

Editors

Prof. Dr.-Ing. Eckhard Kraft

Prof. Liz Bachhuber

Prof. Dr.-Ing. Jörg Londong

Materie

Neu Denken

Repensar la Matèria

পদার্থের পুনঃমূল্যায়ন
Reassessing Material

Repensare la Materia

Art and Environmental Engineering – An interdisciplinary Journey

Barcelona (Spain)

Weimar (Germany)

Khulna (Bangladesh)

Rome (Italy)



2



3



FROM WEIMAR
INTO THE WORLD

TABLE OF CONTENTS

2-3 —→ Introduction: From Weimar into the world

4-7 —→ Table of Contents

8-117 —→ Exhibitions & Excursions

8-9 **Barcelona / Spain**

10-13 —Reassessing Material / Prof. Liz Bachhuber
Statements: Expectations of the excursion participants

14-15 —The Barcelona journey

16-19 —Setting up and opening the exhibition at Universitat de Barcelona

20-21 —Visiting the Baix Llobregat wastewater
 treatment plant / Lena Klopstein, Loy Stieler e. a.

22-23 —Exploring the city's infrastructure / Lena Klopstein, Loy Stieler et. al.

24-25 —Visiting 'La Fàbrica del Sol' and the exhibition 'Beehave'
 / Manuel Gerdon, Miguel González Romo, Lena Klopstein, Loy Stieler

26-27 —Insights from the excursion participants

28-29 **Weimar / Germany**

30-31 —'summaery' – Annual students' work exhibition of
the Bauhaus-Universität Weimar / Linda Schumann

32-35 —Exercises in perception – a course in drawing
 for environmental engineers and artists / Manuel Gerdon,
 Miguel González Romo, Lena Klopstein, Loy Stieler

36-37 —Visiting the 'Biothan GmbH' – Großenlüder (Fulda) / Thomas Haupt

38-39 —Laboratory Workshop / Prof. Eckhard Kraft

40-41 **Khulna / Bangladesh**

42-45 —Perceiving / Experiencing / Understanding –
 Designing?! / Prof. Eckhard Kraft
Statements: Expectations of the excursion participants

46-47 —The Bangladesh Journey

48-49 —Visiting the Padma bridge construction site

50-51 —Reassessing the material of infrastructure / Gregor Biastoch

52-53 —Setting up the exhibition at Khulna University of
 Engineering and Technology (KUET)

54-55 —The opening of the exhibition at KUET

56-57 —The WasteSafe Conference at KUET

58-59 —Waste – Reflecting Society – A Mirror to Society / Tonia Schmitz

60-61 —Visiting a landfill in Khulna

62-63 —Refuse in Khulna City – Possibilities for
 Resource Management / Hans Peter Fajardo Salmon

64-65 —Faecal Sludge Management – a need,
 but a challenge / Prof. Jörg Londong

66-67 —A different package tour? / Lea Mattenklotz

68-69 —Visiting informal settlements in Khulna

70-71 —Living in Bangladesh / Manuel Gerdon

72-73 —Visiting the Faculties of Fine Arts and Architecture at Khulna University

74-75 —Right Angle / Samira Gebhardt & Andreas Grahl

76-77 —Ship breaking yard / Gregor Biastoch

78-79 —Bangladesh's coal future – The force that
 paralyses busy Bangladeshi traffic / Miguel González Romo

80-81 —Confrontations and Synergies / Linda Schumann & Tonia Schmitz

82-85 —Rooftop or the Spearhead of Evolution –
 Rooftop oder die Speerspitze der Evolution / Andreas Grahl

86-87 —Visit Bangladesh before tourists come / Florian Wehking

88-91 —Insights from the excursion participants
 Journey to Bangladesh / Andreas Grahl

92-93	<u>Rome / Italy</u>
94-95	—Pecunia non olet / Prof. Jörg Londong <u>Statements: Expectations of the excursion participants</u>
96-97	—The Rome Journey
98-99	—Reassessing Material – From fermentation residue to fermentation product / Tobias Baus, Hans Peter Fajardo Salmon et. al.
100-101	—Setting up the exhibition at Sala 1
102-103	—Symposium ‘Reassessing Material’ at the University of Rome – Sapienza
104-105	—The opening of the exhibition at Sala 1
106-109	—Between ancient glory and the present day – a look at Rome’s infrastructure / Valerie Johne
110-111	—The refuse of Rome / David Gaeckle, Ilona Gerlach, Eva Konetzki et. al.
112-113	—Insights from the excursion participants
114-115	—Art and other misunderstandings – learning from an interdisciplinary exhibition / Linda Schumann
116-117	—What it’s worth!?! / Florian Wehking

118-119	<u>Works of art and exhibits of environmental engineers</u>
120-121	—Homeland / Mina Amini
122/123	—Snowflakes & Selfportrait with Suitcase / Prof. Liz Bachhuber
124/125	—Tomatoes & NPB – Nutrient Power Bombs / Tobias Baus, David Gaeckle, Ilona Gerlach, Valerie Johne, Eva Konetzki et. al.
126-127	—Play the circle of nutrients / Tobias Baus, David Gaeckle, Ilona Gerlach, Hans P. Fajardo Salmon et. al.
128-129	—Wardian Suitcase / Clara Luise Bernhard
130/131	—yellow lamp & o. T. / Christian Claus
132-133	—P-Bank / Sylvia Debit, Stefanie Hörnlein, Prof. Jörg Londong, Anniek Vetter
134-135	—Anthropocene artifacts / Clara Freund
136-137	—leftovers / Carolin Gasse

138-139	—Sunday / Samira Gebhardt
140-141	—Material Manifestations / Manuel Gerdon, Lena Klopstein, Miguel González Romo, Loy Stieler, Tonia Schmitz
142/143	—Universe 3 & The Saddest Cheerleaders in the World / Andreas Grahl
144-145	—COVER II / Christoph Haupt
146-147	—Ahrenshoop, 20.04.2018 / Sophie Kampf
148-149	—Future Wars / Kaspar Elias Kimmel
150/151	—El Ejido, Andalucía & 800 grams of tomatoes / Lea Mattenklotz
152-153	—pedes dolentes / Michael Merkel
154-155	—Care / Linda Schumann
156-157	—Marine Snow / Manuel Gerdon, Lena Klopstein, Miguel González Romo, Loy Stieler
158-159	—Memento / Rieko Tsuji
160-161	—How it all started... / Florian Wehking
162-163	—Untitled / Max Weisel

164-171 —→ About the participants / CV’s

172 —→ Imprint

3 a l'11
de maig
2018

Estudiants i Professors
participants

Liz Bachhuber
Clara Luise Bernhard
Christian Claus
Clara Freund
Carolin Gasse
Samira Gebhardt
Manuel Gerdon
Andreas Grahl
Christoph Haupt
Sophie Kampf
Kaspar Elias Kimmel
Lena Klopstein
Lea Mattenklotz
Michael Merkel
Miguel González Romo
Tonia Schmitz
Linda Schumann
Loy Stieler
Rieko Tsuji
Florian Wehking
Max Weisel

Materie

Neu Denken

Repensar la Matèria

Reassessing Material

Una exposició d'art en col·laboració amb enginyers ambientals

INAUGURACIÓ

3 de maig
a les 13 h

De DILLUNS a DIVENDRES

Sala d'Exposicions
Facultat de Belles Arts

De 10 - 14 h i Pau Gargallo, 4
De 16 - 20 h 08028 Barcelona



REASSESSING MATERIAL

Prof. Liz Bachhuber

What is our relationship to material objects in our increasingly immaterial, automated and digitized society? What can we do to curb the flood of our material consumption? Can so-called trash be better utilized? Let us start by calling it a resource. The goal of 'REASSESSING MATERIAL' is to communicate the multi-faceted value of used material – referred to as garbage, junk, or sewage – and to show its potential. In the traveling exhibition we focus on the narrative and aesthetic qualities of found objects as well as the energy potential of materials. Knowledge of material processes in their evolving stages of change shifts perspectives and brings about ecological awareness.

During the past 10 years, interdisciplinary research trips with environmental engineers and artists – to the border cities Tijuana and San Diego, in Barcelona, Khulna and Rome – have hammered home the environmental consequences of the worldwide transfer of material and human capital in globalization processes. In planning the international venues for the 'Bauhaus 100' exhibition we tapped into our combined university networks to come up with a plan based on exchange with partner institutions in combination with professional contacts from our respective fields of art and engineering.

Our collaboration occurs with disciplines far removed from each other. Engineers are usually focused on solving specific problems and artists usually on larger perspectives. What happens when these visions are given the opportunity to merge? The attempt to come together and learn from each other requires a leap of faith on both sides, and a departure from one's personal comfort zone.

We hope to present our research – artistic and scientific – to the public in such a way that it can be understood on an intellectual and aesthetic level. In our collaboration and in our exhibition we hope to point out the untapped potential of transformation processes and to challenge perception. This requires us to present the radical subjectivity of artists alongside the engineers' scientific research pertaining to the environment, ecology, recycling and the value of material.

Art practice encompasses a wide spectrum of possibilities for both individual expression and activism. Civil society is not served with a boiled down, didactic/propagandistic version of applied art. The unfolding of aesthetic experience demands highest artistic quality. In the work shown the incompatibility of man-made and natural materials is pointedly and incisively demonstrated as well as the absurdity of technological overkill in a vulnerable, closed system.

How can objects extracted from life situations be utilized in works of art? As a global nomadic strategy each work of art is transported in a suitcase. The suitcase – used as a shipping crate – becomes an element in the work itself, a container for a 'Baukasten'-system, or simply a tool box containing implements used to form on-site materials as they expand into the space of the gallery. The physical parameters of the suitcase force each traveler to plan ahead. It contains the clothing and implements necessary for the trip based on climate, anticipated activity and length of journey. This selection reveals the judgement and preferences of the traveler, carefully thought out and packed to fit the space. Including material from the city where the exhibition takes place requires intensive pre-trip research. A flexible working plan and acquired knowledge of place synthesize with the actual on-site situation.

The daily objects that surround us manifest a particular era in their form and construction and are valuable artifacts in an archeological sense. The objects included in the art works have either a biographical or political relevance to the

STATEMENTS STUDENTS' EXPECTATIONS BEFORE THE BEGINNING OF THE EXCURSION



"Actually, it was the very uncertainty of what would await me in Barcelona, away from my daily habits and starting to deal with the subject of art, which attracted me to this project so much."

LENA KLOPFSTEIN



"When I applied [to participate in the project], I hadn't thought that we would experience art in such a practical way over the course of the semester. A good opportunity to find out how to approach environmentally relevant issues there [in Barcelona]."

MIGUEL GONZÁLEZ ROMO

participants or represent the location from which they were taken. The works range from quirky collections to material experiments. The participants investigate not only intrinsic value but also the iconography of materials which, in combination, communicate a specific content. The integration of found materials is a form of recycling.

'REASSESSING MATERIAL' also refers to the far-flung influence of the Bauhaus after it was forced out of Germany due to the rise of fascism. This traveling exhibition pays tribute to Bauhaus members who went out into the world and spread their utopian ideas, crossing boundaries between countries and disciplines.

"How do we want to live together?" asked Walter Gropius when he founded the Bauhaus in 1919, immediately after World War I had left Germany in political and economic chaos. With this question in mind the format 'Bauhaus-Project' approaches real-world issues from an artistic as well as a technical perspective in order to gain a complex and multifaceted understanding of a situation. A holistic approach is taken in addressing issues that affect civil society and daily life.

In an attempt to raise awareness of our patterns of consumption the environmental engineers show a series of posters aimed at giving the general public insight into the ways in which garbage is recycled or disposed of. Through windows onto second layers of information, the viewer can move from a general overview into a more complex explanation of facts, e.g. numbers and fate of 'coffee to-go' cups or the sustainability of so-called biodegradable materials. At a later stage in our collaboration the engineers began to perceive their process as vital and of great interest to the public. They exhibited aspects of their research highlighting principles of physics. One object is a transparent anaerobic bioreactor, demonstrating the biodegradation of organic matter. Another is an elegant pyramid of fertilizer balls on a white pedestal, formed from straw and manure, which are used to fertilize house plants or complement the seed bombs of guerilla urban gardening. In this work the olfactory as well as the visual and the haptic senses are addressed.

An international field trip is a complex, multi-sensory experience and skills can be honed to deal with input. We therefore offered the following preparatory courses: In 'Perceptual Exercises' students learn to see differently through drawing. Students confront their usual rapid navigation through space, imposed on us by our culture and often filtered through digital media. Deceleration through the coordination of hand-to-eye movement in drawing on paper in a number of exercises trains exact observation and heightens perception—skills essential to both engineers and artists. In 'Laboratory Assistance' art students use the biotechnology laboratory to assist in a controlled-environment, according to scientific methodology. Experiments are repeated over time, results are compared, evaluated and conclusions are drawn in a process that is carefully documented.

We travel the world to see the way things are done – or not done – in other countries. During excursions students participate in a balanced program which addresses both disciplines. There are visits to technical facilities like recycling plants, sewage treatment plants, landfills, compost plants, methane gas plants, model house visits for off-the-grid electricity/solar energy production or on-site water treatment and passive house technology. On the artistic side we visit exhibitions in museums, galleries and alternative spaces that show work relevant to research-related themes. We visit artists and activists, cottage industries, handcraft studios and workshops in order to see how creative work is structured in a particular culture, the future of which concerns us all. DIY, inventing one's own job, finding a niche and a way of economic survival is a theme that is of particular interest to the ongoing freelance artists in the group.



"I myself have never had much talent as far as art is concerned, but I have always been fascinated by how creative, multi-layered and diverse works of art can be. I hoped that the project would help me to understand art better and possibly do some practical art work. Especially in the position of an engineer who needs to get in touch with many representatives of different groups, it's very important to broaden my horizon and get to know different perspectives."

LOY STIELNER



"Personally, I think it's essential, especially in the field of environmental engineering, not to limit one's own perception to the engineering point of view, but to adapt it to an environment that is constantly changing anyway."

MANUEL GERDON

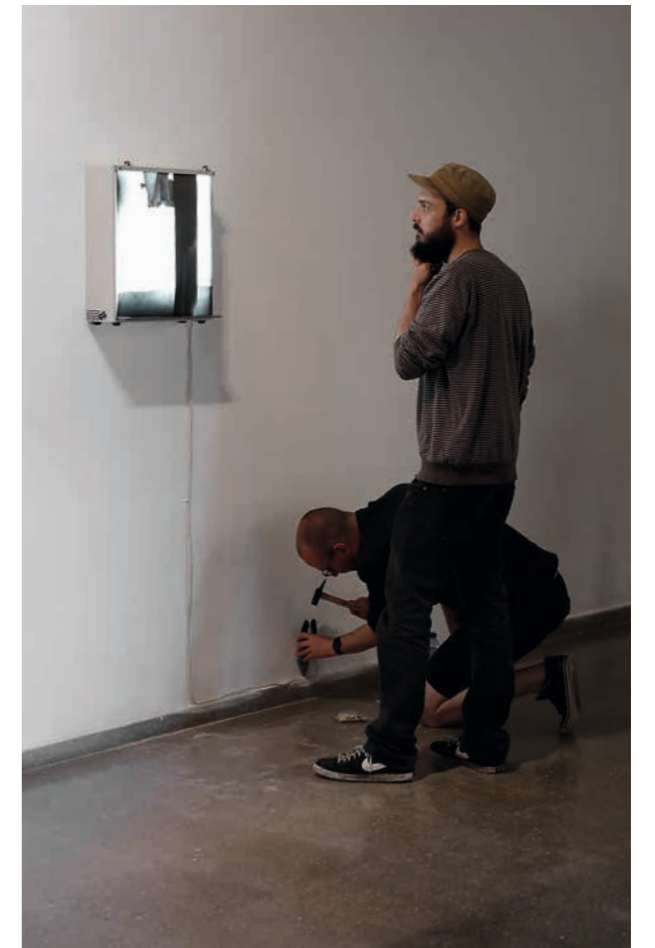
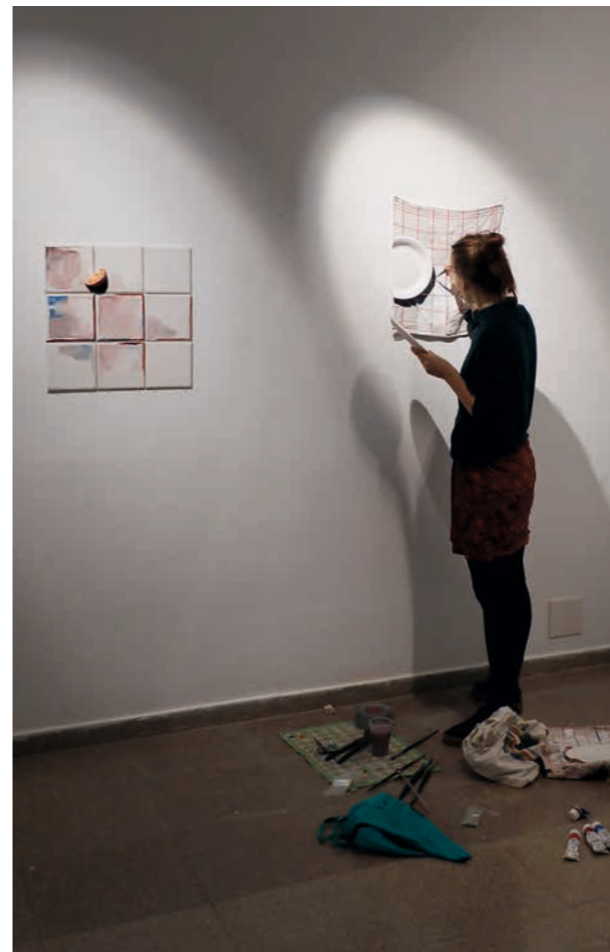
On excursion the participants document their experience in their own way and according to their disciplinary skill-set: note-taking, sketching, diary-writing, photographing, filming, interviewing and collecting material and stories. All of these activities mark time and record place. Artists working in ephemeral media like performance or temporary intervention are able to respond immediately to a new situation. Others need time for the translation of experience into new work, after a period of reflection. In the evenings we are often dealing with aspects of basic survival: finding and cooking food and recovering from the day-long bombardment with input. We cook and eat together and then informally discuss events and the impressions of the day. At times we formalize a meeting, writing a protocol, or asking a set series of questions that focus on what has been seen and experienced.

Spending time together and creating space for discussion is the first step in joint research and problem-solving. This experience may well lead to the discovery of a common ground in the response, which could enable the next steps of setting goals and developing a strategy of intervention to bring about positive change. The goal of this collaboration between artists and environmental engineers is to investigate the similarities and differences in working methods and in doing so to broaden perception of both disciplines and to prepare the ground for collaboration – during university studies as well as later on in professional life.



THE BARCELONA JOURNEY

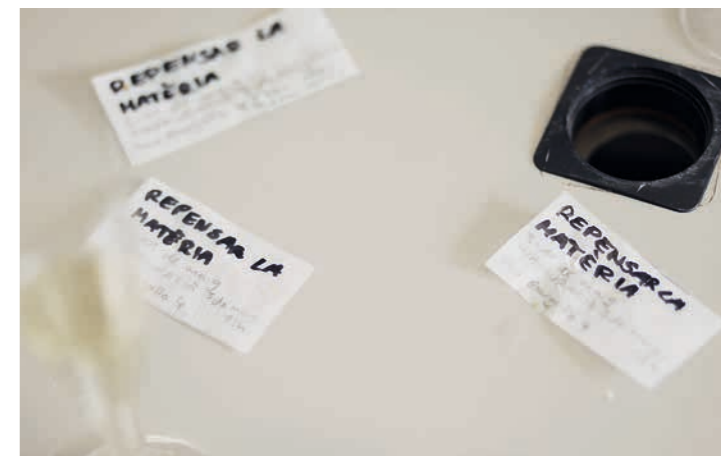


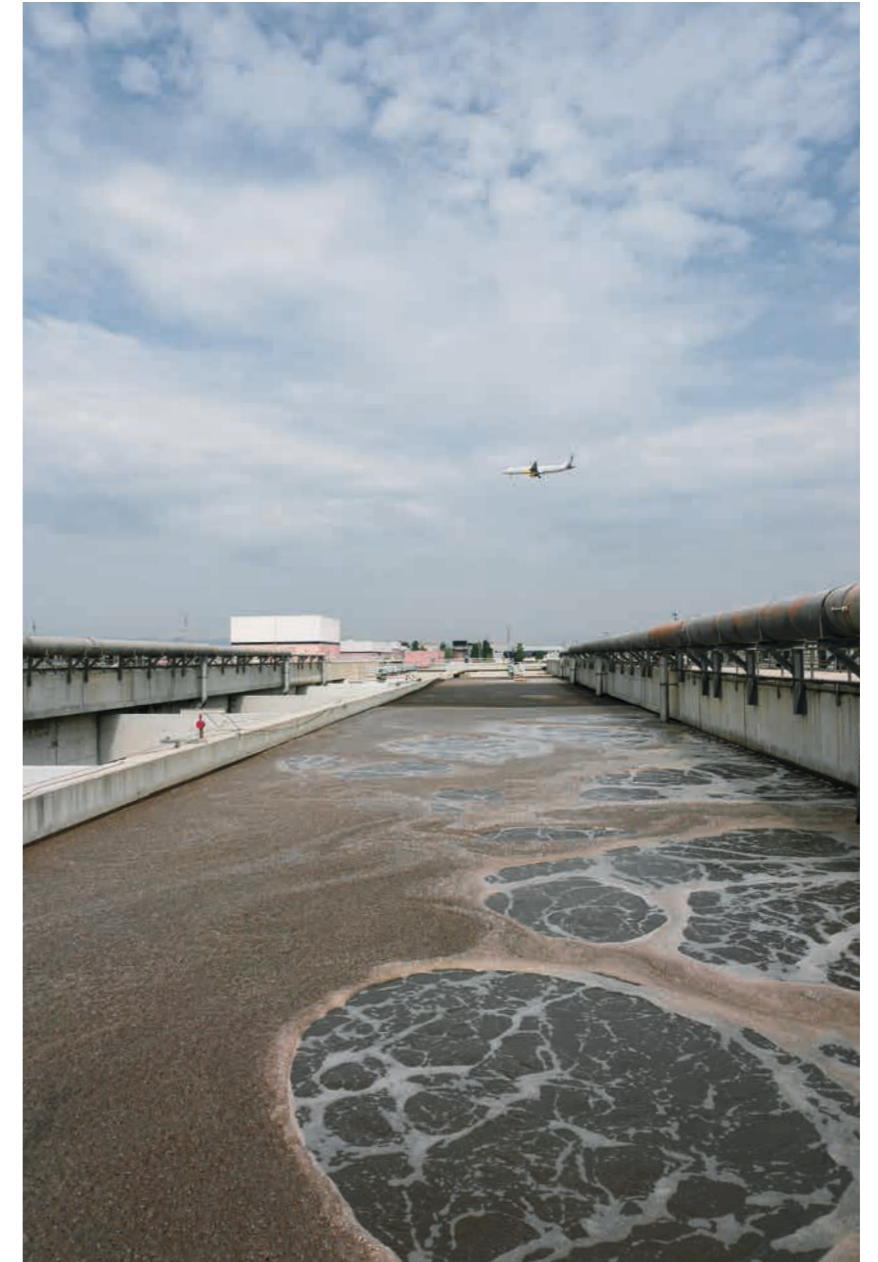


**SETTING UP
THE EXHIBITION AT
UNIVERSITAT
DE BARCELONA**



OPENING THE EXHIBITION AT UNIVERSITAT DE BARCELONA





VISITING THE BAIX LLOBREGAT WASTEWATER TREATMENT PLANT

Manuel Gerdon, Lena Klopstein, Miguel González Romo, Loy Stieler

Our visit to the city's second largest sewage treatment plant focused attention on Barcelona's infrastructure. The treatment plant is located at the mouth of the river Llobregat into the Mediterranean and treats about a quarter of the wastewater from Barcelona and other municipalities in the metropolitan region.

Since the 1970s, there has been an intrusion of seawater into the aquifer of the Llobregat Delta due to intense groundwater use. There is a danger, therefore, that one of Barcelona's largest freshwater reservoirs will become increasingly salinated due to the ingress of seawater.

Currently, an attempt is being made to stop this effect using a hydraulic barrier. 14 injection wells were installed for this purpose, pumping purified and treated wastewater into the aquifer in order to raise the water level and prevent the inflow of seawater. At the same time, groundwater recharge is promoted^[1].

This measure illustrates the fragility of water supply to Barcelona – one of the most densely populated cities in the world – and the effort required to preserve it for the decades to come.

SOURCE

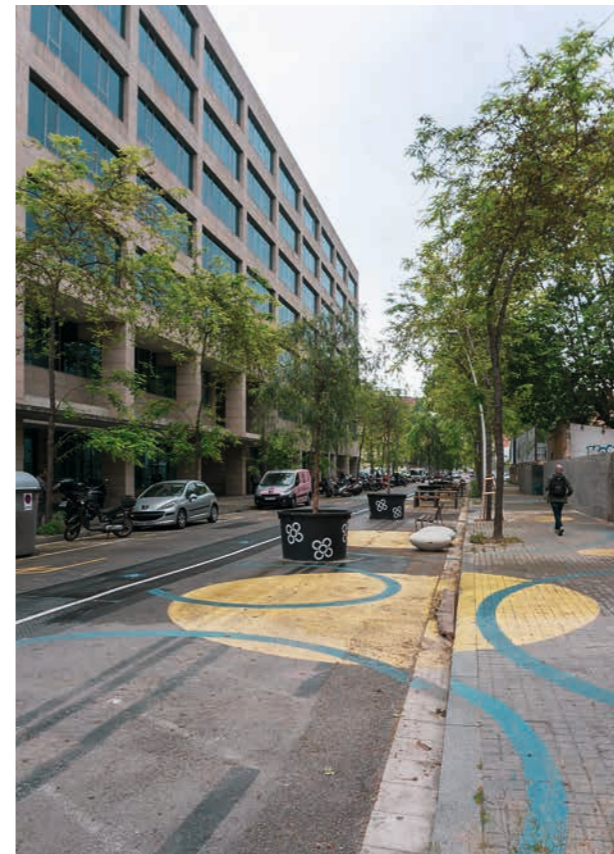
[1] EDAR Baix Llobregat. 2018. Aigües de Barcelona. 2018. Information leaflet for visitors to EDAR Baix Llobregat.



EXPLORING THE CITY'S INFRASTRUCTURE

Manuel Gerdon, Lena Klopstein, Miguel González Romo, Loy Stieler

In order to give the artists a better understanding of Barcelona's infrastructure, a bike tour was planned to some special features of the 'smart city' Barcelona – perceiving infrastructure directly and being part of it was an experience in itself. The aim was to discover Barcelona's innovative infrastructural elements, getting to know the city from a cyclist's perspective. The 'BCN smart city tour' smart phone app offered free of charge by Barcelona City Council was very helpful. It provides the user with interesting facts about Barcelona's development into a technologically advanced city.



Considering that in April there are far fewer tourists in the city than during the main season, one quickly becomes aware that despite a widespread bicycle rental system and specified cycle tracks, Barcelona is far from being a bike city. The cycle track network in Barcelona is well-developed on certain sections of the route, but if you attempt to deviate from those main paths, a small bike ride turns into a big adventure.

As well as smaller destinations like Wi-Fi columns, bike-sharing stations and noise measurements, our main objective was the super block 'Superilla del Poblenou'. This is a traffic-calmed area extending over three times three hous-



ing blocks. The roads are only open to cars in one direction and there is a speed limit of 20km/h. Cyclists can ride on a very small, two-direction cycle path. Most of the area and the major crossroads are used for the residents' recreation and relaxation. The road is designed with great variety and offers plenty of opportunities for children, e.g. a small race track or several playgrounds.



VISITING 'LA FÀBRICA DEL SOL' AND THE EXHIBITION 'BEEHAVE'

Manuel Gerdon, Lena Klopstein, Miguel González Romo, Loy Stieler

La Fàbrica del Sol

'La Fàbrica del Sol' is not only a building supplied with energy, electricity and water in the most environmentally friendly way possible; it is also a place where every employee is motivated to improve something in the city. The electricity is generated by solar panels and the building is heated using pellets. The seminar room is supplied with fresh air by many plants and modern technology, and this demonstrably promotes the employees' thought processes. On the roof there are different plants, and according to the operators' own statement, no gardener is necessary. Under the plant beds and floor slabs there is a huge rainwater storage tank. There is also a collector on the roof to bundle



daylight and direct it into the building via fibre-optic cables. Everyone is welcome in the freely accessible labs. Their use is free of charge, but a small return service is expected; helping others, for example, or imparting one's own knowledge to others. 'La Fàbrica del Sol' works through the citizens' ideas and engagement.

Beehave

In the Fundació Joan Miró at the foot of Barcelona's local mountain Montjuïc, we visited the art exhibition 'Beehave'. The exhibition began in front of the building with the work '1000 flors' by Pep Vidal, a flower bed planted with a thou-



sand plant species that are native to Catalonia, but are rarely to be found in such a concentrated form. The reference to the proven death of insects made it apparent that 'Beehave' also addressed man-made environmental problems. Upon entering the exhibition, the visitor was invited to immerse himself in the world of honeybees. Only a few moments later one literally took the viewpoint of a bee collecting pollen. The installation 'Relaciones mutualistas' by the Mexican artist Jeronimo Hagerman consisted of several hanging glass spheres opened downwards and filled with flowers. If you put your head into one of these glass spheres, you will first be surprised by a very intense scent of flowers, and for a moment you actually have at least a small idea of how bees perceive our world.

The work 'Swarms' by Xavi Manzaneres and Àlex Muñoz conveyed another experience from the realm of bees. On the honeycomb platform, which transmits vibrations, visitors can take a seat and listen to the sounds of a bee colony through headphones. Those who engage in this process are offered a vivid idea of the processes within a colony of bees. The exhibition took place from 16 February to 21 May 2018.

BARCELONA
INSIGHTS FROM THE EXCURSION PARTICIPANTS

26



"I was surprised in a positive sense by the exhibition's effect as a whole. Even though each artist worked for himself, the outcome was an exciting overall picture."

LOY STIELER



"The biggest obstacle in practical cooperation between artists and environmental engineers is the different intentions being pursued. Some of the objects exhibited in Barcelona have a broad scope for interpretation, but in my view a joint, final work should handle a topic with obvious environmental relevance."

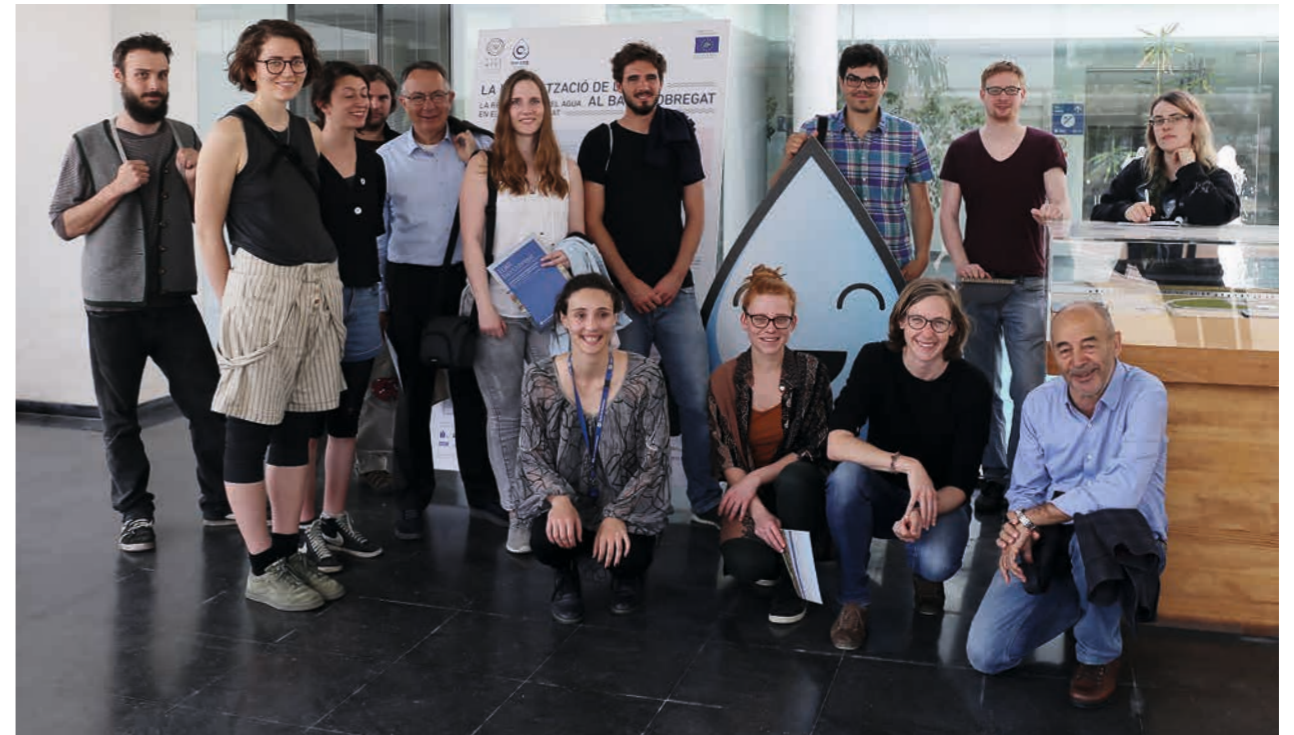
MIGUEL GONZÁLEZ ROMO



"The most surprising aspect for me was the positive feedback. There were comments implying the exhibition was completed by our contribution. Our posters were described as a haven of peace, inviting visitors to linger. There were also many questions from the artists about the topics addressed."

LENA KLOPFSTEIN

27



Visiting the Baix Llobregat wastewater treatment plant



Visiting the MACBA - Barcelona Museum of Contemporary Art

PARTICIPATING STUDENTS
AND PROFESSORS



Group picture in Khulna, Bangladesh 2019

CV's

MINA AMINI

was born in Iran in 1988. There, she studied painting before emigrating to Germany in 2012. She studied Fine Art under Prof. Liz Bachhuber at the **Bauhaus-Universität Weimar**. During her studies she twice received the *DAAD Award* for extraordinary commitment by international students and doctoral students. She completed her studies in Weimar in 2018.

Mina Amini works with topics such as sexuality, women's and children's rights, conflicts and wars. Her art incorporates ceramics, porcelain, bones, concrete, hair and wood. She uses various artistic media such as installation, sculpture, painting, photography, crochet and sewing. Her works have been exhibited in Europe, Iran, Japan and Bangladesh. She and her family have lived in Kassel since 2018.

P. 120 [W]

PROF. LIZ BACHHUBER

Sculptor and installation artist Liz Bachhuber is emerita professor of *Fine Art (Freie Kunst)* at the **Bauhaus-Universität Weimar**. Her research interests and artistic practice focus on the environment, with a particular emphasis on the found object in art and the global implications of unbridled consumerism and the resulting garbage. She has a history, in the tradition of the **Bauhaus-Universität**, of working at the intersection of art and science in collaboration with environmental engineers.

Her long-standing interest in politics, recycling and technology led to the following research projects and exhibitions: *'Das Müll Projekt'*, 1993; *'Flottsam and Jetsam'*, 2001 and *'Entrop(H)y: Garbage and Art'*, 2011 and *'Border City – chapter 1 & 2'* 2015, 2018 in collaboration with the *Chair for Waste Management / Biotechnology in the Resource Economy* at the **Bauhaus-Universität**. In 2001–2011 she founded and headed up the English-language, international MFA-Program *'Public Art and New Artistic Strategies'* with the support of the *DAAD*.

She has also spearheaded the interfaculty and international collaboration between Art, Environmental Engineering and Urbanism in the *DAAD 'Strategic University Partnership'* with the **University of California San Diego**.

P. 122, 123 [W] P. 11 [T]
www.liz-bachhuber.com

TOBIAS BAUS

was born in Bad Salzufflen, North Rhine-Westphalia, in 1993. His career in engineering started after he had finished training as a carpenter in 2013. He started to study civil engineering at the **HTWK-Leipzig** in 2014 and finished his studies as a construction and property / facility manager at the **Hochschule Mainz** in 2018. Since then he has been studying environmental engineering at the **Bauhaus-Universität Weimar** with a focus on biotechnology in resource management. He sees his future in engineering solutions for development aid abroad.

P. 124, 125, 126 [W] P. 98, 102, 110 [T] P. 95, 113 [ST]

CLARA LUISE BERNHARD

Born 1998 in Bielefeld – the hometown of Dr. Oetker and his famous baking powder – was raised in the provinces of North Rhine-Westphalia, and Thuringia. She grew up in a flat partly converted into a greenhouse, and also spent some time in an ecovillage in the Spanish mountains, as well as a year in an old watermill beside a small, but sometimes raging stream, surrounded by dogs, cats, free range chickens, ducks, horses and even donkeys.

Clara's early interests were in dying trees, tree stumps and fine arts, but also death and ruins – therefore, at the age of 8, she made her mother and her grandpa arrange a trip to Pompeii. She started participating in art courses (painting, modelling, film) and also took lessons in violin, harp and workshops in advanced computing. In 2010 she participated in the project *'Lutherweg'*, in 2012 she won a prize at a Thuringian film festival.

Clara finished school in 2015 and received a grant for a student exchange program in Kumamoto, Japan. Afterwards, she spent a year at the **Musik- und Kunstschule der Stadt Bielefeld**, in the autumn of 2017 she started studying Fine Arts at the **Bauhaus-Universität Weimar**.

Nowadays, her interests cover both dead and living plants and their connections to people, Japan, travelling, and the future of life on earth. Her latest projects include a church-window made out of plastic waste, a concept for a patient-tract of a children's hospital, and a computer game set in the dystopian future of Bauhaus.

P. 128 [W] P. 94, 112 [ST]

GREGOR BIASTOCH

Born 1991 in Speyer, has been studying environmental engineering at the **Bauhaus-Universität Weimar** since 2012. To specialize in the field of municipal waste management and sanitation he intensified his studies in Salamanca, Spain and Bangkok, Thailand. He is employed as a research assistant for two years at the *Chair of Biotechnology in Resource Management*, researching into anaerobic treatment, renewable bio-resources and the evaluation of biodegradability. The circular economy and recycling management are his principles and the guideline for his work. Aware that natural resources are limited, he is trying to close gaps and evaluate sustainability from the perspective of an engineer.

P. 50, 76 [T] P. 43, 88 [ST]

CHRISTIAN CLAUS

was born in Leinefelde, Germany in 1987. He lives and works in Erfurt and Weimar. From 2004 to 2011, he did training and worked as a chef. From 2012 to 2018, he studied Fine Arts at the **Bauhaus-Universität Weimar**. In 2016, Christian Claus studied painting and sculpture at **Pratt Institute New York City**. Among other things, he has received a promotional award from the *Cusanuswerk* and an artist's grant from the *Cultural Foundation of the Free State of Thuringia*.

From 2013 to today, Christian Claus has participated in a series of exhibitions. Among other things, these have included two years in a row at the international art fair 'Position' during *Berlin Art Week* and in renowned galleries in Berlin, Erfurt, Munich, Weimar and the Netherlands.

P. 130, 131 [W]
www.christian-claus.net

SYLVIA DEBIT

was born in Roanne, France. After finishing her bachelor in Product Design in Nîmes in 2010 and in Eco Design in Besançon in 2011, she came to Germany. Here, she worked for one year as a product designer at Schedel Bad+Design in Saxony, before moving to Weimar to participate in the master's program *'sustainable product cultures'* at the **Bauhaus-Universität Weimar**. She finished a study focusing on preserving and / or rehabilitating shopping facilities in rural places. Within a semester project together with Anniek Vetter, she developed the concept for the *P-BANK* in 2013. They participated in several contests and received the *'Universal Design Expert Favorite'* in 2015. She then started to develop the project *P-BANK* further with Anniek Vetter and Michel Riechmann. They have received support from the *neudeli Start-Up Hub* in Weimar.

In her project she aims to use design to make people aware of societal and environmental issues and to support the change towards sustainable consumption, making it attractive.

P. 132 [W]

HANS PETER FAJARDO SALMON

was born in Salzburg, Austria in 1985 and grew up in Guayaquil, Ecuador. Until 2014, he studied sports science and economics at **Martin-Luther-Universität Halle-Wittenberg**, Germany. From September 2014 to March 2018, he studied environmental engineering and renewable energy at the **University of Applied Science (WHZ)** in Zwickau, Germany. From April 2018, he continued to pursue his studies in environmental engineering and municipal waste management at the **Bauhaus-Universität Weimar**. In February and May 2019, he collaborated with other engineers and artists on the *'REASSESSING MATERIAL' Project*, exhibiting works of art in Khulna City, Bangladesh and Rome, Italy.

He sees his professional future in regional waste management in East Thuringia, Germany. This will include the collection, transport and treatment of 'waste' to manage the resources recovered from it.

P. 124, 125, 126 [W] P. 62, 98, 102, 110 [T] P. 44, 88, 95, 112 [ST]

CLARA FREUND

was born in Weimar (Thuringia) in 1991. She has been involved in art since her youth. Initially, it was in the form of culinary art. She sees working with food and its forms and colours as being like creating a painting. The kitchen corresponds to a studio full of organic material, consistencies, tastes, and aromas.

This was followed by social studies. The key issues concerning her are still the design of cooperation, relationships, friendships and the supervision of a son, now five years old. The questions she keeps asking herself are: How do we want to live? Do we follow the given or do we create something new? Do we also incorporate the artistic into the way we are shaping life and society?

Since 2016, she has been studying Fine Art at the **Bauhaus-Universität Weimar**. During her studies she moves between object, sculpture and installation. Her works of art are based on found, broken, discarded, supposedly 'dead' objects. Through the process of reassembling and reconnecting, supplementing with other materials and transforming, the found objects are brought to life or exhibited unchanged as ready-mades.

P. 134 [W]

DAVID GAECKLE

was born in Southern Germany, in Heilbronn (Baden-Wuerttemberg) in 1988. After his apprenticeship as a mechatronic he went a bit further south for a one year in the civil service in the Austrian alps. From 2011 to 2015, he studied water resources management at the **University of Applied Forest Sciences** in Rottenburg, where he developed his longing to travel and visit foreign countries while working on his practical semester in Brazil. After finishing his bachelor's degree he started studying environmental engineering sciences at the **Bauhaus-Universität Weimar**, where he also began to teach environmental education courses on sustainability at numerous schools in Thuringia. From 2017 to 2018, he spent a one year exchange in Cambodia, where he worked on a term paper about groundwater issues around an unprotected municipal solid waste dump. In his leisure hours, David likes spending time outside, photographing landscapes and nature.

P. 124, 125, 126 [W] P. 98, 102, 110 [T] P. 94, 112 [ST]

CAROLIN GASSE

was born 1992 in Werl, Northern Westfalia. From 2012 to 2013, she studied performing arts and theatre at the **University of Strasbourg**. In 2014, she moved to the **Bauhaus-Universität Weimar**, where she is still pursuing her studies in Fine Arts. She has won various prizes with her work, such as the *Grafe Kreativpreis*, awarded during the annual exhibition at the **Bauhaus-Universität**, and the art award of *Berlin Hyp*. Her work has been featured in gallery exhibitions and at art fairs in Erfurt, Weimar, Berlin, Bonn and Jena. She is also an awardee of the *Cusanuswerk* since 2018.

Gasse's artistic work centres on interlacing different artistic media like photography, installation and painting – often playing with the viewer's perception. The content of these photographed paintings or painted installations is everyday situations, convivial gatherings or moments of intimacy and solitude. Through the use of mixed media she obtains an effect of confusion between fiction and reality, inside and outside, and mental and physical spheres.

P. 136 [W]

www.cargocollective.com/carolingasse

SAMIRA GEBHARDT

was born in Munich in 1995. After various activities, such as an internship in the workshop for stone sculpture at the **Academy of Fine Arts Munich** and participation in the *International Munich Art Lab*, she came to the **Bauhaus-Universität Weimar** to study Fine Art in 2015. Her interest in different disciplines, such as architecture and film, is reflected in her artistic work. She examines and changes the mechanisms and techniques of the medium / material slightly and thereby develops a fresh perspective. She understands her works as a dialogue with the material of spaces, with time. The material reveals who we are and where we stand. She finds connecting opposites and the resulting affinity or dislike of different materials / things / images the most exciting and joyful aspects in her work. She has already participated in several exhibitions outside Germany, for example in Italy, Spain, France and Bangladesh. In 2018 she received a scholarship from the *Studienstiftung des deutschen Volkes*. In the winter semester 2019 she will study at **Marmara University** in Istanbul.

P. 74, 138 [W] P. 45, 89 [ST]

EXPLANATION

[W] Work [T] Text [ST] Statement

CV's

MANUEL GERDON

was born in Landau (Rhineland-Palatinate) in 1988 and raised in a village close to the French border. He studied mechanical engineering at **Trier University of Applied Sciences** and environmental science at the **University of Koblenz-Landau** (*Landau campus*). During his studies he worked 3 years for the *Institut für Umweltstudien* in a monitoring project which took place in *Philippsburg Nuclear Power Plant* and 2 years as a bartender in Cologne, where he moved in 2014. In 2015, he finished his bachelor degree, bought a motorbike and shipped it to Santiago de Chile, South America to start a journey of 40000 kilometers across the continent. During this period he realized the increasing demand for clean water, especially in rural areas and isolated indigenous settlements. In 2017, he decided to go back to Germany to continue his studies. He moved to Weimar for a master's degree in environmental engineering at the **Bauhaus-Universität Weimar**. In January 2019, he moved to Berlin for an internship at the *Berliner Wasserbetriebe*, where he got the chance to extend his voluntary period in order to write his master's thesis about optimization possibilities in the field of biological wastewater treatment.

P. 70, 140, 156 [W] P. 20, 22, 24, 32 [T] P. 12, 44, 89, 116 [ST]

ILONA GERLACH

was born 1988 in Geseke (NRW). In 2009 she did an apprenticeship as a carpenter. After 3 years of working in different companies as a carpenter, boat builder and drywall builder, she started her studies in Weimar at the **Bauhaus-Universität** in 2015. She finished her studies at the beginning of 2019 with a bachelor of science in civil engineering. Since then she has been working on her master in environmental engineering at the **Bauhaus-Universität**.

P. 124, 125, 126 [W] P. 98, 102, 110 [T] P. 95, 113 [ST]

MIGUEL GONZÁLEZ ROMO

was born the son of a German mother and a Spanish father in Höxter (North Rhine-Westphalia) in 1992. After graduating from school he took part in the development volunteer service *weltwärts* and spent a year working in a social project in Peru's capital Lima. He decided to study for a bachelor of civil engineering at the **Bauhaus-Universität Weimar** in 2013. Impressed by experiences made in Peru, he then specialized in the field of environmental engineering. His master studies, in which he is focusing on waste management and urban water management, have led him to the **Universitat Politècnica de València** and to exhibitions in Barcelona, Spain and Khulna, Bangladesh.

P. 140, 156 [W] P. 20, 22, 24, 32, 78 [T] P. 11, 26, 32, 45, 89, 117 [ST]

ANDREAS GRAHL

was born in Karl-Marx-Stadt, a workers' town on the easternmost edge of Germany, in 1981. He barely made it through 10th grade, after which he began living on the streets and hired himself out as a day labourer. From 2003 to 2006, he learned the profession of a carpenter, and from 2007 to 2011, he went on his travels as a 'foreign and free' carpenter. Until 2014, he worked as a freelance carpenter, fire acrobat and circus teacher. Since then he has devoted himself to art studies and the *'Manifesto of Uselessness'* at the **Bauhaus-Universität Weimar**. From one state of identity to the next. He moves between dilettantish photography, installation and performance. Hardly capable of isolating anything, always including everything, he can only name the topics that occupy him. The awkward fumbling of our species and its uselessness interweave into a game which tickles everything out of the viewer while stimulating him at the same time.

P. 74, 82, 84, 90, 142, 143 [W] P. 43 [ST]

CHRISTOPH HAUPT

was born in Bad Langensalza (Thuringia) in 1989 and trained as a wood sculptor at the **State College for Wood Sculptors** in Bischofsheim / Rhon from 2005 till 2009. In 2010, he took his master craftsman's diploma in wood sculpture in Empfertshausen. Then he worked as a freelance sculptor in Fulda / Hesse, sharing a gallery with a fellow artist in Fulda. In 2014 he received a one-year scholarship and the first cultural promotion award from the town Heilbad Heiligenstadt (Thuringia). 2015, he started his art studies at the **Bauhaus-Universität Weimar**, which he will finish in 2020. Since 2018 he has lived and worked in his own art studio in Heiligenstadt. His works reflect upon tradition and the loss of environment and social identities. The central elements of his works are focused on specific social systems of human existence.

P. 144 [W]

THOMAS HAUPT

After studying civil engineering specialising in environmental engineering at the **Bauhaus-Universität Weimar** and a side trip into architecture, Thomas has been working as a scientific associate for the *Chair of Biotechnology in Resources Management* in the same place since 2005. His interest is mainly in material flows in general and the circular economy in particular. With a specialisation in anaerobic digestion, he is meanwhile, after completing a doctorate, the person responsible for laboratories and technical centres of the *Bauhaus-Institute for Infrastructure Solutions (b.is)*. Besides the topics mentioned, his teaching activities include the fields of waste management, biological process engineering, measuring control technology, and air pollution control.

P. 36 [T]

STEFANIE HÖRNLEIN

was born in Suhl (Thuringia) in 1986. After graduating, she completed an apprenticeship as an industrial clerk in the field of mechanical engineering. After several years of work experience Stefanie enrolled in the study program of environmental engineering at **Bauhaus-Universität Weimar**, graduating in 2015 with a Master of Science degree. During her undergraduate and graduate studies, she was a student assistant at the *Chair of Urban Water Management and Sanitation*. In various research projects at the *Bauhaus-Institute for Infrastructure Solutions (b.is)* she gained extensive knowledge in source separation of wastewater flows and the subsequent treatment. Since 2016, she has been a research associate at the *Chair of Urban Water Management and Sanitation*, working with Prof. Jörg Londong. In addition to teaching wastewater treatment and process simulation, she was involved in teaching and research in Ethiopia and South Africa as part of the networking projects *IN3* and *WAT-NET*. At the moment, she is working in the *P-BANK project*, aiming to raise awareness of the growing scarcity of natural resources and the role of resource-oriented sanitary systems as an alternative to the conventional end-of-pipe system. As part of her doctoral thesis Stefanie is focusing on technical options for the implementation of wastewater source separation in existing buildings.

P. 132 [W]

VALERIE JOHNE

was born in Konstanz in 1990, beside beautiful Lake Constance in the very south of Germany. After finishing school, she moved to Berlin to study Geographical Sciences at the **Freie Universität Berlin**. She completed her bachelor's degree in 2014 and spent the following time travelling and working in different countries, for instance New Zealand. In 2015, she continued her studies in Environmental Engineering at **Bauhaus-Universität Weimar**, completing them with a master's degree. During her studies in Berlin and Weimar she got the opportunity to be part of exchange programs, which took her to Granada in Spain and Panama City. Since 2018, she has been working as a research assistant at the *Chair of Biotechnology in Resources Management* at the **Bauhaus-Universität**. She deals with topics related to the sustainable use of resources, especially treatment methods for digestates of agricultural biogas plants.

P. 124, 125, 126 [W] P. 106 [T]

SOPHIE KAMPF

Born in Heidelberg in 1991 to a German mother and a Swiss father, grew up in an intercultural context, constantly moving places. She picked up her first camera when she was 12 years old and over the years slowly developed her subject into conceptual photography. Through her photography, which she uses as an instrument to express emotions and visualize inner worlds, to capture the fleeting moments of which our life is composed, she emphasizes the interaction between nature and humanity, mostly dealing with their inevitable physicality in the purest form, the nude. In art school she focused more on expressing herself in video-performances, addressing current political and environmental issues. From 2010 to 2017, she studied psychology at the **Julius-Maximilians-Universität Würzburg**, as well as the **Universidad de Autónoma de Madrid**, Spain. After finishing her master's degree she chose to pursue her Fine Arts studies at the **Bauhaus-Universität Weimar**. Once she returns from a year abroad at the **Concordia University Montreal**, Canada, she will finish her Fine Arts diploma.

P. 146 [W] P. 94, 112 [ST]

KASPAR ELIAS KIMMEL

is a Fine Art student at the **Bauhaus-Universität Weimar**, born in 1978 and comes from the world of 'Denkende Hände'. In his work he deals mostly with the essence of being human. To do so, he likes to integrate industrial products into his works and strives for participative forms of work and perception. Besides his studies, Kaspar is dedicated to experimental housing construction. Here, the focus is on a responsible, individual and resource-conserving way of life.

P. 148 [W]

LENA KLOPFSTEIN

was born in Jena (Thuringia) in 1995. From 2013 to 2017, she completed a bachelor's degree in civil engineering, majoring in environmental engineering, at the **Bauhaus-Universität Weimar**. In 2017, she began her master's degree in Environmental Engineering with a specialization in traffic engineering at the **Bauhaus-Universität**. From November 2017 to June 2019, she was a student assistant at the *Faculty of Traffic System Planning*. Since June 2019, she has been working as a parental leave replacement in the city administration of Weimar as a traffic planner. After this, she plans to successfully complete her master's degree.

In the winter semester 2018 / 19, she led the course *bauhaus.mobil* together with her fellow student Maximilian Wunsch as part of the *Bauhaus.Semester*. During this course, 21 students from all 4 faculties, in 8 interdisciplinary groups, were able to make their contribution to improving sustainable mobility at the **Bauhaus-Universität Weimar**. The course was regarded as a pilot project and will be offered again by the *Chair of Traffic System Planning* as from the winter semester 2019 / 20. The course was based on Walter Gropius' motto: *"Let's want, conceive and create the mobility of the future together"*.

P. 140, 156 [W] P. 20, 22, 24, 32 [T] P. 11, 26 [ST]

EVA KONETZKI

was born in Frankfurt am Main in November 1984. After her education as Management Assistant for Real Estate and Housing, she worked 10 years for a real estate company in Frankfurt am Main. Subsequently, she completed her bachelor's degree in Construction and Property Management / Facilities Management in Mainz and after finishing she changed her course of study to Environmental Engineering at the **Bauhaus-Universität Weimar**. The *'REASSESSING MATERIAL-project'* was her first art project.

P. 124, 125, 126 [W] P. 98, 102, 110 [T] P. 95, 113 [ST]

PROF. DR.-ING. ECKHARD KRAFT

He is characterized by a continuous ambition to develop, implement and optimise engineering buildings and systems for a better use of biological procedures. His interdisciplinary work is mainly related to infrastructural applications. Hands-on experience with a real world engineering firm gave him a firm grasp of the challenges of negotiating scientific discovery and practical demands. The work in the research and science group of that office required knowledge-based innovations, and had to include practical implementation in the midterm. Presently, he holds a full professorship in *Biotechnology in Resources Management* at the **Bauhaus-Universität Weimar**, Germany. He is passionate about closing loops between energy and material. He works specifically on long-term emissions from landfilling, anaerobic treatment of faeces, organic waste and crops, creation of fundamental knowledge for a controlled anaerobic process and anaerobic biodegradation of pharmaceuticals and biopolymers. His work includes the technical realization of a mobile anaerobic system for use in underdeveloped regions and refugee camps. Having grown up in a socialist state, he will always see the importance of addressing socio-economic realities. To this end, he has completed several projects in developing communities in South-East Asia.

P. 38, 43 [T]

CV's

PROF. DR.-ING. JÖRG LONDONG

Studied civil engineering at the **RWTH Aachen**, specialising in urban water management, urban planning, and the transport sector. After completing a doctorate at the **RWTH**, he dealt with questions of water management at the *Wupperverband*. He has taught at the universities of Essen and Wuppertal, and since 2001 he has been Professor of Urban Water Management at the **Bauhaus-Universität Weimar**. His specialist fields of research are the resource-oriented handling of sewage and the development of transition concepts for technical infrastructure.

P. 132 [W] P. 64, 94 [T]

LEA MATTENKLOTZ

was born in Berlin in 1996. She works politically in Andalusia and regularly participates in international brigades to Almería. There, she supports the trade union *SOC-SAT* and labour disputes of migrants. Since 2017 she has been studying at the **Bauhaus-Universität Weimar**. Her political debate in Andalusia encourages her to set the precarious situations of the migrant population, exploitative structural systems and her experiences into the art context, in order to develop a new perspective on these themes and thereby make their political standpoints clearer. She works with analog photography, with found materials from Almería, combining them with materials discovered here or developing them further by using them for photographs or etchings.

In April 2019, while studying at the **Bauhaus-Universität**, she started a guest student group in Graphic Design at **Burg Giebichenstein**.

P. 150, 151 [W] P. 67 [T] P. 44, 88 [ST]

MICHAEL MERKEL

was born in Dresden (Saxony) in 1987. After professional training as a wood-carver, he studied German language and literature, cultural sciences and history of art in Dresden and Wrocław (Poland). Furthermore, he studied art at the **Academy of Fine Arts in Wrocław** and the **Bauhaus-Universität Weimar**. He has received several grants and prizes for his artistic work. Since 2018, Merkel has been coordinating the artistic program of the *GEHB* art space in Dresden.

P. 153 [W]

www.michael-merkel.eu | www.instagram.com/michael.merkel.art

TONIA SCHMITZ

Born in Luxembourg in 1986, Tonia Schmitz studied mechatronics (B.Sc. & M.S.c) in Ilmenau (Germany) from 2005 to 2011. Continuing shortly afterwards with studies at the **Bauhaus-Universität Weimar**, she finished in 2013 with a master's degree in environmental engineering at the *Chair of Biotechnology in Resources Management*. Currently, she is writing a PhD thesis on the cultivation and anaerobic treatment of macroalgae in land-based closed systems. As a research assistant at the **Bauhaus-Universität Weimar**, she is working on waste and resource recovery technologies, and investigates infrastructure systems and strategies adapted to quickly changing demographic and climatic circumstances. During several field trips in mixed artist-engineer groups, she has had the opportunity to test different approaches to perceiving real world problems and working on long term solutions with a new understanding of interdisciplinary cooperation.

P. 80, 140 [W] P. 58 [T]

LINDA SCHUMANN

was born in Zwickau (Saxony) in 1988. After completing her training as a design assistant, she began studying Fine Art at the **Bauhaus-Universität Weimar** in 2009. Following an exchange semester at the **Minneapolis College of Art and Design** in 2011, she graduated with a diploma in 2015. Since that time she has been working as a freelance artist, exhibition manager and lecturer, parallel to her work as an artistic associate in the department of Fine Art under Prof. Liz Bachhuber. She has worked for various art associations and taught on the subject of artistic material at **Liaocheng University**, China.

She explores the relationship between human beings and nature through materials and sensory perception. Her work is a inter-connection of strategies and approaches with different forms and shapes that are presented in objects, workshops, drawings and installations. The materials she uses vary from haptic, hypersensory and unusual to multimedia. One of the focal points of her research is the lovely disgust as an artistic strategy that can be found not only in various forms in many of her works, but also correspondingly in several essays. In addition to participating in national and international exhibitions, her works can also be found in publications and collections in Berlin and London.

P. 80, 154 [W] P. 30, 114 [T]

www.lindaschumann.de | www.instagram.com/linda.schumann

LOY STIELER

was born in Clausthal-Zellerfeld (Lower Saxony) in 1994. He attended elementary school in his hometown Altenau. In 2004, he started studying at the **Niedersächsische Internatsgymnasium** in Bad Harzburg. After his graduation from high school in 2012 he decided to complete a voluntary social year at **ApoCare**, a local institution for the daily care of senior citizens.

In 2013, Loy Stieler began his civil engineering studies at the **Bauhaus-Universität Weimar**. After various internships in the fields of geotechnic and hydraulic engineering, he decided to choose the specialization 'Environmental Engineering' and graduated with a bachelor degree in 2017. In the same year he started his master's degree in environmental engineering at the **Bauhaus-Universität**. In 2019 / 2020 he took part in the *Erasmus+* program and studied one semester at the **Universitat Politècnica de València** (UPV) in Valencia, Spain.

P. 140, 156 [W] P. 20, 22, 24, 32 [T] P. 12, 26, 32 [ST]

RIEKO TSUJI

Born in Tokyo in 1991, she received her BFA from **Kyoto University of Art and Design** in Japan. She also studied at **Zurich University of the Arts** in Switzerland and the **Bauhaus-Universität Weimar** in Germany as an exchange student. She received her MFA from the *Global Art Practice program* at **Tokyo University of the Arts** in March 2019.

Since she has travelled abroad frequently in recent years, she has been researching the communication between people who live far apart via digital methods such as social media and video calls. Her artwork is mostly based on less-known narratives like her own personal experience, which she tries to make sharable with an audience.

P. 158 [W]

www.riekotsuji.com

ANNIEK VETTER

was born in Eindhoven, the Netherlands in 1988. After finishing her bachelor degree in Industrial Product Design at **The Hague University of Applied Sciences**, she moved to Germany and continued her studies at the **Bauhaus-Universität Weimar**, in the master's program 'sustainable product culture' of the *Faculty of Design*. In 2016, she was able to develop the study project the *P-BANK* further – together with Sylvia Debit and Michel Reichmann – with the support of the *neudeli Start-Up Hub program*. Since 2017, she has also been working on several other projects, mostly related to sustainability and social design.

At the beginning of 2019, the *P-BANK* received funding from the *German Federal Environmental Foundation (DBU)* and, as a member of the Faculty of Civil Engineering of the **Bauhaus-Universität Weimar** under the lead of Prof. Jörg Londong, she has been working on the design and construction of the first *P-BANK*.

P. 132 [W]

FLORIAN WEHKING

was born in Westerstede (Lower Saxony) in 1982. From 2001 to 2003, he studied political science, philosophy and German philology at the **Carl-von-Ossietzky-University Oldenburg**. Until 2009, he continued to pursue his studies in visual communication at the **Bauhaus-Universität Weimar**, where he has been working as a freelance filmmaker, photographer and graphic designer since 2010. Since 2015, he has also been an artistic associate in the *Faculty of Fine Art* and *Faculty of Civil Engineering*, working with Prof. Liz Bachhuber and Prof. Jörg Londong.

Various of his film works have received awards at film festivals and have been broadcast by *ORF* and *MDR*. Among other things, he received a grant from the *Thuringian Graduate Promotion Fund of the Free State of Thuringia* and an artist's grant from the *Cultural Foundation of the Free State of Thuringia*.

His works relate to the everyday survival of people on the edge of society. The political and social context is always an essential aspect, aiming to create empathy with the other – without which it proves impossible to live together.

P. 86, 160 [W] P. 116 [T]

www.instagram.com/f.lo.w

MAX WEISEL

was born in 1986 in Rosenheim, a small town in Upper Bavaria. From 2008–2012, he trained as an artist blacksmith. Until 2014, he worked as a journeyman in this profession. From 2014, he studied Product Design at the **Bauhaus-Universität Weimar**. In the third semester, he completed a Fine Art project under Prof. Liz Bachhuber and later switched fully to studying fine art.

From then on, he has built apparatuses that breathe, bent steel, while dealing with anatomy and drawing filigree figures or forms in space using round steel profiles or laths. He has a continuing interest in movement and dynamics, the shadows of objects, and the sounds they make.

P. 162 [W]

PHOTO CREDITS

All pictures (especially in chapter Works) are taken by Florian Wehking.

Except:

P. 12 (top), *P. 20* (top left), *P. 21* (top left), *P. 22* (top), *P. 23* (top left and right), *P. 24* (top right; bottom left and right), *P. 26* (middle right and bottom left), *P. 27* (top) by Prof. Liz **Bachhuber**;

P. 47 (top right), *P. 49* (top left), *P. 64* (bottom left), *P. 68* (middle left), *P. 69* (middle right) by Gregor **Biastoch**;

P. 2 (top right) by Christian **Claus**;

Graphic on P. 62, P. 110, P. 111 (top, middle and bottom left; bottom right) by Hans Peter **Fajardo Salmon**;

P. 20 (bottom right), *P. 74–75* by Samira **Gebhardt**;

P. 15 (second from above right), *P. 23* (bottom right), *P. 25* (bottom left), *P. 49* (bottom right), *P. 79* (left) by Manuel **Gerdon**;

P. 20 (bottom left), *P. 22* (bottom left), *P. 24* (top left)

by Miguel **González Romo**;

P. 61 (top left), *P. 74–75, P. 82–85* by Andreas **Grahl**;

P. 94 (bottom middle and right), *P. 95* (bottom right), *P. 96* (middle right), *P. 97* (bottom left and right), *P. 100* (bottom right), *P. 101* (top left and middle right), *P. 107* (middle left), *P. 113* (bottom middle),

P. 124 (top) by Christoph **Haupt**;

P. 96 (top), *P. 107* (top), *P. 109* (top right), *P. 125* (top) by Valerie **Johne**;

P. 11 (top), *P. 14* (bottom right), *P. 15* (second from bottom right),

P. 20 (middle right), *P. 21* (bottom left and right), *P. 23* (bottom left),

P. 25 (top left and right) by Lena **Klopfstein**;

P. 46 (bottom right), *P. 47* (second from above right and bottom right),

P. 49 (middle left and right; top right), *P. 53* (middle right), *P. 57*

(middle right), *P. 60* (bottom, middle and top left; top right), *P. 61*

(top right), *P. 68* (bottom and top left; bottom, middle and top right),

P. 69 (top and bottom right), *P. 73* (middle left), *P. 76* (bottom left

and right), *P. 77* (top left; bottom left and right), *P. 78, P. 88* (bottom

and top right), *P. 89* (bottom right), *P. 95* (top left), *P. 107* (bottom

left), *P. 109* (middle left), *P. 111* (top right) by Prof. Jörg **Londong**;

P. 15 (bottom left) by Michael **Merkel**;

P. 47 (middle left), *P. 58, P. 59, P. 77* (top right) by Tonia **Schmitz**;

P. 17 (top right), *P. 20* (top right), *P. 22* (bottom right), *P. 25* (middle

left), *P. 27* (bottom), *P. 33, P. 47* (bottom left and second from

bottom right), *P. 57* (bottom left), *P. 60* (bottom right), *P. 61* (bottom

right), *P. 66, P. 77* (top middle), *P. 80–81* by Linda **Schumann**.

The work '*Snow Flakes*' by Liz Bachhuber on page 122 is photographed

by Eva-Maria Löffler, Stuttgart and Robert Seitz, Los Angeles.

IMPRINT

EDITORS Prof. Dr.-Ing. Eckhard Kraft, Prof. Liz Bachhuber,
Prof. Dr.-Ing. Jörg Londong

EDITORIAL TEAM Florian Wehking, Prof. Dr.-Ing. Eckhard Kraft,
Prof. Liz Bachhuber

TRANSLATIONS & PROOFREADING Dr. Lucinda Rennison

DESIGN COVER & CHAPTER Florian Wehking

DESIGN & LAYOUT zebraLuchs, Weimar + Leipzig & Rosa Linke

PICTURE EDITOR / PHOTO EDITING Florian Wehking

ORGANISATION EXHIBITION & FIELD TRIPS BARCELONA

Linda Schumann, Àngels Viladomiu, Prof. Liz Bachhuber,
Florian Wehking

ORGANISATION EXHIBITION & FIELD TRIPS WEIMAR

Prof. Liz Bachhuber, Prof. Dr.-Ing. Eckhard Kraft,
Linda Schumann, Florian Wehking, Thomas Haupt, Tobias Wätzel,
Prof. Dr.-Ing. Jörg Londong

ORGANISATION EXHIBITION & FIELD TRIPS KHULNA

Tonia Schmitz, Prof. Dr.-Ing. Eckhard Kraft, Prof. Liz Bachhuber,
S. M. Tariqul Islam, Robi Shohag, Florian Wehking

ORGANISATION EXHIBITION & FIELD TRIPS ROME

Valerie Johné, Mary Angela Schroth, Sara Esposito,
Prof. Liz Bachhuber, Linda Schumann, Florian Wehking

CONTACT

Bauhaus-Universität Weimar

Prof. Dr.-Ing. Eckhard Kraft
Biotechnologie in der Ressourcenwirtschaft
b.is Bauhaus-Institut für zukunftsweisende Infrastruktursysteme
Coudraystr. 7
99423 Weimar
Germany
www.uni-weimar.de

Universitat de Barcelona

Dra. Àngels Viladomiu
Facultat de Belles Arts
Pau Gargallo, 4
08028 Barcelona
Spain
www.ub.edu

Khulna University of Engineering & Technology (KUET)

Muhammed Alamgir, Ph. D., Post Doc.
Ex. Vice-Chancellor of KUET (21.07.2010 to 02.08.2018)
Professor of Geotechnical & Geoenvironmental Engineering
Department of Civil Engineering
Telegati Road, Fulbari Gate, Khan Jahan Ali Thana
Khulna 9203
Bangladesh
www.kuet.ac.bd

Sala 1 – Centro Internazionale d'Arte Contemporanea

Mary Angela Schroth
Piazza di Porta San Giovanni, 10
00185 Roma
Italy
www.salauno.com

ISBN 978-3-95773-282-8

Alle Rechte, auch des auszugsweisen Nachdruckes, der auszugsweisen oder vollständigen Wiedergabe, der Speicherung in den Datenverarbeitungsanlagen und der Übersetzung, vorbehalten.

Bibliografische Information der Deutschen Nationalbibliothek: Die Deutsche Nationalbibliothek verzeichnet diese Publikation in der Deutschen Nationalbibliografie; detaillierte bibliografischen Daten sind über <http://d-nb.de> abrufbar.

BAUHAUS

UNIVERSITÄTSVERLAG

Bauhaus-Universitätsverlag Weimar
als Imprint von arts + science weimar GmbH
www.asw-verlage.de

© 2019 for texts and images with the authors and artists.

Printing House Beltz, Bad Langensalza

Paper RecySatin® 150 g/qm – FSC

Cover Circleoffset Premium White 300 g/qm – FSC

Edition 1000 pieces

We would like to thank our international partners who supported us in the exhibitions: Àngels Viladomiu (Universitat de Barcelona), Prof. Muhammed Alamgir (KUET / Khulna), Mary Angela Schroth (Sala 1 / Rom)