into objectified, analytically efficient knowledge about the

PERCEPTION LAB  
UNIVERSITY OF APPLIED  
SCIENCES OWL  
DETMOLD / DE



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Workshop participants  
listening and recording  
the specific sound of  
Gröpelingen, Bremen

Photo: Jan-Phillip Ley

perception of spaces, since it is known that colors, sounds, smell and light as well as the size of a room, the location of objects, shapes, materials and surfaces affect the human mood in such an individual way.

By the involvement of different departments from design, planning and visualization as well as the supplementing of external experts with the expertise of psychology and sociology the interdisciplinary research lab creates the ground for a holistic philosophy of doing research. This collaborative structure approaches the development of an applied apparatus for planning and design within the context of the university, practice, and society by combining knowledge from

classical empirical research activities with the experience from planning and design practice.

The projects can be categorized in four different research subjects: basic research on the effect of spaces and objects (physical and virtual), the procedure and mechanism of orientation, testing, studying and improving processes of interaction between user and object, or user and space (usability) as well as the acceptance of different structures and objects in different spaces focusing on the effects of the user by design interventions.

Facilities and tools

So far, the PerceptionLab is the one and only German research-facility that tackles the issue on spatial perception with a systematic and interdisciplinary strategy which transfers the resulting knowledge into applied design concepts. For the execution of this concept the lab consists of a series of different facilities: laboratories for visualization, analysis, design and testing of objects and spaces as some kind of tangible aspect within the interrelationship of man and space, and technologies that make the affective, psychological and physiological aspects feasible. The “Lichtlabor” can be used for measurements of different light sources as well as light-designs of interior and exterior spaces. An “artificial sky” can simulate the movement of the sun and changes in the qualities of daylight. The “Raumlabor” is used to design and test on the scale of 1:1. In the “FabLab” researcher can develop new design concepts by building prototypes with the use of different tools and machines from the field of digital fabrication.

These facilities for production and testing get accomplished by a variety of tools for visualization: the “Powerwall” can visualize designs of interior spaces in a 3-dimensional way by the scale of 1:1. With the help of modern VR-technologies it is possible to simulate virtual scenarios to test the effects on the potential user. Reactions of the body

like changes in the galvanic skin response or muscle contractions triggered by the different qualities of space, can be measured with a “Biofeedback-system”. The use of the “Eye-Tracking-System” gives information on the visual focus of the user while being exposed to different spatial environments. The generated data only gives information on the different effects, they cannot lead to the specific source. That’s why these measurements get expanded by the usage of questionnaires for the individual evaluation of the specific situation, interviews and video documentation - all qualitative and empirical methods of psychology and sociology. Analytical connections between objective measurements in combination with subjective perceptions and ratings can only be made by this multimodal approach.

Which instruments are used within the development and execution of an experiment highly depends on the given research question. Many tests, as the MARTa-study in Herford (see below), are executed in the different scales of the field and can lead from the city to the corridor of a hospital to an elevator or the working desk in a shared office. The research is always about the connection of perception and effect, aesthetical acceptance and usability, which means optimal criteria of use in the sense of Universal Design. Other studies put the participant in a “neutral” research environment in order to find answers to questions on different phenomena of perception and cognitive processes without the influence of disruptive factors. Additionally, the “PerceptionLab” sees a high potential in the combination of research and education. Therefore, it integrates the creative and innovative expertise of students into their research projects, as aspiring offspring of design-research.

Best practice project I: MARTa study

A contribution to classical empirical examinations on the research field of orientation gave the MARTa-study executed

during 2009 and 2011 under the lead of Prof. Dr. phil. Martin Hofmann. By a series of field tests the research team made a complex analysis of the architecture of the Marta Herford, a museum build by the American architect Frank O. Gehry.

It contained individual subjective valuation of the building as well as the question of how people can navigate through the interleaved building with its confusing wayfinding system in moments of emergency. Throughout the study more than 500 people were asked by the means of surveys with guiding questions, questionnaires and individual interviews. In addition to that several experiments were made to record and analyze the movement patterns and reactions by the use of modern digital research technologies. Starting point of these developments was a test-alarm that showed that at least one third of the museum visitors had huge problems in localizing the escape routes: 34,6% did not recognize the signs of emergency exits at all and simply tried to follow back the route they were coming from.

This result showed that the complexity of the inner structure of the building was way too high in order to react in an adequate way in case of emergency although there were existing emergency routes. The practical exercise even showed tremendous deficiencies. Using the "Eye-Tracking-System" enabled the researcher to verify the enormous potential of danger caused by the visitor's disorientation in extreme situations. The test person had to wear high-tech glasses that were connected to a computer in order to track each of their eye movements. In a second step the generated data sets got complemented and confirmed by additional interviews of the test person: although the existing emergency system was built after the existing guidelines for emergency architecture it was highly insufficient in case of emergency.

Based on the outcome of the analysis the "PerceptionLab" developed a new guiding

system for emergency cases which consists out of floor-integrated light stripes that light up to show safe exits when a dangerous scenario occurs. The new concept was able to reduce the evacuation time by 50%.

This high efficiency was given because the design not only followed the existing legal requirements but based its foundation on human behavior in a specific spatial situation. The "PerceptionLab" approaches this idea of "Human-Centered- Design" which places the individual into the center of all research and design activities. The MARTa study not only works with qualitative data collection in order to create objectified knowledge but tries to generate outcomes that can be transferable in different contexts, always in close distance to the test person. The closer the respective research is to people and space, the more suitable and sustainable the solutions that result in the design.



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Fire emergency scenario in the MARTa Herford study  
Photo: Perception Lab

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Eye-tracking used to measure visitor's disorientation in an emergency case in the MARTa Herford  
Photo: Perception Lab



### Best practice project II: PS2 Sensitive Maps of Gröpelingen, Bremen

In a cooperation between Jan Phillip Ley (scientific assistant at PerceptionLab), Stéphane Clor (Sound and Media artist) and the "PS2 Digital Impact Lab" the project "Sensitive Maps", which took place in November 2017, is using completely different approach.

The workshop was based on the idea of developing a collective map of the city district of Gröpelingen together with neighbors and interested Bremen citizens. By the help of a perception-based application for smartphones the map on the one hand became a medium for creative exchange about subjective impressions and experiences the participants archived during the workshop and on the other hand we were able to identify and localize relevant spaces and areas for participatory sustainable and innovative social urban developments.

Goal of the workshop was the collation of collective knowledge as a result of subjective spatial experience, as well as the use and transfer of knowledge about the design production of digital tools for the transformation of thoughts and ideas into tangible objects as a base for interpersonal and intercultural exchange. By the use of the physical body as a sensing instrument for spatial perception these elements got accomplished by the identification and localization of favorite places and spaces that create negative connotations. The third

goal became the crowd-sourced database on visually and acoustically striking places in Gröpelingen as a base for future investigations on its relevance in connection to urban developments.

The geographic peripheral location of the district and the associated population structure in terms of age, cultural origin and economic or social „status“ led to the question of whether cultural diversity also brings a diversity in the way we perceive spaces. With the focus on the visual appearance and the sound of the city, the question arose which connection between these two sensory worlds can be identified in the context of the city and which potential lies within them.

The workshop started with a discussion guided by three leading questions about personal opinions on places that represent the district, favorite places and places that are connotated with negative emotions. Each question was answered with one word on a wooden "marker" which got combined with the others participants "markers" to some spatial arrangement mapping the district. In a next step consisted of an introduction to the open source software "MobMuPlat", the mobile version of Pure Data – a platform for visual sound programming. The main feature of the app was to record sound and save them marked by a time stamp and extended by a photo of the recorded situation. In order to get a new perceptual sensation and to be able to focus on the acoustics of the area the participants used headphones during the recordings. The use of open source software and the smartphone, as a familiar object of everyday life, promoted the identification with the developed method and intensified the confrontation with the district of Gröpelingen.

Once familiar with the tool, the participants started the "Perception Walk", which followed a predefined route, with the goal to create a database for the sound and image of Gröpelingen. The walk started and ended at the "PS2 Digital Impact Lab" and took around 90 minutes. After the tour all

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data was collected and processed for the next step. This emerging database can be developed further in order to grow and create a maintaining representation of the district. The processed data was then projected into the space of the "PS2 Digital Impact Lab" in a way that the collage of the participant's sensory experiences of image and sound became a new sensual experience by shifting it into a different spatial context. A multichannel sound system was used to create a spatial appearance of the recorded sounds. Chronologically parallel to the sound recordings the pictures were projected on the ceiling of the room directly located above the map. Highlighted by LED-spots the "marker" lighted up when playing the corresponding sound. The interactive installation could now be used to discuss the new atmospheric impressions and to relate them again to the respective impressions, emotions and issues on the corresponding space.

Finally, it is necessary to clarify how the described format of participatory developed, perception-based, collective maps can be transferred into other spatial contexts in order to be able to make objectified

statements about revealed mechanisms from the deliberately chosen method of qualitative data. The method used can be described as „human-centered research“ in which the collection of „human-centered data“ by means of often digitally extended prototypes of perception-based research tools provides the basis for user-based spatial analyzes. Another effect is the emergence of social cohesion regardless of any heterogeneity as well as the identification with space (appropriation of space) by corporately created collective memories.

Find more information on:  
<http://www.hs-owl.de/fb1/forschung/perceptionlab.html>

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Artist Stéphane Clor  
and a participant  
looking at the final  
interactive emotional  
map of Gröpelingen

Photo: Jan-Phillip Ley



**C ASSOCIATED PROJECTS & PARTNERS**

The Rotary Club Bitola functions as a strong supporter of innovative formats for urban development and participation in Bitola and the Pelagonia region in the Former Yugoslav Republic of Macedonia.

One initiative focused on the revitalization of night life in Bitola's Old Bazaar. The Old Bazaar is the city's historic commercial center. It is situated north of the Dragor River, opposite the clock tower and Magnolia Square. Its narrow streets are home to examples of traditional Turkish architecture including important religious and cultural buildings. Bitola achieved its peak of importance during the Ottoman rule and had a large bazaar. While the size of the bazaar has declined over the years, it remains an active center of commerce in Bitola, but only during the day. After the end of working hours the Old Bazaar becomes abandoned and scary place.

The Rotary Club Bitola motivated by the PS2 subproject in Bitola "4D Virtual Urban Art", actively supported several citizens' initiatives for revitalizing the night life in Bitola's Old Bazaar. The project ended with a large cultural event night in the old bazaar with over 1.000 participants. A second cooperation between the Rotary Club and "4D Virtual Urban Art" targeted the revitalization of Officers' Hall. Considered an architectural gem of Bitola, the Officers' Hall was built in 1911 by Abdul Karim Pasha to

# ROTARY CLUB BITOLA / FYROM



host receptions and parties. It is located in the middle section of the pedestrian street Širok Sokak, just north of the city park, and is owned by the Bitola Municipality, currently in need of renovation.

The Rotary Club Bitola organized a roundtable for consultation with stakeholders and citizens about the future of Officers' Hall in Bitola. All relevant stakeholders for renovation of Officers' Hall participated in the round table: The Mayor of Bitola and other representatives of the municipal administration, the Director of the NI Institute and Museum and other representatives of national authorities for protection of cultural heritage, business sector (Regional Chamber of Commerce and Industry and managers of some biggest companies

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Photo exhibition as part of the cultural night event at the OLD Bazaar in Bitola

Photo: GAUSS Institute

in the region). Experts for urban planning took part, and the local PS2 subproject as advocate of the voice of the citizens (participatory development of Officers' Hall) played an important role as well.

The local project management of the PS2 subproject "4D Virtual Urban Art" gave a keynote presentation on citizens initiatives and ideas for not just architectural renovation of the Officers' Hall but also for revitalizing the its spirit, because Officers' Hall was the

center of cultural and artistic life in Bitola for a long time. The gathering of all relevant stakeholders thanks to the importance of the voice of Rotary Club Bitola means a huge step forward in preserving this place and by giving it a new purpose.

Find more information on:  
<https://de-de.facebook.com/Rotary-Club-Bitola-203144269762331/>

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Celebration of the stakeholder meeting for the revitalization of Officers' Hall in Bitola

Photo: GAUSS Institute





C ASSOCIATED PROJECTS & PARTNERS

"I'd like to have more time", a participant wished at our table. Nobody could give her more time, of course. But could we still try to find a way to make her wish somehow come true? Cook dinner or do the dishes? Or homework? It turned out she wouldn't let us help her with showering, jogging or going to the cinema. At least we had a good laugh, and after all her case joined the pile of unsolved wishes. So much about a confusing visitor's insight to a Social Muscle Club in Basel. Another visitor is quoted as follows: "My neighbour was looking for a horse no one had. He agreed on a riding lesson which some other guy at my table offered. Next to our table someone got a new haircut which he had just negotiated. Later he sang the song he had wished for himself – Nobody walks alone! - for the whole audience on stage, as a reward for his hairdresser."

Social Muscle Club (SMC) is hard to describe. The international performance art project mainly based in Berlin, Basel and Bristol, is all about giving and taking. Wishes and gifts are formulated on paper slips and negotiated throughout the evening – unconditionally, SMC is not a barter shop. If a wish or a gift is not fulfilled, there is at least a discussion to win. And sure enough, a singular amusement. A mixture of happening, celebration and social sculpture, Social Muscle Club is the place where art and anti-art conspire with immersive theatre while it's all about two simple questions: What can you give? What

# SOCIAL MUSCLE CLUB BERLIN / DE & BASEL / CH & BRISTOL / UK



do you want? SMC trains your interpersonal strength through a simple game based on the fact that every human being wants something and has something to give.

The game is framed by a performative program that differs from city to city, club to club, evening to evening. Since its foundation in a Berlin living room in summer 2012, Social Muscle Club has celebrated itself as a playground of the subversive social. In 2013, the first foreign Social Muscle Club opened in Basel, which has so far hosted nine sold-out evenings – in the Kunsthalle, the Grand Hotel, a retirement home, a church, the market hall, barracks, art festivals, a refugee home and one in a fitness center. Soon SMC

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Scene from a Social Muscle Club at the Kunsthalle Basel.  
Every event is different and can take place in almost any location  
Photo: Nicolas Gysin



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Social Muscle Club event in Zagreb as final celebration of the PS2 subproject „Change of heart“  
Photo: Julien Duval

started to hit the road internationally, hosted by the most diverse institutions and events of the art world - starting in Bristol, followed by Athens, Freiburg, Johannesburg, Cape Town, Marseille, Munich, Nancy, Vienna, Zagreb, with Chicago, San Francisco and Zurich to follow this year.

Regardless of the city in which a Social Muscle Club is located, the curators, organised in an international core group, stick to a basic structure, a sequence of elements around an ever same wish and gift-game. While this structure always remains unchanged, the contents – a site-specific performance program with a lot of improvisation and most importantly, an open stage – differ widely. An evening at the SMC is a collective adventure that is – in its intimate setting – to be experienced and interpreted individually by each participant. Therefore, the text at hand is bound to the author and cannot reflect any collective opinion. The beguiling thing about

SMC is its effortlessness. Every cramped person who feels socially incompatible somehow manages to get involved in the game and gain something from it. Due to this low-threshold networking potential, SMC has all it takes to become a hit of the scene. To prevent this, the club continuously moves out of ancestral territories and integrates into the city. Because the gathering lives from its heterogeneity, the most unexpected encounters are possible. SMC left theatres and art spaces and entered new spheres. Thus, the club always has to take new forms in order to reach new audiences. SMC doesn't make itself comfortable just anywhere but ventures out into new social contexts – into fitness centres, old people's homes, luxury hotels, churches or refugee homes. SMC is not a party – as pictures of one evening might suggest. It is an intensive and sometimes strenuous artistic-social project with an elaborately designed framework.

For its organizers SMC requires constant reflection and attention, especially with regard to the seemingly self-evident aspects of gathering, which results in an exciting mixture - intimate, peculiar, effective. The feedback of the audience reflects this. At the beginning of the evening one was a stranger. SMC rituals gradually create the intimacy needed to relax. It is an informal, inviting setting. Nevertheless, a very clearly defined framework and concrete rules are indispensable to guarantee the necessary concentration. In the SMC everyone can move freely. But behaviours should be questioned, and barriers should be exceeded. These are the goose bump moments. The feelings that remain for a long time.

The well-known Swiss political publicist Daniel Binswanger described the relevance of SMC as follows: „The Social Muscle Club has met with an enormous response. The concept is far away from the classical ideas of mediation. The purpose is to intensify the interaction itself. The Social Muscle Club is consistently oriented towards the goal of participation, which is becoming a new urgency everywhere, also in the classical institutions. The playful removal of inhibition thresholds has the effect that any participants, without knowing each other, begin to give each other presents.” The success of the Social Muscle Club in the cultural world is probably best reflected in institutional invitations to such renowned initiatives as the Berliner Theatertreffen, the Schauspielhaus Zurich or the Kunsthalle Basel. And of course the PS2 partner institution Museum of Broken Relationships in Zagreb.

Find more information on:  
<http://socialmuscleclub.de/>

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What often seems to be just a big party is a very demanding, well-curated artistic framework. In this case at the Elisabethen Church in Basel

Photo: Nicolas Gysin



**C ASSOCIATED PROJECTS & PARTNERS**

Ideal Spaces is an ongoing art and research project that aims at the experience of relevant social and imaginative spaces. The project is focused on social dreaming, imagination, and the evolution and shaping of contemporary living spaces by taking a close look on the impacts of "ideal" spaces on architecture, art, and human hopes. Ideal Spaces is also practical, since it enables and generates new spaces for communities.

The team behind the project, the Ideal Spaces Working Group, consists of known international architects, designers, musicians, historians and media experts. They all share the theme of spaces being "ideal" according to how space is practiced, planned, imagined and experienced. The Ideal Spaces Working Group tries to encourage, enable and implement frameworks that can generate ideal spaces, rather than concentrating on the design of actual, physical architecture and space.

The Ideal Spaces Working Group played a huge role in the PS2 subproject Cube-x Journey to Abadyl/wanderlost. The members of the working group helped the subproject to explore spaces of social and imaginative relevance. With them spatial and mediated experiences were developed using animation, 3d and Virtual reality.

The results were used in several of the workshops and exhibitions of Cube-x Journey

**VENICE BIENNALE OF ARCHITECTURE 2016 & 2018**  
**IDEAL SPACES WORKING GROUP KARLSRUHE / DE**



to Abadyl/wanderlost. Some of the invited artists and design students from the subproject got the great chance to be involved in the "Ideal Spaces" exhibition at the Venice biennale of architecture in 2016 and in the "Artificial Natures" exhibition of the European Cultural Center at palazzo Mora in Venice in 2018.

The Ideal Spaces Working Group works with the idea of gestalt through artefact creation (including virtual objects and 3D-worlds) as one surface to explore, exploit, test and communicate our ideas and concepts, that are generative rather than produced, where we try to grasp systematic insights through complex generated realities, in which an audience later is invited to interact.

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A piece from the Venice Biennale 2016

Together with artist and designers from the Ideal Spaces Working Group we developed an Ideal Spaces virtual reality experience, shown later in 2017 and 2018 in Copenhagen and Kristianstad

Photo: Ideal Spaces Working Group

The "Ideal Spaces" exhibition for the 2016 Biennale in Venice tried to explore this via a combination of presenting ideal city spaces, active participation of the visitors molding their own spaces, and symbolic representation. In the project the Ideal Spaces Working Group made important contributions regarding ideal spaces through history but also as an idea.

Find more information on:

- <https://www.idealspaces.org/exhibition-venice-2016/> &
- <https://www.idealspaces.org/artificial-natures-venice-2018/>



A workshop in Malmö, Sweden, at the Inter Art Centre with artists/designers Andi Seiss and Daniel Hepperle about immersion in virtual reality

This piece of work was shown later in Copenhagen in October 2017 and in Kristianstad in May 2018

Photo: Ideal Spaces Working Group



One of the physical interfaces built for interacting with video material by artists/designers Anders Grahn and Mauro Ferraro, used in workshops, presentations and exhibitions

Photo: Ideal Spaces Working Group



C ASSOCIATED PROJECTS & PARTNERS

After the 1990s vacant buildings in Bremen could no longer be reused with similar purposes and Bremen had to seek for new approaches and test new tools. In 2006, the city administration decided to set up a temporary use agency for the old harbour site. Being successful on this site the city decided in 2009 to spread the activities on the whole city and outsourced it to a group of architects and urban planning activists. They created the ZZZ - ZwischenZeitZentrale Bremen, to wake-up "snoring" buildings and spaces in Bremen. The ZZZ is usually involved in the development of concepts and strategies for vacancies in all 23 quarters and neighbourhoods in Bremen. ZZZ is considered as a way of promoting initiatives in the field of culture and creative industries, also in the field of social and environmental projects. Furthermore, temporary uses have been incorporated into the daily practice of the administration (construction law, contract drafting, guidelines for marketing, etc.).

Thanks to the ZZZ agency, temporary use has become a reliable tool of urban development and a broadly accepted method in the Bremen administration. Moreover, vacancy and temporary use practices seem to be perceived as a „new normal“ in Bremen and not anymore as an anomaly. The new challenge - set by the massive arrival of refugees - is being turned into an opportunity or at least an occasion to overcome the present state of the art in terms of temporary

ZZZ –  
ZWISCHENZEITZENTRALE  
BREMEN / DE



use. The aim of Bremen/ZZZ is to take a first step in experimenting with an „urban lab“. The idea of an urban lab is a platform for the creative industry, for local entrepreneurs, for community projects as well as refugee accommodation and employment. And to start with a role model, a visible sign and tool for urban and social integration in a central vacancy – transformed into a lively place for participation.

From 2013 to 2015 the ZZZ was part of the URBACT project TUTUR (temporary use as a tool for urban regeneration) as best practice giving partner. It illustrates that the experience of Bremen can serve as best practice European-wide and that it is addressing a task that many European cities are facing. Its transferability to other cities

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Visitors at the „WURST CASE“

Thanks to the ZZZ the old meat factory found a new purpose as a temporary home for artists, manufacturers, designers and social entrepreneurs after the owning company stopped the production

Photo: Mirco Christmann

had been proven within TUTUR. Being as well partner in the URBACT project REFILL (re-use of empty spaces as driving force on local level) from 2015 to 2018, the ZZZ was collaborating with nine European cities to exchange on the topic of temporary use and how it can be adopted to address further challenges in the urban development. Within this project the ZZZ was as well collaborating with the PS2 project partners M2C Institute and City University of Applied Sciences (HSB) in Bremen.

Being permanently on the search for new tools and methodologies to address owners, users and stakeholders for the topic of temporary use, the ZZZ was collaborating on different levels with the PS2 project in Bremen. One was about the question of how digital tools could transport the concept of temporary use to stakeholders that haven't been reached in the past years. Being interested in getting more migrants and refugees interested to the use of space the support of PS2 was a big support. Another topic of the collaboration between ZZZ and the PS2 project focused on using empty spaces for the purposes of media art. In the experience of the ZZZ artworks and media performances re-enacting with vacant spaces can attract people to those places and bring them back to public attention which is essential to get users back in the development of abandoned places.

One of the media tools, the ZZZ is working with, is an independent database called "vacancy detector". It is a crowd supported web site, where vacant buildings and areas can be reported. It shows at the moment more than 750 abandoned spaces in Bremen. The range of vacant spaces is very wide: empty stores, commercial buildings, industrial plants, military barracks, brownfields etc. As a tool, especially promoted in Hamburg and Bremen, the number of detected vacancies in Bremen does not present a comparable number of vacancies and brownfields in Germany. The "vacancy detector" nevertheless illustrates clearly the need for

a vacancy management / strategy for the city of Bremen.

One of the examples of supported temporary use projects in the past years was the "Höftschwung" project. A former restaurant near the river Weser was abandoned due to a bad running business and lack of investment in the building. After a call for proposals by the city had failed to rebuild the whole place, a temporary use concept by the local electronic music association "Zucker" started to re-activate the whole place. It became a spot where music and parties took place, but it was as well a place that provided atelier spaces for a lot artists. The whole interior had been changed by them and made the whole place very livable. Even being in conflict with parts of the neighborhood, the project opened up the opportunity to use the building in the following years as well. That presents a huge difference to the situation before, in which the building was supposed to be demolished.

With the "WURST CASE", the ZZZ installed an example of a multi-used building that comes close to the idea of an urban lab as mentioned above. The former office building of a meat company has been activated for temporary use for already three years now. Besides the "classical" use by artists and musicians and members of the creative sector for ateliers, studios and workspaces, the place also hosts language school classes or a bike repair workshop. The "WURST CASE" is located in a less developed neighborhood and is attracting people to discover the potentials abroad the inner city. And the "WURST CASE" as a best practice example is as well a good starting point in establishing an urban lab at another place.

After more than ten years the ZZZ is well now established in Bremen. It helped over the past years to experiment with over 100 projects in vacant spaces in Bremen and gave opportunities to the users for their first steps. Over the topic of temporary use many people got access to discussions about urban

development and new forms of participation. In the city of Bremen the ZZZ right now has a pioneer role in developing ideas for vacant areas and is asked to engage especially in the most problematic areas. With strong partners the city is creating laboratories for new types of urban cooperation. Nevertheless there is the danger of an intermediate body like the ZZZ that is not internalised in the city's administration; and progress which had been made over the last years may get lost with the end of the support of the ZZZ.

Find more information on:  
<https://www.zzz-bremen.de/ueber-uns/> &  
<https://refillthecity.wordpress.com/>

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Members of the ZZZ  
asking potential users  
of vacant spaces in the  
WURST CASE for their  
ideas of the design of  
the place

Photo: Daniel Schnier

D

PARTICIPATIVE METHODS

D PARTICIPATIVE METHODS

# PARTICIPATION: CONTEMPORARY VS. TRADITIONAL

The Bitola based PS2 subproject "4D Virtual Urban Art" followed two realms of participative methods: contemporary ones and traditional ones. The contemporary methods were the following:

- Case studies have been fostered to trigger participation from stakeholder groups that are usually not involved in urban planning processes in the Former Yugoslav Republic of Macedonia. As a result the subproject succeeded in involve international and local artists that contributed with 48 artistic proposals altogether showing new potential usages for urban planning in Bitola.
- The subproject set up an e-participation platform on Facebook also targeting the unused potential of local citizen knowledge and creativity. Here another 54 proposals for the re-design of urban areas in Bitola were submitted from the citizens.
- By focusing on walking tours, role playing, and fantasizing about the future the "4D Virtual Urban Art" project used gamification as a tool to engage people and to gather information that can be used in urban planning processes.
- The format of deepened dialogue on politics has been tested in the PS2 subproject in Bitola. This means that citizens

The more traditional methods consisted of:

- Bilateral meetings of the subproject managers with authorities from the public administration the local society of artists and other groups like the Rotary Club Bitola.
- Over 50 thematic meetings with different stakeholder groups were organized within the four years of the "4D Virtual Urban Art" project.
- Two public opinion polls were designed and conducted in the PS2 subproject in Bitola



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The new approach on civil participation the urban planning in the PS2 subproject "4d Virtual Urban Art" received nationwide attention in the Former Yugoslav Republic of Macedonia

Photo: Gauss Institute



The first one in 2015 was spread to all 84 municipalities in the Former Yugoslav Republic of Macedonia with the aim to get an insight on the current state of civil participation in urban planning process throughout the country. The results show that there is an extremely low level of civil participation in the urban planning process at the moment. But the poll also showed that municipalities are very open for cooperation and accepting the citizens' proposals on a national level i.e. out of the 2.993 proposals submitted from 2005 to 2015, 764 were accepted.

After that a second poll was conducted asking for the civil attitude about the urban planning process with the result that the opinion about decision making in urban planning and about the involvement of citizens' opinions is very negative.

One conclusion from this that supported the design of the PS2 activities in Bitola is, that new methods are needed to bridge the gap between negative attitude among the population and the willingness of the administration to integrate citizen knowledge and participation more often.

All workshops, events and activities focused on the same participatory design concept mixing new innovative formats like online platforms with traditional public meetings. This mix made it possible for the "4D Virtual Urban Art" to tackle the topic of participatory urban development in modern way. The



success of this approach is reflected in the quality of the proposals developed for several "un-functional" spots in Bitola. One proposal has already been physically built: due to a virtual proposal the fountain in front of the NI Institute and Museum in Bitola was constructed.



The fountain in front of the NI Institute and Museum in Bitola was completely re-designed due to a participatory process in the "4D Virtual Urban Art" project

Photos: NI Institute and Museum



D PARTICIPATIVE METHODS

# THE FIELDASY APPROACH

With Fieldasy the “Cube-x Journey to Abadyl/wanderlost” tried to unify different methods into one creative process that attempts to understand and redefine our world in a situation where information is lacking.

This lack of information is used as a resource, for example by providing ambiguous fragments as a starting point, removing constraints on the imagination. It was designed with the aim of staging a conflict that has a mind triggering influence on the co-creator with a set of problems that only can be captured in a given material.

Fieldasy was used in the PS2 subproject in Kristianstad and Copenhagen as a method for engaging multiple perspectives in the

creation of a world, and the mapping of its virtual space, by extracting artifacts and stories from the actual world through the developed scenarios and game-boards.

Fieldasy itself refers to the methods of field working and imagination by using physical objects. The objects constitute a shared ground for collaborative creativity, serve as nodes in a complex narrative and as a basis for worldmaking. Fieldasy plays as a vital part in the creation of a space where everyone could be in a constant dialogue with a large database of material that is interlinked through the architecture of a city, regardless of its incompatibilities.

The method establishes a multidisciplinary common ground for an art practice, interaction design and technology development, through an investigation of philosophy and criticism in a dynamic material. Using Fieldasy is an open-ended way of working where the original scenarios originate, at beforehand, unknown artifacts. The scenario’s relation



← Performance installation “Pristine” by Mischa Badasyan, a 3-hour durational performance installation about representations of the body, space and the sensation of touch on 19th May 2017 during the Wanderlost Digital Art Festival at Warehouse9

Photo: Abdulsalam Ajaj

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→ Figure 3 The Creator – one of the guides in the “Cube-x Journey to Abadyl/wanderlost” project – guiding a group of participants in one of the Portals

Photo: Michael Johansson

to the overall project is loosely defined as to allow the creation of artworks that though enriching the database, still are autonomous from the mother project in the sense that they can be exhibited by themselves. They also act as generators while they generate new and unforeseen processes which extend into new and likewise unforeseen contexts.

The scenarios developed in the “Cube-x Journey to Abadyl/wanderlost” – for example the collective, app supported walking experience “wanderlost” (see chapter B\_) – are handed over to the invited temporary citizens and co-creators of Abadyl. They can then act in relation to the scenario, in and by themselves chose tools and materials that in the end help them produce an artifact. Hopefully, the co-creators themselves import qualities into the world, which do not and cannot stem from the City of Abadyl itself. As one participating artist expressed it:

“Imagination was tickled by the knowledge of being part of a networked mapping I didn’t know in detail. The scenario got me going, but I felt no repressing obligation towards it and also felt more liberated than in the situations of my own work where I’m the responsible and potential object for critique.”



→ Digital City Scapes. Installation by Jacob Tekiela & Jorgen Callesen. Future City Labs during KulturNatten, 13th October 2017 at Warehouse9

Photo: Michael Johansson

Audience participation in performance, installation and site specific art. For the Warehouse9 performance workshops and cultural events that were part of the “Cube-x Journey to Abadyl/wanderlost” staging techniques, art practices and methods from specific artists and performers were used to inspire the development of the final

performance with the title “Cube X – Future City Labs”. The individual performance workshops all had their own methods inspired by performance art, dance, acrobatics, role play and participatory theater. Social engagement through participation in a collaborative art piece is a process which is unique in time and place and has many outcomes in the form of experiences, memories, artefacts and digital traces. Examples illustrating this approach perfectly



are the workshops for a 1 to 1 performance by the Scottish artist Rosana Cade, the 3-hour durational performance and photo project “Pristine” by Mischa Badasyan and Abdulsalam Ajaj, the digital performance “Omnipresence” by performance Artist Annika B. Lewis and the “Body Politic” print workshops by Clare Farrell and Myles Glyn. These approaches to staging were combined with technology supported collaborative processes such as the “Minecraft your city” events in the construction platform MineCraft and the OCR based mobile device controlled audiovisual installation “Digital City Scapes” by Jorgen Callesen and Jacob Tekiela.

Finally “Cube-x Journey to Abadyl/wanderlost” initiated the development of a method combining performance practice and audience participation from an auto-ethnographic perspective in collaboration with the actor and performer Hans Kellett.

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D PARTICIPATIVE METHODS

# D / URBAN REMIXES

D/Urban Remixes was an interdisciplinary, intercontinental creative collaboration between participants in Durban, South Africa, and design and computer science students from the University of Applied Sciences Potsdam directed by Austrian lecturer Magdalena Kovarik and the University of Applied Sciences Düsseldorf with the lecturer Anastasia Treskunov, Germany.

The focus of this approach is on the question of how we can use virtual reality to bring people closer together and motivate them to collaborate across a great distance. Based on pictures of Durban, Düsseldorf and Potsdam the participants build a virtual reality meeting point together. The participants share their thoughts on what the essence of meeting points is online, across borders their have are involved in shared and transparent planning process that also brings to light cultural differences and common grounds.



The workshop format aims to create a fictitious intercontinental meeting point based on human emotions and memory, rather than rational urban development planned from 'above'. Outcome of the workshop was a merged cityscape that arises in a virtual reality environment simultaneously co-

created by participants on two continents and three cities.

Durban, Düsseldorf, Potsdam - places that can't be connected in real life were virtually connected by the workshop participants. Collaboratively they created a fictitious city stitched together through snippets of memory and narration. This layer of memory and narration composes another fabric of the city, one that is both individual and emotional.

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# DOING IT TOGETHER: CO-CREATING INTERACTIVE OBSTACLES AND DIY SKATEBOARDING SPACES

Given the focus of the PS2 subproject in Oslo, which was on experimental design of tools and technologies for participative and collaborative smart development of urban environments, we were motivated to explore the emergence of subcultures within a larger urban cultural movement.

We chose a skateboarding subculture to work with, and Collaborative DIY making, or Doing it together, as a way of exploring the potential for the emergence of a maker subculture within skateboarding. The skateboarding community showed a broad range of attitudes

on engaging with city spaces, from projects approved by diverse official instances to "guerilla" ways of just putting stuff "out there" and design activism. This project was of the latter kind. Studying the relationship between technology and social life has proved to be somewhat elusive. Rather than just engaging in the participatory making of an interactive obstacle, we wanted to learn about synergies that exist, or could arise, between interaction design, maker culture, and the urban skateboarding community itself. Twenty-eight highly experienced and internationally recognized skaters were directly engaged in this project in one of the three ways: workshops, in-depth interviews, and the event that we called „The Master Jam“. The jam was organized on the occasion of the launching of the co-created obstacle.

Some of the skaters engaged in multiple ways (attended one or both workshops, participated in The Master Jam, and / or were interviewed). The design of the sound-based obstacle used at The Master Jam, was instrumental for exploration of the above mentioned synergies. The eagerness and motivation for joining this and future DIY projects is present in the skateboarding community. This DIY project gathered a large number of people and received significant interest from within the community. It showed that the skaters enjoy learning new things and appreciate everyday creativity to the extent of expressing a willingness to engage also in similar projects in the future. The social and empowerment aspects were seen as strong motivators for the project and show that skaters are capable of making by Doing It Together.

Parts of this section are adapted from the following research paper:  
Galewicz, O., & Culén, A. L. (2017). Co-creating Interactive Obstacles and DIY Skateboarding Spaces. In Proceedings of the 12th Biannual Conference on Italian SIGCHI Chapter (pp. 27:1-27:10). New York, NY, USA: ACM. <https://doi.org/10.1145/3125571.3125595>

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→  
The Master Jam.  
From the top left:  
placing the obstacle at  
the chosen location.  
Place of installation:  
green, flat and loved  
by all, not just skaters.  
Together, fixing the  
sound components  
under the obstacle.  
Finally, skating!  
Photos: Alma Leora Culén



D PARTICIPATIVE METHODS

# ENGAGEMENT THROUGH INSTALLATION: CHILDREN'S ENGAGEMENT IN ENVIRONMENTAL AND CLIMATE ISSUES

This method arose from an exploration of a broad theme centered around the question, "What kind of world do children see for their future selves and how do their actions today impact that future world?" We started by looking at possibilities of stimulating activism among Norwegian children and youth who are concerned with environmental issues. More specifically, we were interested in exploring how and why certain children engage in youth activist organizations such as Miljøagentene ([www.miljoagentene.no](http://www.miljoagentene.no)) and how this activism and engagement could be spread more widely.

We designed an installation called Eco-A, inspired by Miljøagentene (Eco-Agents in English). It consisted of three parts. The first part of the installation aimed to playfully introduce diverse issues relevant to climate changes at a level understandable for children. The second part took a critical approach, probing and questioning children's existing and future habits which can impact the environment. The third part, inspired by design activism, aspired to engage youth and children in voicing their opinions on climate change and other environmental issues. The method uses combinations of designed technological artefacts to prompt critical

and creative reflections about visitors' own habits and practices as well as larger social norms that often go unnoticed. Eco-A was tested the Norwegian Museum of Science and Technology in Oslo in November 2015 and exhibited as a PS2 installation at a CityKids event in March 2016. At the CityKids installation, we observed that many parents and their children engaged reflectively with the exhibit questions. Some children discussed questions with other children as well.

Parts of this section are adapted from the following research papers:  
Culén, A. L., Eilertsen, I., Læg Reid, L., Pandey, S., Søyland, M., & Smørgrav Viddal, I. (2016). Eco-A: Children's Engagement in Environmental and Climate Issues. 978-989-8533-52-4, 76-84.

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The images show buttons that children could press to answer "yes", "no" or "I do not know" to the question on the screen. The intention with questions was to challenge children to discuss and reflect on their own behaviors. Are they, and their families "green"?

This image shows the three members of the team preparing the room for the Eco-A installation. The informative videos are shown on the right, the critical questioning through the quiz on the left, while the possibility to voice opinions by speaking or writing a bottle-mail, was in the back

These images are from three different video clips, providing information on climate and environmental issues



Photos: Ingrid Viddal

D PARTICIPATIVE METHODS

# POP-UP MAKERSPACES: CATALYSTS FOR CREATIVE PARTICIPATORY CULTURE

This method emerged out of our exploration of the portable kit-based platform littleBits (www.littlebits.cc) as a creative design material in multiple settings of 'pop-up' makerspaces for catalysing creative participatory cultures. We organized pop-up makerspaces in workshop settings with different groups of participants. These workshops were situated within the larger goal of the PS2 project, aiming to investigate technology-centric design interventions as a means of configuring public engagement and participatory culture.

We specifically targeted three user groups:

1. children from the age group of 6 to 12 years
2. design researchers
3. professional graphic designers.

These groups represented a broad spectrum of creatively inclined individuals with differences in age, nature of practice and access to technology. All three groups engaged regularly with creative activities in their day-to-day routines: children engage in creative activities at school and in their home environments, design researchers use various prototyping methods in their design projects, and graphic designers



←  
Child interacting with littleBits at a CityKids workshop March 2016  
Photos: Ingrid Vididal

engage primarily with creative production in professional settings. All groups, however, had limited to no experience with the use of tangible technological materials in practice.

Because of the differences in the groups, the approaches used to engage with each of them in the workshops were different. The physical space, however, in each case was consistent as a temporarily converted makerspace with free and easy access to prototyping materials such as colored paper, card sheets, foam boards, paints, scissors, brushes, ice cream sticks, rubber bands, cups, assorted Lego bricks and Play-doh. Multiple littleBits workshop kits were used as the primary technological material for provoking electronic and creative tinkering. The quantity of each material differed based on the themes of each workshop. This also helped us evaluate the role and impact of supportive materials on the nature and form of engagement when used in conjunction with littleBits.

As the workshops were conducted in the form of open pop-up makerspaces, the format of participation was either open (walk-in) or sign-up (pre-registration) based. The sign-up based workshops began with an informal introduction to the littleBits platform and a loosely defined theme for the day and ended with a presentation and feedback.

In the open workshop setting, on the other hand, the introduction was interspersed between the activities. Previous experience with littleBits or any other technological tools was not required for any of the workshops.

Parts of this section are adapted from the following research papers:  
Pandey, S., & Srivastava, S. (2016). 'Pop-up' Makerspaces: Catalysts for Creative Participatory Culture (pp. 50–56). Presented at the ACHI 2016, The Ninth International Conference on Advances in Computer-Human Interactions. Retrieved from [https://www.thinkmind.org/index.php?view=article&articleid=achi\\_2016\\_3\\_20\\_20271](https://www.thinkmind.org/index.php?view=article&articleid=achi_2016_3_20_20271)

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D PARTICIPATIVE METHODS

# THE INSPIRATIONS BANK

The Inspirations Bank project represents one of the tools for developing the audience as a co-designer of life-environment through participatory actions enhanced by digital media used in Gdańsk during the PS2 project phase. It was developed by the Gdańsk City Gallery together with representatives of the Inicjatywa Miasto organization (an NGO involved in urban activism) and academic researchers from the University of Technology/ Architecture Department in Gdańsk.

The project consisted of a series of workshops. The aim of the workshops was to collect base materials for artistic interventions in selected city spaces realized together with the inhabitants. The result of the workshops was a series of simple artistic statements constituting the inspiration and the basic material for further actions performed by



←  
Citizens collecting audio material for a database of ideas for artistic interventions in Gdańsk  
Photo: SisiCecylia

professional artists in Gdańsk. The materials were created in a form chosen by the participants, be it drawing, photography, film, text, sound recording, interview, report, etc. The concept of the workshops was open. All materials created during the workshops have been archived and presented on an especially dedicated web site in a form of an interactive map of spaces that we found artistically stimulating.

The use of simple techniques of artistic expression proves perfect for educational activities that try to encourage participation through art in any form, without excluding those who are not professionals in the field of arts, urban planning, activism and the like. Putting the materials together in a form of an open online archive makes it widely accessible to other potentially interested actors.



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Participants discussing the results of a workshop in the Metropolia University of Applied Sciences in Helsinki  
Photo: Kari Salo

# MEASURING THE LEVEL OF ENGAGEMENT

As a part of the activities carried out in Helsinki during the PS2 project the researchers at Metropolia have developed a concept which helps them to reach their target audience and helps to measure the level of engagement.

As the target audience is young people, one way to reach that audience is intensifying the co-operation with and motivation of schools and teachers. Thus, workshops which fulfil extracurricular characteristics will serve this purpose. In the Helsinki case two different workshops were developed, which have a clear structure, are supervised by adults, and have pedagogical objectives for the participants' skill development.

The second part of the concept is addressing the question of how young people experience the workshops. For this purpose the student engagement structure was analyzed in order to find out the level of engagement in workshops, where an audio platform developed for PS2 plays a vital part. Audio is an especially delicate topic when it comes to identify or predict a suitable workshop format that provides good results.

By observing participants and utilising a self-report questionnaire, which specifically designed for this purpose, it is possible to measure the level of behavioural, emotional and cognitive engagement. This enables workshop designers to get a detailed picture of how participants experience a workshop.

This made it possible to adapt the workshop formats during the project. Two formats have been evaluated very positive and can therefore be recommended as suitable approaches for audio workshops with young people:



1. Soundscape workshop, where participants create their own soundscapes and discuss the meaning and impact of changes in sonic environment.
2. Audiostory sharing workshop, where participants record personal audiostories and define emotion related stories; finally everybody listens and discusses stories shared by other participants.

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Workshop participants drawing and thereby adding to the inspirations bank  
Photo: Joanna Szechliccka

D PARTICIPATIVE METHODS

# SJEĆARNICA – EXCHANGING MEMORIES FOR FLOWERS

How can citizens be motivated to tell stories about their environment? One participative method using all seductive means for turning the citizens into storytellers was tried out in Zagreb as part of the PS2 Upper Town activities on May 15th, 2016.

The idea for the action developed as an homage to Floraart, the traditional flower fair that used to take place in the Zagreb Upper Town - for the first time in 1966. In collaboration with Zagreb based florist and dramaturg Ida Jurjević, strollers passing by a pop-up flower shop in the Upper Town could exchange their personal memories about this part of the city for a beautiful flower bouquet that was created in front of their eyes.

At the same time, the stories were broadcasted as romantic reminiscences in a 24h radio program and captured through the pens of the two local comic creators Josip Sršen and Ivan Glasnović.

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Figure 13 A pedestrian sharing his memories about the Upper Town in Zagreb. In exchange he receives a flower bouquet and two artists translate his story into a comic

Photo: Sinisa Glogoski

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PS2@ISEA2018 DURBAN

D PARTICIPATIVE METHODS

# PS2 IN SOUTH AFRICA

In its last project year the “The People’s Smart Sculpture” set course for Durban, South Africa. The Bremen subproject “The Public Space as Shared Museum” and the M2C Institute functioned as curators for an extensive program of art events, conference panels, talks, guerilla actions, digital interventions, and workshops that were realized as part of the International Symposium on Electronic Art, ISEA2018 in Durban. ISEA is one of the world’s most prominent international media art and digital innovation conferences. From 23rd to 30th of June 2018 a team of more than 20 PS2 project members from M2C Institute, City University of Applied Sciences Bremen, University of Applied Sciences Düsseldorf and Metropolia University of Applied Sciences Helsinki and activists from associated partners implemented more than 15 conference talks, 10 workshops and 11 digital art activities in South Africa’s second largest urban agglomeration all derived directly from the PS2 activities realized since 2014.

This meant a great opportunity for the PS2 project to take its actions abroad and to secure a worldwide recognition. It was also the perfect stage to test the tools and methods developed throughout the different subprojects and to apply them in a fully different urban sphere. To proof and ensure the sustainability of the PS2 results, of its tools and methodologies, the Durban PS2 program around the ISEA2018 was invaluable for all participants and the whole consortium.

To secure a value not only for PS2 but first and foremost for the people, the artists, and the city of Durban, all actions were organized in collaboration with local cultural institutions namely the “The KwaZulu Natal Society of

the Arts (KZNSA)”, the “Durban Art Gallery”, the art and culture hub “BAT Centre”, the “Denis Hurley Centre”, a place for education and community building, the “Creative Arts College”, and the “Amasosha Art Movement”, a group of local artists with Zulu background. The aim of all activities was to involve as many local artists and activists as possible and to enable Durban people to experience the creative potential of technology for developing art about and for their city.

Durban was an ideal but also very challenging spot for this goal. Not only because the city is a multicultural hub with people from very diverse backgrounds, and because it faces a difficult history, but also because of its huge infrastructural issues and its omnipresent need to re-develop its urban sphere.

To address all that ISEA is the best thinkable forum since its 2018 topics matched perfectly with the ideas behind PS2. The annual International Symposium on Electronic Art started in 1988. It allows individuals and organizations from around the world to come together annually and share experiences. It fosters the interdisciplinary academic discourse and exchange among culturally diverse organizations and individuals working with art, science and technology.

The ISEA2018 theme of Intersections involved perspectives on creative technological innovation as an activist engagement into public space and public practice. Creative collaboration between artists, artisans, designers, technologists, entrepreneurs, engineers, scientists and inventors were placed in a context where survival is the most basic instigator for solutions: Durban. In such a scenario, technological developments have to follow and support these solutions. In addition, the role of the artist is essential in providing opportunities to build new and exciting interactions between people and place. In conceptualizing the 2018 edition the ISEA International board wanted to create a localized festival, offering unique experiences incorporating aspects

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Scene from the final event of ISEA2018. A member of the Amasha art network and one of his art works projected on the square in front of the Durban city hall

Photo: Lorenz Potthast

of local culture, history and traditions. The official local partner institutions reflected this approach. They consisted of academic institutions (“DUT Durban University of Technology”), the local administration (“eThekweni Municipality”), the most relevant local stakeholder for economic, environment and tourism development (“Durban Kwazulu-Natal Convention Bureau”), artist groups (“trinity session”), female start-up training organizations (“Plan A”) and think tanks (“Innovate Durban”).

The PS2 program developed the M2C Institute picked up the ambitious target of the ISEA2018 and tried to meet it with a temporary digital art lab called “PS2 Lab @ISEA2018”. What were the ideas behind it? All activities aimed at fostering the imagination of the inner city of Durban as a special place to love, live, create and work. By analyzing existing district culture, picking it up and acting as an attractor for the growing artists, maker, commoning and digital scene, local strengths, advantages and disadvantages should be highlighted. The meeting of local citizens with these innovators and creative and young artists in the PS2 Lab in public space could contribute to freeing up new energies for local cultural projects. The design of the campaign picked up the experiences from the four years of PS2 and the project’s strength to build bridges between existing initiatives from different backgrounds, in this case African and European artists. Workshops about tool-building, artistic methods, participation and art project fundraising were implemented as well as daily participative art activities. An academic and an art panel discussed effects, opinions and results of the work within and in the PS2 Lab.

In the following all Durban actions of the PS2 Lab are presented by first considering the art activities followed by the workshops and the final event.



← Poster for the PS2 ISEA2018 campaign



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# PS2LAB@ ISEA2018 DURBAN ART ACTIVITY

## WHAT IS THE INTERNET FOR YOU

→ Visitors of the installation „What is the Internet for You“ at the KZNSA Gallery

Photo: Lorenz Potthast

In this participative digital art installation Lorenz Potthast (Xenorama art collective) and the PS2 Subproject “Express Yourself/ City” at KZNSA Gallery broached the internet based connectivity between Africa and Europe and in particular the one deep sea internet cable that connects the two sister cities Durban and Bremen and what it means for people. People could send an email and the different opinions became part of a projection on the front of the gallery.



← A stream of particles symbolizing the internet “enters” the beach at Durban Point

Photo: Lorenz Potthast

A second part of „What is the Internet for You“ took place at uShaka Beach as a cooperation between Potthast, “Express Yourself/City” and the “uShaka Marine World” and the seaside at Durban Point. A digital stream of particles was projected on the sand to symbolize the online data send through the deep sea cable constantly. Cables like the one between Bremen and Durban reach a coast deeply buried under the sand. The installation made visible that the simple communication that is enabled by the internet is connected to gigantic infrastructure that most people do not think about.



# PS2LAB@ ISEA2018 DURBAN ART ACTIVITY TENTVISION

This art activity related directly to the subproject "The Public Space as Shared Museum" in Bremen. „TentVision“ was implemented by the Bremen artists Jürgen Amthor, Marion Bösen, Patricia Lambertus. The three artists performed and exhibited art works in public space that were created together with by-passers and artists from Durban as a „re-survey“ of urbanity as a social and cultural space with art as a medium of exchange between the spheres and people. Therefore the artists set up a tent at different places in Durban, KZNSA Gallery, BAT Center, City Hall, Durban Art Gallery, UShaka Marine World and DUT University. People could enter the tent and share images of Durban with the artists. In a looping slideshow all shared images piled up forming layers of memories and views. Not only locals shared images with the artists but also conference participants. Result was a collection of personal visual statements on Durban from the inside and outside perspective.



Young Durban locals after sharing their view on their hometown with the "TentVision" artist group

Photo: Jürgen Amthor

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Visitors of the PS2 Stand at KZNSA Gallery looking at new fictitious road signs for Durban

Photo: Stephan Siegert

# PS2LAB@ ISEA2018 DURBAN ART ACTIVITY STATES OF PUBLIC MIND / WIRELESS BIRDS

Based at KZNSA Gallery this project by the New York City based artist Carl Skelton and member of M2C Institute Stephan Siegert related to the PS2 Subproject "Express Yourself/city". „States of Public Mind / Wireless Birds“ proposed additions to the public language of road signs, in preparation for a time when the ubiquity of digital signage in „Smart“ cities will make it possible not only to provide dynamic signage, but to do so based on the direct participation of local stakeholders in real time, about a much broader range of concepts relevant to safety and quality of life. ISEA 2018 organizers, artists, visitors, neighbors, and everyone else could get into exchange with the artists and propose alert/ warning/ information/ command sign ideas to complement and extend not only the iconography, but also terms of engagement of the public realm at a hyper-local level. Participants could send a finished graphic, a photo of a sketch, a description of an idea, or a single word. After one week over 20 new road signs were produced all picking up local particularities and nuisances in a humorous way.

Two example of the signs created: one stating that people with disabilities are no personae non grata in Zulu language and another one claiming to tackle corruption in the local municipality

Icons: Carl Skelton





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Projection of an animated art piece from an Amasosha artist from the balcony of the "Denis Hurley Centre" on a colonial building on the other side of the road

Photo: Elektro Moon Vision



←  
The local "Amasosha Artist Movement" contributed with their modern art reflecting the Zulu identity in modern South African society

Photo: Lorenz Potthast

## PS2LAB@ ISEA2018 DURBAN ART ACTIVITY THE PUBLIC SPACE AS SHARED MUSEUM

This digital guerilla art projection project that was named „The Public Space As Shared Museum“ after the Bremen subproject. It was implemented by a team with Popesz Csaba Láng, Elwira Wojtunik-Láng (Elektro Moon Vision), Lorenz Potthast (Xenorama), members of the M2C Institute Martin Koplin and Stephan Siegert together with the local Durban artists of the "Amasosha Art Movement".

It consisted out of a series of activities at different venues in Durban, the Denis Hurley Center, the BAT Center, the Durban Art Gallery and the City Hall. The project reflected the design of facades in Durban with their often missing link to African art. It created an example how contemporary African art can change the face of the urban environment fundamentally by artistic participation in urban re-design and development. Therefore art works by local Amasosha artists reflecting the identity, the history and the problems black citizens have to face in modern South Africa were identified, digitalized, and animated. The results were projected on a façade directly opposite the Denis Hurley Centre as part of the official ISEA2018 program. The animated art works were again shown at the final event of the ISEA2018 at the city hall in form of a projection on the pavement and the central square in front of the building. The events ensured the local artists a great attention showing importance of integration of the new local African art in an international conference like the ISEA2018.

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## PS2LAB@ ISEA2018 DURBAN ART ACTIVITY HOP ON

"HOP ON" played with the ideas for a participative design of future public transport and cultural place making in Durban.

During a public intervention at the „wreck“ of "uShaka Marine World Durban" by the PS2-Team, the HOP ON Team: Sibonelo Hlanganani Gumede, Researcher at "Urban Futures Centre DUT" and Paul Jones, Director at consulting agency "Lumec", and "Elektro Moon Vision", visitors could get an insight into the people's need of a new

bus system and HOP ON's research for a participatory re-design of the Durban public transport system that is thwarted by corrupt taxi businesses. For HOP ON participative urban development means also to create culturally public spaces out of non-spaces and to link the different parts by public transport - the HOP ON bus shuttle system - mobility for all people in Durban.

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HOP ON founders Sibonelo Hlanganani Gumede and Paul Jones together with Elwira Wojtunik (Elektro Moon Vision) (from right to left) at the "uShaka Marine World"

Photo: Lorenz Potthast

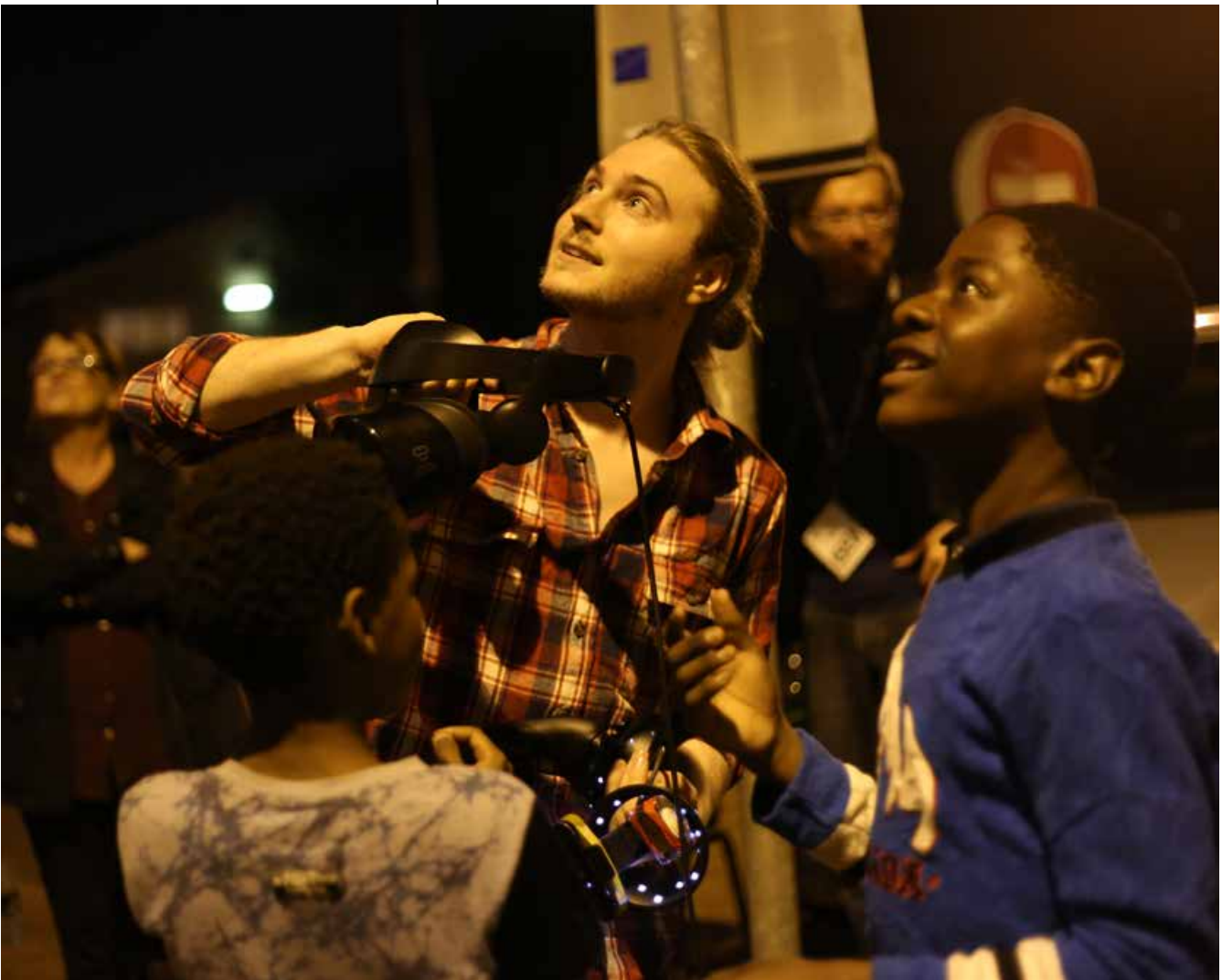
# PS2LAB@ ISEA2018 DURBAN ART ACTIVITY VIRTUAL GRAFFITI

This participative live art project was implemented by the PS2 Team from the "Trails of Memory..." subproject in Düsseldorf, led by Ivana Druzetic and Chris Geiger of the Düsseldorf University of Applied Sciences. At the KZNSA Gallery Durban the project offered people to influence the urban sphere through a virtual art practice and combined the virtual and the physical space. Artists, visitors, neighbors, and especially kids were invited to become creative in the re-design of their public space by drawing virtual graffiti and "painting Durban together with Durban".

Whether by writing a message, making a drawing or creating a simple abstraction all participants were given the opportunity to create their own mark in a public space with the help of digital tools. By using a camera connected to the controller, the users were able to shoot a photo in the endless pallet of their real surroundings and choose local sights, objects, faces or random details as patterns for their VR graffiti artwork. At the same time, the process was visible for the observers as a projection on a real nearby wall. Drawing on the symbolism of graffiti art, this participative public activity offers an opportunity for personal expression in urban space. Multiple questions arose from the activity: However perishable and ephemeral on brick-and-mortar, can this virtual tool reproduce the contested terrains of the city walls while avoiding the controversies often attached to it? Can the virtual walls be vandalized? Can the virtually extended space be appropriated?



↑ →  
Children drawing in 3D in the virtual space instructed by the PS2 Team from Düsseldorf  
Photo: Janna Lichter



# PS2LAB@ ISEA2018 DURBAN WORKSHOP EXPRESS YOURSELF / CITY

At Durban Art Gallery the workshop team from Bremen (Lorenz Potthast, Siegert, Elwira Wojtunik and Popesz Csaba Láng, both "Elektro Moon Vision") tried to convey the paradigm: The urban space is physical, is virtual, is changeable! During the 3-4 hour workshop, participants received an introduction about the basic principles of the video mapping techniques followed by a hands-on instruction on how to create animations for façade projections.

The goal of the workshop was to transport the idea that next to the real space there is also a digital space that works as a second reality that can add to or influence our perception of the real space. In a second step the workshop also focused on the idea that in the future urban spaces can be changed virtually by everybody and that thereby the lines between real and virtual space will become blurred. The workshop ran really well thanks to a very active participation.



↑  
Popesz Csaba Láng  
observes the progress  
of the workshop  
participants that were  
introduced to basic  
video mapping

Photo: Lorenz Potthast



→  
Participants of the  
„Trails of Memory...“  
workshops showing  
their 3D body scan

Photo: Anastasia Treskunov

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# PS2LAB@ ISEA2018 DURBAN WORKSHOP TRAILS OF MEMORY...

This series of workshops took place in the local cultural space "BAT Centre", an open space for art exhibitions, theatre and music performances and local craftsmanship, inspired participants to express their personal attachment to their city and supported individual empowerment by raising their statue in the virtual streets of Durban. This was achieved by making 3D scans of their bodies

and placing them in the virtual surrounding that could be explored through a virtual reality walk. The workshop resulted in a virtual scene of the Durban city map, filled with 3D statues of local people and their messages – an homage to the urban everyman. Beside the collective creation of a truly moving piece of virtual art, the workshop opened many interesting conversations about people's relations to their city, stressed the potentials for change and importance of personal agency. The workshops were conducted by the PS2 team from Düsseldorf University of Applied Sciences (MIREVI-Team): Heike Baudach, Ivana Družetić, Christoph Vogel, Anastasia Treskunov, Janna Lichter, Fabian Büntig and Michael Bertram together with Magdalena Kovarik, Austrian artist and designer.

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Participants of the  
„Trails of Memory...“  
workshops placing their  
digital counterpart on a  
virtual map of Durban

Photo: Janna Lichter



# PS2LAB@ ISEA2018 DURBAN WORKSHOP D / URBAN REMIXES

Creating a VR City together was the goal of this workshop at the "Durban Art Gallery". People from Durban, Düsseldorf, Potsdam and Berlin got to know each other in a live online meeting.

They took pictures of their hometowns that were transformed by the computer science experts and designers from the Düsseldorf PS2 Team.

In doing so they created fictitious intercontinental city scapes and collages based on human emotions and memory. Skills that were learned in the workshop: interdisciplinary collaboration, critical work on urban space connected to personal memory, citizenship and VR-development.

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PS2 Düsseldorf  
team member Ivana  
Družetić discussing this  
participant's emotions  
towards Durban in  
order to integrate it into  
the fictitious city scape  
of : D/URBAN

Photo: Janna Lichter

# PS2LAB@ ISEA2018 DURBAN WORKSHOP PS2 - SOUNDSCAPES RESEARCH AND DESIGN OF A SONIC SPACE

The workshop and art activity, conducted by Finnish researcher Aura Neuvonen from the "Metropolia University in Helsinki" at the "Denis Hurley Centre" picked up a central topic of the PS2 subproject "The Neighborhood Living Room": soundscapes.

The workshop approached the question of what soundscape research is, informed about the history, the present, and the change in sonic environment. Participants also discussed the differences between soundscape design and sound design and learned how to use mobile tools in soundscape research and in designing a soundscape.

PS2LAB@  
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WORKSHOP  
MAKING THINGS  
TELL

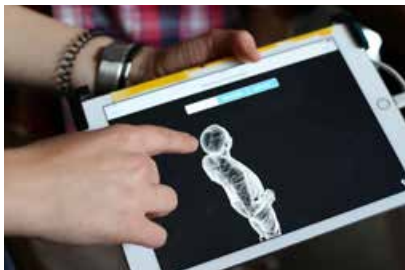
This workshop by the "Trails of Memory..." team from Düsseldorf involved students of visual arts from the "Creative Arts College" Durban in a 3D scanning adventure. Participants made 3D scans of themselves as well as of objects that they brought to the workshop assisted by the Düsseldorf team and as Bongumusa Shezi and Alessandra Brüchner from the "BAT Centre", where the workshop took place. In virtual reality they could combine, edit and paint on the scans - new stories and esthetics got generated.

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Designer and artist  
Magdalena Kovarik  
showing a young visual  
design student how to  
modify a 3D scan on a  
mobile tablet device

Photo: Janna Lichter



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PS2LAB@  
ISEA2018 DURBAN  
WORKSHOP  
CREATIVE EUROPE  
PROGRAMME

Martin Koplín, PS2 coordinator and Director at "M2C Institute Bremen" led this workshop supported by Susa Pop, Director at "Urban Media Art Academy" and officially supported by Sabine Bornemann, Director of the "German Creative Europe Desk Culture" at the "Innovate Durban" space. Participants from South Africa, Mozambique, Europe and international organizations like the "Global Impact Accelerator" and the "Leadership Center Plan A" learned how to future participate in EU-projects as artists, creatives or scientist, or as associated partners and how to enhance exchange and collaboration between cultural players from Europe and Africa and received general information on how the Creative Europe Programme works.

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PS2LAB@  
ISEA2018 DURBAN  
PANELS

As part of the official ISEA2018 program "The People's Smart Sculpture PS2" implemented two panels one with an academic and scientific focus and one with an emphasis on art and creative methods. They both reflected on the social and political impact of the past four years of the PS2 project with its media art and science activities that involved more than 800 artists and scientists. The panels presented the participatory digital art methods and digital tools for changes in urban living environment developed. The focus was on the sustainable results and the questions: What will be left after four years? What are results, artistic methods, digital tools that will continue? What is transferable into different situations? The panel additionally integrated the experiences of all the workshops and art activities played out by the PS2 Team before and during ISEA2018.

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# PS2LAB@ ISEA2018 DURBAN FINALE PS2 - MASH UP!

The ISEA2018 in Durban closed with a large party at the Durban city hall.

The whole PS2 team including its partners “Elektro Moon Vision”, “Xenorama”, “HOP ON”, the “Amasosha Art Movement”, “BAT Centre” and more engaged in organizing the event. Result was a digital jam session in the digital “share jam” style: all participants, artists, digital artists, DJs, musicians, singers were asked to co-create a sound layer for the visual mash up of all the works from the different PS2 workshops and art activities, e.g. the digitalized art works from “The Public Space as Shared Museum”.

The result was a projection from the balcony of the city hall on the pavement of the great public square in front of the building.



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A projection of a work by an artist of the “Amasosha Art Movement”

Photo: Lorenz Potthast

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Guests of the PS2 Mash Up! at the Durbancity hall

Photo: Stephan Siegert



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PUBLICATIONS



F PUBLICATIONS

This chapter contains a selection of the PS2 publications that the project partners placed in journals, anthologies, conference proceedings, catalogues and other publications in the last 4 years.

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Presentation of PS2 results at the „Luminale“ light festival in Offenbach in 2018. The Bremen based subprojects were invited to inspire new art-based participatory ideas for the re-use of the main station in Offenbach

Photo: Lorenz Potthast



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For the subproject „Express Yourself/city“ in Bremen an overseas container was set up at the Bremen main station functioning as a forum for discussion on future techniques and tools in urban development

Photo: Martin Koplin

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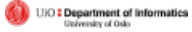
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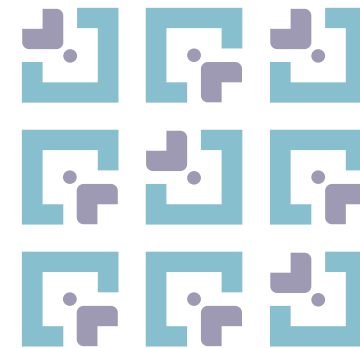
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**BEST PRACTICE STUDY  
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