

AN EXPERIMENT WITH
 NON-LINEARITY,
 VISUALISING COMPLEX
 NETWORKS,
 UNDERSTANDING
 COMPLEX SYSTEMS,
 PARALLEL
 DOCUMENTING OF
 PROCESSES AND
 MIRRORING THEORY COMPLEXITIES
 IN
 SIMPLE TEXT
 STRUCTURES

The development-time of this project was two days, which lead following typing errors, term mistakes and punctuation, etc. to remain invisible at the time the booklet was printed on 30/01/:

- p. 2, paragraph 1, line 5: ~~generated itself~~ -> was generated
- p. 2, paragraph 2, line 10: showing ~~the~~
- p. 2, paragraph 2, line 16: ~~e~~hierarchisation -> hierarchisation
- p. 2, paragraph 3 (middle column), line 12: „Collective Geography“ -> “Collective Geography”
- p. 2, paragraph 3 (middle column), line 13: „Collective Brain“ -> “Collective Brain”

Literature



- p. 2, paragraph 3 (middle column), line 17: fictional
- p. 2, paragraph 5 (right column), line 8: That's -> That's
- p. 2, paragraph 5 (right column), line 16: disperesed -> dispersed
- p. 2, paragraph 5 (right column), line 17: „Collective Geography“ -> “Collective Geography”
- p. 2, paragraph 6 (right column), line 1: „Collective Brain“ -> “Collective Brain”
- p. 4, “We live in” -> Berlin is missing
- p. 7, between 5 and 6 -> Space is missing
- p. 7, 13 Algae's Time to Shine, Michael Ang -> Michael Heidt
- p. 8, paragraph 2, line 2 (from bottom): ~~understands~~ itself -> regards itself
- p. 18, Algae's Time to Shine, Michael Ang -> Michael Heidt



**IN/VISIBLE
CITIES:
PROTOTYPING
LAB**

AN EXPERIMENT WITH NON-LINEARITY,
VISUALISING COMPLEX NETWORKS,
UNDERSTANDING COMPLEX SYSTEMS,
PARALLEL DOCUMENTING OF PROCESSES
AND MIRRORING THEORY-
COMPLEXITIES IN SIMPLE TEXT
STRUCTURES

edited by Sandra Moskova

TABLE OF CONTENTS

AN EXPERIMENT WITH
NON-LINEARITY,
VISUALISING COMPLEX
NETWORKS,
UNDERSTANDING
COMPLEX SYSTEMS,
PARALLEL
DOCUMENTING OF
PROCESSES AND
MIRRORING THEORY-
COMPLEXITIES IN
SIMPLE TEXT
STRUCTURES 2

Collective Geography 3–4

The Lab Idea 5

The Project Scedule 5

Presentation of the process
participants (beginning of
diagram) 8

Alberto G. Said 8, 18, 20

Fatih Aydogdu 8

Ekmel Ertan 8

Jasmin Grimm 8, 23

Nadege Fundschler 8

Susa Pop 5, 6, 8, 23

Jasmin Vogel 9

Achim Friedland 9, 17, 20

Duygu Kaban 9, 18

Mert Akbal 9, 18

Andreas Förster 6, 9, 17

Aaron Krach 5, 9

Diana Arce 6, 9, 17,

Tristan Biere 9, 18

Iago Romero 10, 18, 20

Julian Adenauer 5, 10, 23

Ilana Weinreich 10, 23

Nanna Jansen 10, 23

Sarah Langnese 10, 23

Shubhra Bhatt 10, 18

Aravinth Panchadcharam 10

Akitoshi Honda 10, 17

Birk Schmithüsen 6, 10, 17, 18, 20

Sebastian Meier 10, 23

Felix Richter 10, 17

Lena Flamm 11, 17

Michael Ang 11, 18, 20

Ricardo O’Nascimento 11, 17, 20

Melanie Nobis 11, 17, 20

Tamer Aslan 11

Rafael Polo 11, 23

Victor Mazón Gardoqui 11, 18, 20

Michael Heidt 11, 18

Rodrigo Delso Gutierrez 11, 18, 20

Marc Kloubert 6, 11, 17

Angelica D. Schmitt 11

Zhipeng Liang 6, 12, 17, 20

Petja Ivanova 12, 18

Robert Kleinfeld 12, 23

Ferit Topcu 12

Carla Chan 6, 12, 17

Julian Perez 12, 18

Charlotte Knips 5, 6, 12, 23

Simon Worthington 12, 18

Elli Kurus 12, 18

Ilaria Di Benedetto 12, 18

Gabi Sobliye 5, 13, 23

Collective Brain 21–22

Impressum 23

AN EXPERIMENT WITH NON-LINEARITY, VISUALISING COMPLEX NETWORKS, UNDERSTANDING COMPLEX SYSTEMS, PARALLEL DOCUMENTING OF PROCESSES AND MIRRORING THEORY-COMPLEXITIES IN SIMPLE TEXT STRUCTURES

This documentation considers itself as a work about the work, as a process about the process and generated itself – from the first idea until the final content and structure – during the Prototyping Lab on 26. and 27. January. It was layouted on 28. and 29. January and printed on the latter.

The main idea was to reflect the process in a theoretical approach, which was to be summed up in a curatorial and a theoretical text but what developed from that, was a far more complex structure and carries the idea of a representation of a network, showing the its complexity as it emerged in order of events and seeks to make the progress visible. Thus, it does not go after simplification and is against chierarchisation, which is why I picked up a simple method how to arrange the structure and

that is the order in the way processes developed.

To collect a mutual understanding of theory here, I do not explicitely name concepts and approaches, as well as visions and theories, on which everything is based, but much more see this documentation as an accumulation of all these fragments, and have made them visible in what I called a „Collective Geography“ and a „Collective Brain“ at the end of this booklet, which consists of inspirational fictional and non-fictional, which you (the participants) recommended and I hereby recommend you (you).

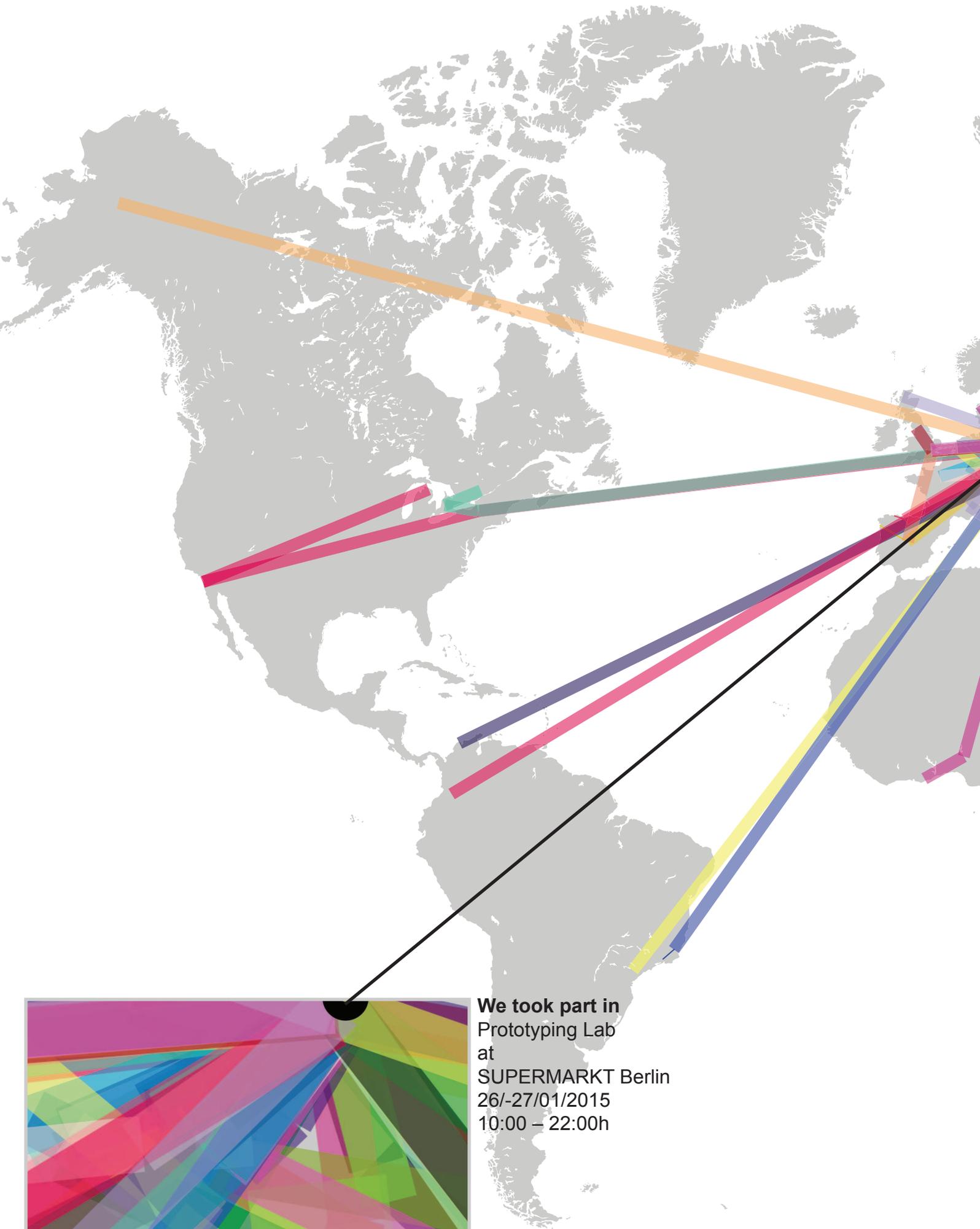
Also, as the 47 people I talked to came from all over the world and most of us had a long journey behind us – being born in one city, grown up in another country, studied all abroad and now living somewhere else – it was essential to depict this complexity in a wild geographical mesh. It is quite hard to tell though, where is where as the anonymity of the map challenges even exceptional Geography knowledge.

This map is not meant to be read, but to be sensed.

Working with 1pt-lines and different colours – as I have matched the single dots of born-in, studied-in and living-in parcours-lines – made everything overlap in even more non-understandeability. That's why I decided to work this into a graphical element, so I thickened the lines to 3pt and made them transparent to 53%, so that you get a sense of what happened at the Lab: we gathered for 2 days and disperesed again. The „**Collective Geography**“ is a snap-shot.

Also, the „**Collective Brain**“ is perceived as a mutual neuro-network, as it is essential to make visible which ideas have inspired us and shape our current approaches. No matter if you are a computer engineer, a media artist, a theorist, a curator, an urban planer, a technician or a marketing director, mutual fiction and theory has shaped your perception of the world – different people, different experts repeatetly named similar or same titles.

And also, you named several fiction books, where I think that above all it is fiction, that helps us make *sense* of reality.



We took part in
Prototyping Lab
at
SUPERMARKT Berlin
26/-27/01/2015
10:00 – 22:00h



We were born in

Merzifon (Turkey)
 Izmir
 Darmstadt
 Benin (Westafrika)
 Kempten
 Nürnberg
 Istanbul
 Salzburg
 Michigan
 Alaska
 Vigo (Spain)
 Trier
 Munich
 Fjerritslev (Denmark)
 Berlin
 Ahmedabad (India)
 Batticaloa (Sri Lanka)
 Okayama
 Aachen
 Willich
 Grimma
 Mayschosz
 Moscow
 Montreal
 Sao Paulo
 Lichetnstein
 Nova Friburgo
 Santander
 Gießen
 Madrid
 Bonn
 Shanghai
 Shumen
 Leipzig
 Hong Kong
 Bogota (Columbia)
 Plettenberg
 Manchester
 Viersen
 Bari (Italy)
 London

We studied in

Vienna
 Istanbul
 Hannover
 Berlin
 Munich
 Ilmenau
 Weimar
 Hamburg
 Dessau
 Shanghai
 Saarbrücken
 Graz
 San Diego, California
 Lepizig
 Madrid
 Karlsruhe
 Aarhus
 Frankfurt Oder
 Paris
 Freiburg
 Lion
 Ahmedabad (India)
 Chennai (India)
 Hildesheim
 Düsseldorf
 Potsdam
 Waterloo Canada
 New York City
 Sao Paulo
 Linz
 Heide
 Eichstätt
 Barranquilla
 Milan
 Rio de Janeiro
 Bilbao (Bask country, Spain)
 Marburg
 Aachen
 Erlangen
 Dresden
 Bogota
 Nantes
 London
 Rome
 Cottbus

We live in

Vienna
 Istanbul
 Munich
 Dortmund
 Jena
 Graz
 New York City
 Madrid
 Aarhus
 Weimar
 Leipzig
 Rotterdam
 Linz
 Düsseldorf
 Essen

THE LAB IDEA

The participants' proposals were based on open applications and the project theme was related to the topic of Visible/Invisible Cities:

Within the topic of IN/VISIBLE Cities the Prototyping Lab was initiated together with Fraunhofer FOKUS and SUPERMARKT Berlin and supported by the RWE Foundation. Joined by artists from the Connecting-Cities-Network, creative developers, IT experts, urban planners and future visionaries gathered together and used sensor measurement technologies to create DIY and crowdsourcing strategies dealing with the visualization of invisible technologies and data collection in cities.

Three topics: Safety (digital citizens), Climate Change and Energy (hybrid city) and Translocality were the participants' starting point for creating use of data and sensors.

The group **Digital Citizens** was moderated by Gabi Sobliye and Rafael Polo (Tactical Technology Collective).

The group **Hybrid City** was moderated by Sebas-

tian Meier (Interaction Design Lab/Potsdam University of Applied Science)

The group **Translocality** was moderated by Julian Adenauer (retune Conference/Sonice Development).

After the Prototyping Lab, three best ideas were chosen by the jury board (Julia Kloiber from the Open Knowledge Foundation, Charlotte Knips from Fraunhofer UMSICHT, Robert Kleinfeld from Fraunhofer FOKUS and Susa Pop from Connecting Cities) and will be developed and presented as light installations in Dortmund and Jena.

THE PROJECT SCHEDULE

// A first get together on 25/01/2015 from 18.00 till 22.00h

started with a warm welcoming by the host and project facilitator of SUPERMARKT, Ela Kagel and Susa Pop from Public Art Lab/Connecting Cities and Daniela Berglehn from the RWE Foundation.

After the framework was presented, each partner introduced him/herself in 5 minutes, Robert Kleinfeld from Fraunhofer FOKUS, Bernd Vorjans from JenaKultur, Charlotte Knips from Fraunhofer UMSICHT Dr. Reinhold Pabst from Fraunhofer IOF,

followed by the group moderators: Gabi, Rafael, Sebastian and Julian.

Inspirational talks by Julia Kloiber, Mark Shepard (on a project called „Sentient City Survival Kit“) and Aaron Krach (on the project and initiative „Ghana Think Tank“) followed.

Finally, all participants introduced themselves to the audience, That's when everyone met for the first time.

// Prototyping Lab
Day 1
26/01/2015
at SUPERMARKT Berlin

10.00 getting started
with project agenda,
presentation of the context
and some inspirational in-
puts by the moderators.

After introducing the cu-
ratorial concept and tech-
nologies (Susa Pop), the
cities Jena (Bernd Vorjans)
and Dortmund (Charlotte
nips and Daniela Berglehn)
and the group themes in
inspirational inputs, the
grouping process started.
Then, I started to interview
everyone.

After lunch, the groups
started to condensate first
ideas – the beginning of a
2-day-marathon.

By dinner time, 14 small-
group-ideas were develo-
ped and presented in front
of everyone. The project
names in order of presen-
tations were:

1
Power dynamics (Digital
Fortune Teller)

2
Meaningful lights with world
saving impact algae:

3
Questioning data, Un-
collections

4
Footprints

5
Blackout

6
Visualizing lost energy
spots

7
Digital shadow

8
Light catchers

9
Wasteometer

10
Traces of memory

11
Activation of forgotten
spaces

12
Light trails

13
Privacy collider

14
Flow

Around 22.00h day one
ended.

// Prototyping Lab
Day 2
27/01/2015
at SUPERMARKT Berlin

from 10.00 until 18.30h it
was all about developing
the ideas further, preparing
for the final presentation
and eventually re-grouping.-

At 18.30h the final presen-
tations of all together 15
projects started and eve-
ry team had 5 minutes to
present their project and
additional 2 for questions
from the audience. In order
of presentation came:

1
Digital Fortune Teller
by
Marc Kloubert, Diana Arce

2
Wikipedia Made of Citizens
by
Lydia Zechelius (who was
not attending and showed
a video instead)

3
Flow
by
Carla Chan

4
Privacy Collider
by
team Panopticum
(Zhipeng Liang, Andreas
Förster, Birk Schmithüsen)

5	Enlightening Urban Energy by team Energy (Lena Flamm, Felix Richter)	11	Light Catchers by team Polygon (Michael Ang, Alberto Gómez Saiz, Iago Romero)	
6	Save-O-Meter by team Happy (Ricardo O’Nascimento, Melanie Nobis, Achim Friedland)	12	Digital Shadow Race by Birk Schmithüsen	
7	Dark Steps by team Footsteps (Akitoshi Honda, Tamer Aslan)	13	Algae’s Time to Shine by team two (Petja Ivanova, Michael Ang)	// Prototyping Lab Presentation of Results Pa- nel at transmediale festival 2015 Capture All
8	Raillumination by team Translocality (Mert Akbal, Julian Perez, Shubra Bhatt, Tristan Biere, Duygu Kaban, Ilaria Di Benedetto, Jeremy Pine)	14	Blackout by team Blackhole (Rodrigo Delso Gutierrez, Victor Ma- zon Gardoqui)	16.00–17.30h After the presentation of all projects, the winners and the artists, I hope to get 2 minutes to present this publication and tell you to take one with you home.
9	Traces of Memory by team Translocality (Mert Akbal, Julian Perez, Shubra Bhatt, Tristan Biere, Duygu Kaban, Ilaria Di Benedetto, Jeremy Pine)	15	Stories About Data (Sha- ring The Un-Library) by UnCollection League (Si- mon Worthington, Elli Ku- rus)	
10	Vitalight Space by team Translocality (Mert Akbal, Julian Perez, Shubra Bhatt, Tristan Biere, Duygu Kaban, Ilaria Di Benedetto, Jeremy Pine)		After a jury session on 28/01 at Public Art Lab, three winner projects were chosen.	

This documentation features all participants – workshop participants, moderators, project facilitators, curators, interns, theoreticians, technicians – who took part in the **Prototyping Lab** at Supermarkt on 26/ and 27/01/2015.

In the course of these 2 days, I talked to all 47 people involved and made short portraits of them, which here appear in the order of conversations (and not according to hierarchy, alphabetical order, team-grouping or any other order). Beside to contribute to the a „Collective Geography“ by naming place of birth, of study and where he/she is living today, I separately asked everyone „Why are you here?“ aiming at the initial topic of interest, and finally about a book everyone must read, which flowed into a „Collective Brain“. The reason for that, is to represent the processes in their nature as a complex network, thus they formed a diagram. The structure of this publication was also developed during the working process at the Prototyping Lab on 26/ and 27/01/2015, from 10.00 till 22.00h at Supermarkt, Berlin, and understands itself as a work about the work.

The structure is as follows:

of conversation

Name and Surname

What do you do?

Why are you here?/What is your topic of interest?

1

Alberto Gomez Said

developer

Low bluetooth devices for exhibition attendants to carry with them, where the light would change as people group; visualization of interaction.

2

Fatih Aydođdu

visual artist, designer, curator (a. o. Amber Platform Istanbul) and sound artist

The term „translocality“ reminds of the 90s term „glocality“; interest in this classification; how can the term be defined in the prototyping process.

3

Ekmel Ertan

communication engineer, curator (a. o. Amber Platform Istanbul), works with interactive media and visual communication

If we don't have a social component, technology could become a dystopia, thus how do media facades become a social tool in the sense of „power to the people“ and DIY-technology.

4

Jasmin Grimm

creative planner, project coordinator of the Connecting Cities project

What does „making something visible“ mean and what remains „invisible“ in the context of tabus – what is not yet being talked about and how is this being articulated?

5

Nadege Fundschler

Assistent at Public Art Lab

How does the project topic relate to social scenarios, by producing artistic reactions to urban challenges? What remains for the people beyond that?

6

Susa Pop

curator of Public Art Lab and Connecting Cities

What does the term „digital citizen“ mean in the context of artistic scenarios in the urban sphere?; Light as an

information and communication medium, related to artistic scenarios, where the subject complexity gains scientific relevance.

7

Jasmin Vogel

marketing director at Dortmund U

The DIY-mentality of participation approaches in the sense of „innovative citizens“; Interest in transdisciplinary projects with social relevance, where art leaves its ivory tower and urban space is being reclaimed. It's not about just putting something on the walls of Dortmund U, but using the space as a platform.

8

Achim Friedland

developer

Generating excess value through multiperspectivity. Problem: Where does the whole data come from and how to adequately work with it when it's being centrally collected?

9

Duygu Kaban

urban curator and facilitator of „Interact Istanbul“

Control in public space; how do movements, such as the Anonymous Movement, affect processes in public space? What's the symbolism behind these activities?

10

Mert Akbal

visual artist

Visualizing dream spaces and mental imagery; Dreams are huge invisible data: out of 8-9 hours of sleep, every night at least 1 hour of image production (a game, a movie, a couple of short films) are being „Produced“; narrative data.

11

Andreas Förster

designer with computer-science-background (developer)

The idea of networkness influences everything from Politics to Design and Art, thus there is the need to make these interrelations visible through urban interactions, which would also influence future visions. In the sense of major consensus narratives, there are too many dystopical scenarios related to surveillance, etc., but no positive visions.

12

Aaron Krach

artist, Ghana Think Tank project

What's the problem with corporations? How to initiate effective social exchange through exchanging problems; How to underline the social component of technology, which goes beyond corporation logics?

13

Diana Arce

citizen privacy group artist, cultural scientist, activist

How to bring projects to the public to cross the topics of private and public personas online; a 1 on 1 experience as a work where a person can be confronted with his/her data and to be reflected publicly and „asses“ their own shadow in a digital sphere.

14

Tristan Biere

urbanist

Interacting with the city in its nature as a complex system. Who defines the city narratives? How do we interact with urban futures?

15	Iago Romero engineer changed to architect Interested in how to apply digital parametric tools for architects for the management of data in the urban environment.	and interaction designer Interested in critical/speculative aspects of Design in the context of visible/invisible cities.	22	Akitoshi Honda artist A footprint made visible with black light.
16	Julian Adenauer moderator of team Trans-locality, organizer of retune festival Transdisciplinarity as a norm instead of an exception and how does that change our understanding and our cities; How do we leave traces in the world?	19 Sarah Langnese Assistent at Public Art Lab Interested in participatory art approaches as an antipole of gallery art. How to interact with data in the sense of democracy and urban activism.	23	Birk Schmithüsen media artist Networking and transdisciplinarity; How to develop the cityscap through technology?
17	Ilana Weinreich Curatorial assistent at Public Art Lab I like the idea that artistic projects in urban space can change how we perceive our cities and interact with fellow citizens. In the best case, we rethink our daily habits and become better humans.	20 Shubhra Bhatt Media-Architecture student Applying various new media technologies in built spaces and Architecture. Also how these technologies changes our culturally inherited interactions.	24	Sebastian Meier designer, PhD student, moderator of the Hybrid City group Visualizing urban data and making complex systems visible in a way that they remain complex but become accessible.
18	Nanna Jansen Assistent at Public Art Lab	21 Aravinth Panchadcharam new media artist and electronics engineer Human-machine interaction; artistic representation of interaction (between hardware an software), which has more value than conventional interfaces.	25	Felix Richter media artist Opportunities to generate alternative energy in the urban space through light and projection.

26	Lena Flamm landscape architect, urban designer	30	Tamer Aslan creative technologist	engineer, philosopher
	The materials/matter hidden in city infrastructures; How to externalize these in the sense of „urban metabolism“		Democratization of power structures through technology; how can new systems be designed to enable participation/collaboration; „active citizens“.	Coproduction as means of expression, as a political language of half-formal codes such as law; theoretical interest interdisciplinary communication, medium/form; „loose/strict hypernation“ (acc to N. Luhmann) and its implementation in digital forms; algorithm as form.
27	Michael Ang media artist and computer engineer	31	Rafael Polo computer scientist/software engineer, activist, moderator of the group Safety	34
	Collaborative public light as an experience/sculpture; work with other disciplines.		Engaging awareness, building systems and tools; the power of algorithms as decentralized systems to question hierarchy.	Rodrigo Delso Gutierrez Architect, PhD student in Architecture
28	Ricardo O’Nascimento media artist	32	Victor Mazón Gardoqui electronic and product designer	Why are cities always the same and don’t have the ability to change? Whenever you plan/build a neighborhood or a building you have to build it for at least 100 years. Cities only reproduce and repeat themselves.
	Connection/interrelations of body and fashion as an expression gesture, Architecture.			
29	Melanie Nobis tourist assistnt	33	Michael Heidt PhD student, computer	35
	Sustainable urban development; raise awareness through artistic practice about what people do in the cities, as the cities are the future of our world because population is growing (waste production, consumption).		The trestle of perception, vulnerability and imposition of power through art/technology; translation/modulation of hidden signals to make them „visible“, not through data visualization, but by sensing in order to modulate the invisible.	Marc Kloubert web and interface designer
				The transdisciplinarity of the lab approach
				36
				Angelica D. Schmitt media art theory, cognitive science
				The medium „urban

screen“; what possibilities does the medium provide; what would happen if you give the medium in the hand of single citizens, as he/she is losing more and more autonomy? A shift of digital structures takes place, which leads to the defragmentation of structures (family, law, etc.), to be replaced by networks, such as cities.

37
Zhipeng Liang
 media artist, researcher
 Transdisciplinarity; experience of different collective work.

38
Petja Ivanova
 researcher, artist
 The topic of the city; focus on designing geopolitics; prototype an idea which would add more benefits to design.

39
Robert Kleinfeld
 product developer, project manager

The Internet of things; externalizing the machine through sensor technology; What creative practices

can be developed through technology? The term „smart cities“ is being instrumentalized as a buzz word but it’s really very hard to find effective innovative solutions.

40
Ferit Topcu
 computer engineer, project manager

The transdisciplinarity of ideas, which come from a completely different perspective; transportations as an industrial outcome and the need to optimize dynamics in public transportation; autonomous functioning in the city.

41
Carla Chan
 media artist

Light/space as an immersive experience; „full dome“; explore the people’s intimacy in public space; create situations as experience.

42
Julian Perez
 media art and design student

Invisible cities/prototyping to get an input from different perspectives; urban development; how each of

us relates to space.
 43
Charlotte Knips
 Philosopher
 sustainable science; exploring digital maturity.

44
Simon Worthington
 publishing research
 Liberate the book; books should be made „workable“; a mixture of policy and technology.

45
Elli Kurus
 collective artist

Democracy and Internet; how they interrelate with each other; how society is shaped by technology.

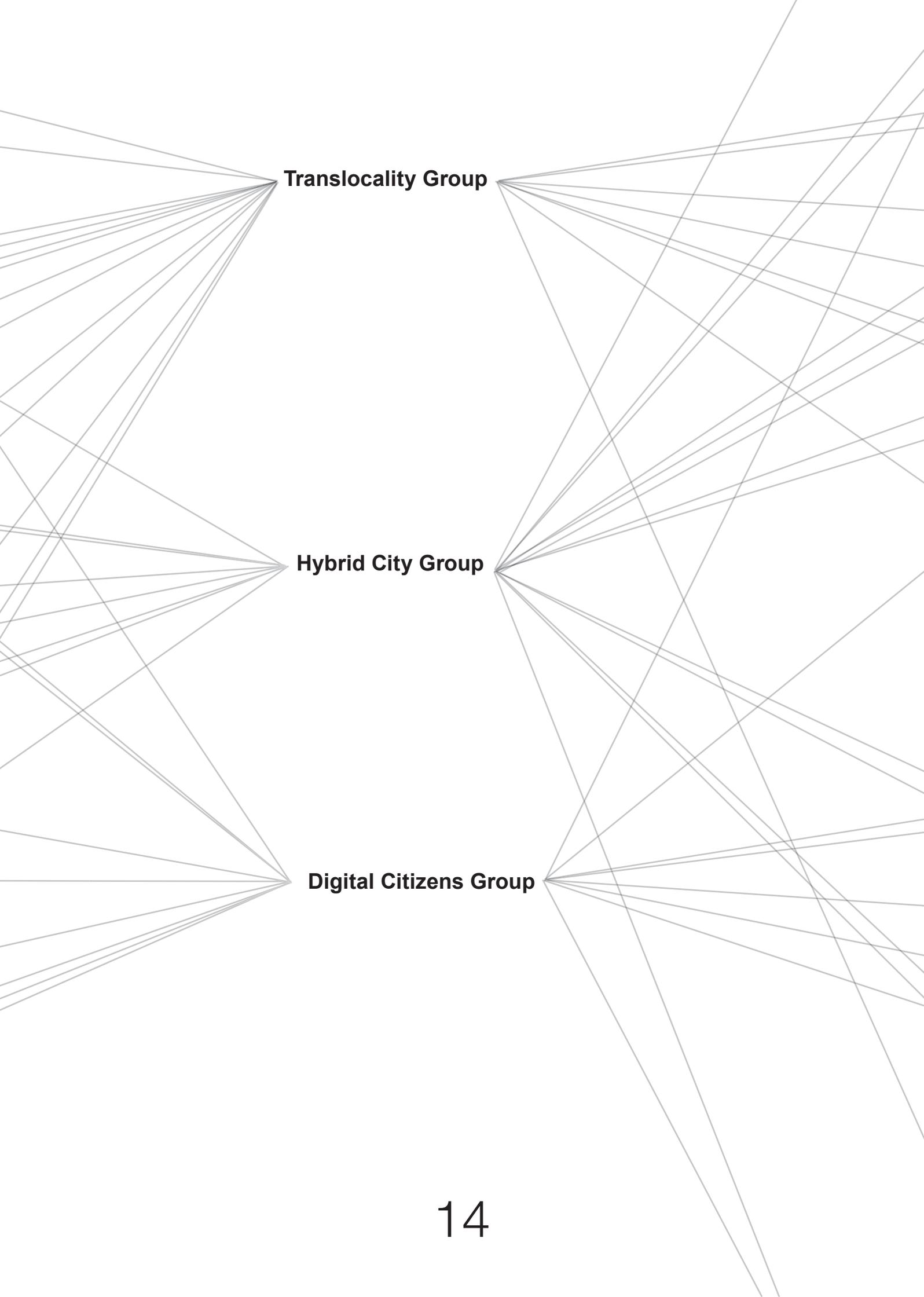
46
Ilaria Di Benedetto
 Architect, urban planner

Interactive urban planning; sociological/anthropological aspects of city development; How to make choices when you plan the city (put your architectural competences together with real people; real life vs. project)

Gabi Sobliye

Tactical technology Collective, Moderator of Digital Citizen Group (Safety)

Surveillance and data collection; presumably the „wild wild west“; in the future things will be much more regulated/constrained, but by that a lot will develop; there are opportunities to use the collected data for good; digital traces; surveillance/ data world does not really match the art world, interest in bringing those two worlds together.



Power dynamics (Digital Fortune Teller)

1 person at a time can step in a fortune teller machine → will feed data to the fortune teller robot → robot will try to show digital footprint by light reflections

Meaningful lights with world saving impact algae

Light with algae; one can grow it at home; algae combines light and resource questions; program the algeas with what you feed them; algeas are react on environment

Questioning Data, Un-collections

What data IS and what data ISN'T collected and why?
Questionnaire online: 10 questions about what they know about the collections and what they want to be collected; a longterm process; projections/representation of data

Footprints

Making footprints visible; blacklight-ink (make traces visible); What do people try to reach, which kind of forms are formed by their traces? make technology visible; mattress with ink -> after walking and switching on backlight, one can see the traces.

Blackout

Turn off public lighting temporary; need no high budget; fears of darkness in cities? Generating emptiness.

Visualizing lost energy spots

Show spots where energy is lost; small light sculptures LEDs on facades, all around the city -> one general station where people can come and see how much energy all around the city could have been saved or is lost.

Digital shadow

Unknown tracking via ID-card-chips or via signal from mobile; visitors can try not being tracked (let digital stuff at home); parcour in Jena where visitors are getting digitally tracked; show tracking path and recognize data.

Light catchers

Crowd source data-collection of people; subjective appreciation of life; people to come together to create a light-sculpture together; group experience, see each others light experience

Wasteometer

What are we consuming everyday and in a year?; energy, waste, water (most important resources that we have); lighting the part of energy (it grows during one month).

Traces of memory

Memory; Jena = student-city; combine memory of city with memory of students from abroad in dreams; visualizing dreams via optical fiber cables; projection.

Activation of forgotten spaces

Delivering messages/migrational of different things (people, messages, things, data etc.); using optical fiber technologies; fiber cables = synapses; transform non-spaces into deeper meaning/activate them (anthropological context: airports, hotels)

Light trails

Inspired by migration project (night trains); collect data of train circulation (e.g. in Dortmund U = close to Hbf); how is movement of the trains? – a small color light installation.

Privacy collider

Using directional microphone and speakers which can limit sound pickup to a sound space -> connect two people on microphone speakers who don't know that they're communicating; one is talking to SOME ONE, but doesn't know to who; one part of idea: make them feel uncomfortable

Flow

Light installation: how laser moves is directed by how people move or speak; when laser is moving, one can create a plate/spatial installation/sculpture; the converting of audience data doesn't have to be realtime.

Digital Fortune Teller

Marc Kloubert, Diana Arce

People enter into booth, machine tells you how much it found out about you, you can select if this is you or not and if you want to show the findings to other participants, also the machine tells you how you can protect yourself more on the Internet (e.g. me and my shadow)

Wikipedia Made of Citizens

Lydia Zechelius

Collect qualitative data of citizens' wishes and choices; building a data collecting system/data containing as a public dialogue.

Flow

Carla Chan

Laser walls creating fictional spaces in real spaces; Walls move according to your movements; people can be "cut" through the walls.

Privacy Collider

Zhipeng Liang, Andreas Förster, Birk Schmithüsn

Forcing people to connect via spotlight (directional mic, speaker, spotlights) which is projected on their figure on a public space, a camera searches and chases people, then they can hear other people and talk to them even if in different cities.

Enlightening Urban Energy

Lena Flamm, Felix Richter

Movement, wind, energy – making use of lost energy like ventilation from shopping malls; Light sculptures enlightening invisible energy spots.

Save-O-Meter

Ricardo O'Nascimento, Melanie Nobis, Achim Friedland

Make people lower their consumption of water or energy; Collect data of waste in Jena and Dortmund; data will be visualized on one building.

Dark Steps

Akitoshi Honda, Tamer Aslan

Site specific installation that makes people aware of the traces they leave behind, e.g. lay out fluorescent color in public space and make footprints visible only in the dark.

The Translocality group proposed 3 projects in different team constellation

Mert Akbal, Julian Perez, Shubra Bhatt, Tristan Biere, Duygu Kaban, Ilaria Di Benedetto, Jeremy Pine

Raillumination

Take "Skeleton" of railways in Dortmund; Illuminate the transit movements on another building in real time; a real time visualization of who is coming in and out of town via train.

Light catchers

Michael Ang, Alberto Gómez Saiz, Iago Romero

Collect different experiences and light histories of different people through wearable sensors. Light installation in public space: people can come and save their personal light history inside a light sculpture.

Digital Shadow Race

Birk Schmithüsen

Unfree participatory city game; Chips track your movements by collecting cell-phone-data; there is one entrance and one exit with wireless networks at both ends; The process is shown as a floor projection on shopping mall.

Algae's Time to Shine

Petja Ivanova, Michael Ang

Interactive emission mapping via bioluminescent algae
Algae have positive impact on environment; Implementing algae into a screen (algae is bioluminescent). Moving through the city or standing at a point your emission is calculated and the height of algae needed to equalize

Blackout

Rodrigo Delso Gutierrez, Victor Mazon Gardoqui

Reflecting the presence and absence of electricity in a ritual gesture; Underlining the importance of electric supply when the cities become dark.

Stories About Data (Sharing The Un-Library)

Simon Worthington, Elli Kurus

Liberating the book in a virtual library where people create data sets: playlists/book-stacks create a complex fractile everyone has access to.

Traces of Memory

Integrative theory; Two memories merge; Participants get EEG on; Machine encrypts the imaginary of the brain to a building "dream" is projected by fiber optics

Vitalight Space Marc

Augé: we are spending time in non-spaces such as supermarkets, airports...; Activate non-spaces by light; projections in space, people activate the space by stepping in; Tic tac toe game.



The three winning projects are

PRIVACY COLLIDER

by

Zhipeng Liang, Andreas
Förster and Birk Schmithüsen

LIGHT CATCHERS

by

Michael Ang, Alberto Gómez
Saiz and Iago Romero

SAVE-O-METER

by

Ricardo O’Nascimento, Melanie
Nobis and Achim Friedland

Honorary Mention

BLACKOUT

by

Rodrigo Delso Gutierrez and
Victor Mazon Gardoqui

COLLECTIVE BRAIN

Agre Phil - The Dynamic Structure of Everyday Life (critical technical practice)

Alexander Galloway - Interface Effect

Alexander Galloway/Eugene Thacker - Ex-Communication

Andreas Ziemann - Medienkultur und Gesellschaftsstruktur: Soziologische Analysen (Wissen, Kommunikation und Gesellschaft)

Andy Weir - The Martian (Roman)

Ash Maurya - Running Lean. Iterate from Plan A to a Plan That Works

Benjamin Bratton - Speed and Politics

Benjamin D.R. Bogart/Phillipe Pasquier, An Integrative Theory of Visual Mentation and Spontaneous Creativity

Bruno Latour - „Hotelschlüssel“/programs and anti-programs; Technology is Society Made Duable (beständig)

Bruno Latour - Das Parlament der Dinge

Bruno Munari - Da cosa nasce cosa

Buckminster Fuller (Author), Building structures and utopian ideas of society

Byung Chul Han - Der Duft der Zeit

C. E. Shannon - Mathematical Theory of Communication

Carville Earle/Kent Mathewson/Martin S. Kenzer – Concepts in Human Geography

Christopher Alexander - Notes on the Synthesis of Form

Daniel Kahneman - Thinking Fast and Slow

Donna Hathaway - The Companion Species Manifesto

Esther Duflo/Abhijit Banerjee - Poor Economics

Florian Cramer - Executable statements. Poetische Kalküle und Phantasmen des selbstausführenden Texts

Florian Cramer - Words Made Flesh

Fritz Heider - Ding und Medium

Furensis - Forensic Architecture

Gilbert Simondon - Being and Technology

Gilbert Simondon: Von der Existenzweise technischer Objekte (Du mode d'existence des objets techniques)

Gilles Deuze - Postscript to a Society of Control
Institute of Network Cultures (Hg.): Unlike us Reader - Social Media Monopolies and their alternatives
Italo Calvino - Invisible Cities
Lev Manovich - Software Takes Command
Lucien Levefre - The Coming of the Book
Manuel Castels, The Information Age: Economy, Society, Culture
Manuel DeLanda - Thousand Years of Nonlinear History
Marc Augé - Non-Spaces
Marc Augé The War of Dreams. Studies in Ethno-Fiction
Marge Piercy - Women at the Edge of Time
Mark Shepard, Sentient City
The Diagrams of „Unendlicher Spaß von David Foster Wallace. 24 Stunden durch den utopischen Westen“. HAU Berlin, Mai 2012
Miranda July - Learning to Love You More
Neal Stephenson - Cryptonomicon
Niklas Luhmann - Theorie sozialer Systeme
Paul Otlet - Cataloging the World: Paul Otlet and the Birth of the Information Age
Paul Virilio - Cronopolitics
Perth/Hassell, Forgotten Spaces: upper floor activation
Robert Harbison - Eccentric Spaces
Stefan Münker - Mythos Internet
Thomas Y. Levin/Ursula Frohne/Peter Weibel – CTRL [SPACE]: Rhetorics of Surveillance from Bentham to Big Brother
Valentino Braitenberg - Vehicles. Experiments in Synthetic Psychology
Vilém Flusser - Das Politische im Zeitalter von technischen Bildern
Viviero DeCastro - Cannibal Metaphysics. An Anthropology study...

IMPRESSUM

Edited by
Sandra Moskova

Idea, Text, Layout/
Structure and Print by
Sandra Moskova

Public Art Lab Team
Susa Pop
Jasmin Grimm
Ilana Weinreich
Nanna Jansen
Sarah Langnese
Nadege Fundschler

 **IN/VISIBLE
CITIES:
PROTOTYPING
LAB**
at Supermarkt Berlin

25/–27/01/2015

Initiated by
Public Art Lab

in collaboration
with Fraunhofer
FOKUS, as part
of transmediale
2015

supported by
the RWE
Foundation

This publication was
generated between
26/01 and 30/01/2015.

© 2015 Sandra Moskova

Group moderators:
Gabi Sobliye, Rafael
Polo, Sebastian
Meier, Julian Adenauer

Jury Board:
Julia Kloiber (Open
Knowledge Foundation),
Charlotte Knips (Fraun-
hofer UMSICHT), Robert
Kleinfeld (Fraunhofer
FOKUS), Susa Pop (Con-
necting Cities)

PROJECT PARTNERS

Project by

PUBLIC
ART
LAB



Supported by

RWE
STIFTUNG
FÜR ENERGIE &
GESELLSCHAFT



In cooperation with

 **Fraunhofer**
FOKUS

 **Fraunhofer**
UMSICHT

SUPERMARKT

UT
transmediale



