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)
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

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 Klopfsen, Loy Stieler et al.
22–23 —→ Exploring the city’s infrastructure / Lena Klopfsen, Loy Stieler et al.
26–27 —→ Insights from the excursion participants

Weimar / Germany
28–29 —→ ‘summaery’ – Annual students’ work exhibition of the Bauhaus-Universität Weimar / Linda Schumann
30–31 —→ Exercises in perception – a course in drawing for environmental engineers and artists / Manuel Gerdon, Miguel González Romo, Lena Klopfsen, Loy Stieler
32–33 —→ Visiting the ‘Biplan GmbH’ – Großenlüber [Fudal] / Thomas Haupt
34–35 —→ Laboratory Workshop / Prof. Eckhard Kraft

Khulna / Bangladesh
40–41 —→ 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 London
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
Rome / Italy

92–93 —Pecunia non olet / Prof. Jörg Londong

Statements: Expectations of the excursion participants

94–95 —The Rome Journey

96–97 —Reassessing Material – From fermentation residue to fermentation product / Tobias Baus, Hans Peter Fajardo Salmon et al.

98–99 —Setting up the exhibition at Sala 1

99–100 —Symposium ‘Reassessing Material’ at the University of Rome – Sapienza

101–102 —The opening of the exhibition at Sala 1

103–104 —Between ancient glory and the present day – a look at Rome’s infrastructure / Valerie Johne


107–108 —Insights from the excursion participants

109–110 —Art and other misunderstandings – learning from an interdisciplinary exhibition / Linda Schumann

111–112 —What it’s worth!? / Florian Wehking

113–114 —Works of art and exhibits of environmental engineers

114–115 —Homeland / Mina Amini

116–117 —Snowflakes & Selfportrait with Suitcase / Prof. Liz Bachhuber


120–121 —Play the circle of nutrients / Tobias Baus, David Gaeckle, Ilona Gerlach, Hans P. Fajardo Salmon et al.

122–123 —Wardian Suitcase / Clara Luise Bernhard

124–125 —yellow lamp & o. T. / Christian Claus

126–127 —P-Bank / Sylvia Debit, Stefanie Hörmlein, Prof. Jörg Londong, Anniek Vetter

128–129 —Anthropocene artifacts / Clara Freund

130–131 —leftovers / Carolin Gasse

132–133 —Sunday / Samira Gebhardt

134–135 —Material Manifestations / Manuel Gerdon, Lena Klopfe, Miguel González Romo, Loy Stieler, Tonia Schmitz

136–137 —Universe 3 & The Saddest Cheerleaders in the World / Andreas Grahl


140–141 —Future Wars / Kaspar Elias Kimmel

142–143 —El Ejido, Andalucía & 800 grams of tomatoes / Lea Matenklotz

144–145 —pedes dolentes / Michael Merkel

146–147 —Care / Linda Schumann

148–149 —Marine Snow / Manuel Gerdon, Lena Klopfe, Miguel González Romo, Loy Stieler

150–151 —Memento / Rieko Tsuji

152–153 —How it all started… / Florian Wehking

154–155 —Untitled / Max Weisel

156–157 —About the participants / CV’s

158–159 —Imprint
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 Klopsteijn  
Lea Matteklotz  
Michael Merkai  
Miguel González Rome  
Tona Schnitz  
Linda Schumann  
Loy Steeler  
Rieko Tsuji  
Florian Wehking  
Max Weisel

Materie  
Neu Denken  
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  
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 multifaceted 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 KLIFSTEIN

“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 GONZALEZ ROMO
participants or represent the location from which they were taken. The works range from quirky collections to material experiments. The participants investi-
gate 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 exhi-
bition 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 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 environmen-
tal 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 prin-
ciples 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 fer-
tilize house plants or complement the seed bombs of guerilla urban gardening.

On the artistic side we visit exhi-
bitions in museums, galleries and alternative spaces that show work relevant to
research-related themes. We visit artists and activists, cottage industries, handi-
craft 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 partic-
ular interest to the ongoing freelance artists in the group.

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 collabo-
ration – during university studies as well as later on in professional life.

“Personally, I think it’s essential, especially in the field of environ-
mental engineering, not to limit one’s own perception to the engi-
neering point of view, but to adapt it to an environment that is cons-
tantly changing anyway.”

MANUEL GERSON

“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 dif-
ferent groups, it’s very important to
broaden my horizon and get to
know different perspectives.”

LOY STIEFEL
THE BARCELONA JOURNEY
SETTING UP
THE EXHIBITION AT
UNIVERSITAT
DE BARCELONA
OPENING
THE EXHIBITION AT
UNIVERSITAT
DE BARCELONA
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 an 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**

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’ smartphone 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 housing blocks. The roads are only open to cars in one direction and there is a speed limit of 20 km/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.
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 Miro at the foot of Barcelona’s local mountain Montjuic, 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 thousand 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 Manzanares 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

“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.”
LUIJ STEBLER

“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 REMIS

“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

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
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]  P. 121 [ST]

CLARA LUISE BERNHARD
Born 1998 in Bielefeld – the hometown of Dr. Otter 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 millturn beside a small, had sometimes sloping, river, surrounded by dogs, cats, free range chickens, ducks, horses and even donkeys. Clara’s early interests were in dyeing trees, street signs and fine arts, but also death and ruins – therefore, at the age of 6, 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 ‘Lutherhöhen’, 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 Musikhochschule 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-in-act of a children’s hospital, and a computer game set in the dystopian future of Bielehaus.


GREGOR BIATOSTCH
Born 1991 in Speyer, has been studying environmental engineering and renewable energy at the Martin-Luther-Universität Halle-Wittenberg, Germany. Since September from 2014 to March 2018, he studied environmental engineering and renewable energy at the University of Applied Science (WDB) in Zweckau, Germany. In 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 worked with other engineers and artists on the REAS-SESSING MATERIAL Project, exhibiting works of art in Khula City, Bangladess. For this he worked with the material recovered from a waste dump. He sees his professional future in regional waste management in East Thuringia, Germany. This will include the collection, transport and recycling of waste to manage the resources recovered from it.

P. 124, 125, 126 [W] 82, 98, 102, 110 [T] 74, 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 materials, both birds, bees, rats, and watermice. This was followed by social studies. The key issues concerning her art are still the design of cooperation, relationships, friendships and the superposition of social layers. From 2012 onwards, the question arising herself is: 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 objects, sculpture and installation, her works of art based on found, broken, discarded, supposedly ‘dead’ objects. Through the process of re-seeing and re-connecting, supplementing with other materials and transforming, the found objects are brought to life or exhibited unchanged as ready-mades.


SYLVIA DEBIT
was born in Roseau, France. After finishing her bachelor in Product Design in Nimes 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 Scobler Bad-Schönborn 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 Aniek Vetter, she developed the concept for the P-BANK in 2013. They participated in several contests and received the ‘Universal Design Expert Favorit’ in 2015. She then started to develop the project P-BANK further with Aniek Vetter and Michael Reichmann. They have received support from the neustart-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. 138 [W]

HANS FJERAI SALMON
was born in Sulzburg, 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 (WDB) in Zweckau, Germany. In 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 worked with other engineers and artists on the REAS-SESSING MATERIAL Project, exhibiting works of art in Khula City, Bangladess. For this he worked with the material recovered from a waste dump. He sees his professional future in regional waste management in East Thuringia, Germany. This will include the collection, transport and recycling of waste to manage the resources recovered from it.

P. 124, 125, 126 [W] 82, 98, 102, 110 [T] 74, 88, 95, 112 [ST]

DAVID GAETCKE
was born in Southern Germany, in Heilbronn (Baden-Württemberg) in 1988. After his apprenticeship as a metalworker he went to a bit further south for a year in the city of the universal Austrian alps. From 2011 to 2015, he studied water resources management at the University of Applied Forest Sciences in Bittenfeld, where he began his training 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 California, 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] 98, 102, 110 [T] 7, 94, 112 [ST]

CAROLINE GASSE
was born in West, 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 Kreatiopanos, awarded during the annual exhibition at the Bauhaus-Universität, and the art award of Berlin Kio. Her work has been featured in gallery exhibitions and at art fairs in Weimar, Berlin, Bonn and Jena. She is also an awarder of the Casanovawerk since 2018. Gasse’s artistic focuses on interfacing different artistic media like photography, installation and painting – often working with the viewer in the composition. This has led to an interesting artistic process. The work of his is easily observed in installations is everyday situations, conversational gatherings or moments of intimacy and solitude. Through the use of mixed media she also focuses on the condition of flux, plasticity and reality, inside and outside, and mental and physical spaces.


www.cercogola.com/cologanasse

SAMIRA GEBHARD
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 MS fine art at the Stoneschule Art Lab, she came to the Bauhaus-Universität Weimar to study Fine Art in 2015. Her interest in different disciplines, such as architecture and art, is reflected in her works. Currently, she studies and explores 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 openings in the resulting affects of the visible objects. She uses light, space and movement to map, explore, and redefine in her objects. In 2019 she received a scholarship from the Stiftungsfonds des deutschen Volkes. In the winter semester 2019 she will study at Marmara University in Istanbul.

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

was born in Bad Langensalza (Thuringia) in 1989 and trained as a wood sculptor at the State College for Wood Sculpture in Bischoldsheim/Rhön from 2005 to 2009. In 2010, he took his master craftsman’s diploma in wood sculpture in Empfertshausen. Then he worked as a freelance sculptor in Fula/Adra, sharing a gallery with a fellow artist in Fula. In 2014 he received a one-year scholarship and the first cultural promotion award from the town Heilbad Heiligenstadt (Thuringia). In 2015, he started his art studies at the Bauhaus-Universität Weimar, which he will finish in 2020. Since 2019 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 specializing 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.i.s). Besides the topics mentioned, his teaching activities include the fields of waste management, process engineering, measuring control technology, and air pollution control.

P. 26 [T]

STEFANIE HÖRNLEIN

was born in Sohl (Thuringia) in 1988. After graduating, she complemed her apprenticeship as an industrial clerk in the field of mechanical engineering. After several years of work experience Stefanie enrolled in the study program of civil engineering at the Bauhaus-Universität Weimar in 2013. Inspired by experiences made in Peru, she then specialized in the field of environmental engineering. Her master thesis of 2017 in the context of waste management and urban water management, have led him to the Universität Politécnica de Valloin in to end his studies in Barcelona, Spain and Kluza, Bulgaria.


ANDREAS GRAHOL

was born in Karl-Marx-Stadt, a workers’ town on the eastern edge of Germany, in 1980 and graduated in 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 2006 to 2011, he went into training as a ‘foreign’ and free carpenter. Until 2014, he worked as a freelance carpenter, fire alarm and circus teather. Since then he has devoted himself to art studies and the ‘Menofits of GĦOÙST’ at the Bauhaus-Universität Weimar. From one state of identity to the next. He moves between di­ tellectually photographic installations 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 unwise intterresiation 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]

VALERIE JOHNNE

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 Brusnica in Spain and Panama City. Since 2018, she has been working as a research assistant at the Chair of Biodiversity 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 Hérédin 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 photogra­ phy. 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 videos­performances, addresses current political and environmental issues.

From 2010 to 2017, she studied psychology at the Julius-Maximi­lius-Universität Würzburg. Since she started a year ago at the Concordia University Montreal, Canada, she will finish her Fine Arts diploma.


KASPAR ELIAS KIMMEL

is a Fine Art student at the Bauhaus-Universität Weimar, born in 1998 and comes from the world of ‘Denkende Hände’. In his work he draws mostly with the essence of being human to do so, the lies 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 together, the focus is on a responsible, individual and resource-conserving way of life.

P. 148 [W]

LENKA KLOPFSTEIN

was born in Jena (Thuringia) in 1995. From 2013 to 2017, she completed her 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 Engineer­ ing with a specialization in traffic engineering at the Bauhaus- Universität Weimar.

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 Wünsch 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 is based on the book ‘Dialoge mit den Städte. Wie man in der Stadt denken lernt’.


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 ‘WEASES­ SING MATERIAL-project’ was her first art project.


PROF. DR.-ING. ECKHARD KRAFFT

He is also involved in the development, implement engineering buildings and systems for a better use of biotechnological procedures. His interdisciplinary work is mainly related to infrastructural applications, particularly in Hands-on experience with a real world engineering firm gave him a firm grasp of the challenges of negotiating scientific discovery and getting the demands. He is the research and science group of that office required knowledge­ based innovations, and had to include practical implementation in the system. Currently, he holds a full professorship in Biotechnolo­ gy in Resources Management at the Bauhaus-Universität Weimar, Germany. He is passionate about closing loops between energy and materials, which works specifically on long-term emissions from landfilling, anaerobic treatment of fats, organic waste and crops, creation of fundamental knowledge for a controlled anaerobic process and an emerging bio-degradation of pharmaceuticals and byproducts. 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 address­ ing socio-economic realities. To this end, he has completed several projects in developing communities in South-East Asia.

P. 38, 43 [T]
LEA MATTENKLOTZ

was born in Berlin in 1996. She works politically in Andalusia and regularly participates in international brigades to Armenia. There, she supports the trade union SOCS and labour disputes of migrants. Since 2017 she has been studying at the Bauhaus-Universität Weimar. Her political debate in Armenia modifies 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 Armenia, combing 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.


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 art in Detmold and Wroclaw (Poland). Furthermore, he studied art at the Academy of Fine Arts in Wroclaw and the Bauhaus-Universität Weimar. He has received several grants and prizes for his work. In 2018, Merkel has been coordinating the artistic program of the GEH art space in Dresden.

P. 153 [IV]

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

TONIA SCHMITZ

Born in Luxemburg in 1986, Tonia Schmitz studied mechatronics at the University of Regensburg. She has received her master’s degree in 2010. Since 2011 she has been working as a freelance art exhibition manager and lecturer. Parallel to her work as an artistic associate in the department of Fine Art under Prof. Liu Bachhuber. She has worked for various art associations and taught on the subject of artistic material at Lütscher University, China. She explores the relationship between human beings and nature through materials and sensory perception. Her work is a interconnection 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, hyperromantic 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 [IV] P. 30, 114 [T]

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

LOY STIELER

was born in Clauslath-Zellerfeld (Lower Saxony) in 1994. He attended elementary school in his hometown Altmuen. In 2014, he started his studies at the Bauhaus-Universität Weimar. In 2018, Stieler has been coordinating the artistic program of the GEH art space in Dresden.

P. 153 [IV]

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

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 2008. 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 art exhibition manager and lecturer, parallel to her work as an artistic associate in the department of Fine Art under Prof. Liu Bachhuber. She has worked for various art associations and taught on the subject of artistic material at Lütscher University, China.

Her work as an artistic associate in the department of Fine Art under Prof. Liu Bachhuber. She has worked for various art associations and taught on the subject of artistic material at Lütscher University, China.

P. 153 [IV]

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

MAX WEISEL

was born in 1988 in Rothenheim, 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. Liu Bachhuber and later switched fully to studying fine art.

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

P. 162 [IV]

www.maxweisel.com

ANNIK 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 Dröbl and Michel Reichmann – with the support of the neubuli 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. Jörk Londong, she has been working on the design and construction of the first P-BANK.

P. 132 [IV]

FLORIAN WEINKING

was born in Westminster (Lower Saxony) in 1992. 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. Jörk Londong.

P. 49 [top], P. 47 [top]

www.instagram.com/globalartpractice

www.instagram.com/zweijt

www.instagram.com/riekotsuji.com

PHOTO CREDITS

All pictures (especially in chapter WORKS) are taken by Florian Weinking. Except:

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

P. 28 (top), P. 49 (top left), P. 64 (bottom left), P. 68 (middle right), P. 69 (middle right) by Gregor Bieutsch;

P. 29 (top right) by Christian Clauß;

Photograph on p. 62, P. 110 (left, middle and bottom right); bottom right by Hans Peter Fajardo Salmon;

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

P. 15 (second from bottom right), P. 26 (top right), P. 25 (bottom left), P. 49 (bottom right) by Manuel Gordon;

P. 28 (bottom right), P. 22 (bottom left); P. 24 (top left) by Miguel González-Ros;

P. 18 (top), P. 42–41 by Prof. Jörk Londong;

P. 47 (second from above right), P. 88 (bottom); P. 49 (bottom left), P. 61 (bottom right), P. 61 (top left and right), P. 107 (middle left), P. 113 (bottom middle) and P. 124 (top right) by Christoph Haupt;

P. 36 (top), P. 107 (top), P. 125 (top) by Valérie Johne;

P. 11 (top), P. 74 (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 Klopfschoten;

P. 40 (bottom left), P. 47 (second from above right and bottom right), P. 50 (middle left and right), P. 55 (middle left and right); P. 52 (middle right), P. 60 (bottom middle and left top); P. 61 (top right), P. 68 (bottom left and top middle, top middle and top right), P. 69 (top left and bottom right), P. 70 (second from below right), P. 78; P. 88 (bottom and top right), P. 49 (bottom right), P. 95 (bottom left), P. 109 (middle left), P. 117 (top right) by Prof. Jörk Londong;

P. 15 (bottom left) by Michael Merkel;

P. 41 (middle left), P. 58, P. 59, P. 77 (bottom right), P. 79 (middle right); P. 77 (bottom right), P. 88 (bottom and middle left); P. 95 (middle right), P. 106 (bottom right), P. 61 (bottom left), P. 66, P. 77 (bottom right), P. 80–81 by Linda Schumann.

The work ‘Snow Flakes’ by Bachhuber on page 122 is photographed by Eva-Marie Löffler, Stuttgart and Robert Setz, Los Angeles.