

# TESTING UN/COMMON GROUPS

Progress Presentations  
Doctoral Program  
»Matters of Activity« 2024

# Program

09:00	testing uncommon grounds – Introduction
09:15	<b>Fluid Interfaces. Designing with Heat, Air and Water</b> Moderation: Bastian Beyer  Anna Schöffner Dimitra Almpani-Lekka Maxie Schneider
10:15	Break
10:30	<b>Designing Human-Plant Interactions</b> Moderation: Iva Rešetar  Emma Sicher Pelin Asa Johanna Hehemeyer-Cürten
11:30	Break
12:00	<b>Commoning Artistic Practices</b> Moderation: Lucy Norris  Kaja Ninnis Claudia Kudinova Rahel Kesselring Rasa Weber
13:15	Wrap up

RAHEL KESSELRING  
RASA WEBER

# UN/COMMON GROUNDS

## Politics and Poetics of Tapping into a Common Disciplinary Space

Our current times of ecological and geopolitical upheavals clearly demonstrate the urgency to broaden the scope of research practices beyond academia and develop new forms of common knowledge production. The »Matters of Activity« doctoral cohort, with its various disciplinary backgrounds ranging from art, architecture, engineering and design to the humanities and natural sciences, is tapping into this interdisciplinary »un/common ground« and aims to develop forms of common knowledge that respect locally-based actors and embrace collaborations with diverse agencies and species. Our research spans the techno-cultural dimension of collaboration between human and material actors, such as human-robot interaction (Anna Schäffner), the interactions of textile and computational tools (Maxie Schneider), material agents in the museum space (Claudia Kudinova, Kaja Ninnis & Babette Werner), ecological actors such as water in architectural systems (Dimitra Almpanti-Lekka) as well as tree bark and beetle-infested wood as a design material (Johanna Hehemeyer-Cürten & Pelin Asa), and collaboration with multispecies communities such as fermentation with microorganisms (Emma Sicher), reef-building marine species (Rasa Weber) and forest ecosystems (Rahel Kesselring).

By confronting the »commons«<sup>[1]</sup> and the »un-common«<sup>[2]</sup> our research practices point to the challenges of working at the intersection of different academic disciplines and integrating forms of non-disciplinary knowledge. The lived reality of these forms of collaboration across species and disciplinary barriers leads to a much more messy, feral and undisciplined form of research.<sup>[3]</sup> At the same time, by using the term ground, we are affirming our respective situated research perspectives<sup>[4]</sup> and emphasizing the imagination, creation and sustenance of common grounds, of multi-perspective places and communities. »Commoning« human and other-than-human knowledge spheres is a political and therefore risky endeavor: it raises questions about the production of research and its outcomes, its place, authorship, ownership, shared responsibilities and common uses, and stresses the importance of public participation, intersectionality and co-advocacy of research.

## The Design of Deformation as a Methodology to Anticipate, Control, and Produce Dynamic Forms of Robotic Systems

Filtering



Detail of the pneumatic membrane.  
Photo: Richard Ley

This year's doctoral presentation will showcase the development phases of a tangible soft interface for a fixed robotic arm, addressing the challenges and discoveries from a practice-based exploration and prototyping process. »Soft Collision« (2024) looks at the potential for safe physical interaction by embracing collision, rather than avoiding it. A deformable pneumatic membrane serves as a tangible interface, fostering direct manipulation and live programming. The collective efforts of the design, performer, and technical partners have been crucial in shaping this concept, to move beyond conventional industrial interaction protocols towards a more engaged and intuitive mode of collaboration. Insights from five European experimental pilots have informed the membrane's evolution, to serve specific functions such as hosting flexible sensors for guiding robotic movement or embedding air channels to soften interactions, thereby creating a more accommodating environment for human-robot interaction. Additionally, an active chamber within the membrane offers feedback to support non-verbal communication and build trust. Drawing inspiration from the natural world and considering diverse biological movements and forms, the project seeks a subtle shift in how we view and interact with robotic systems. Informed by the material knowledge of soft robotics, the project presents a hybridization of soft and hard robotics, showcasing the complexity of designing dynamic, shape-changing artifacts. The presentation will reflect on the close interdisciplinary collaboration between artistic and scientific disciplines throughout the design of the membrane, which is seen as a medium for discussion and co-creation.



Membrane placed on the robotic arm.  
Photo: Michelle Mantel

Anna Schäffner is an interaction designer, exploring the field of human-computer interaction through a practice-based PhD at École Nationale Supérieure des Arts Décoratifs in Paris and at the Cluster »Matters of Activity«. Her research centers on the design of deformation as a vehicle for movement, dynamic material adaptation, and expressiveness. Through her design practice, she investigates hybrid forms of interaction to enhance the connection between robotic objects and their environments. Her thesis is supervised by Prof. Carola Zwick, Prof. Dr. Patricia Ribault and Prof. Dr. Samuel Bianchini.





Dance performance with the membrane.  
Photo: Michelle Mantel

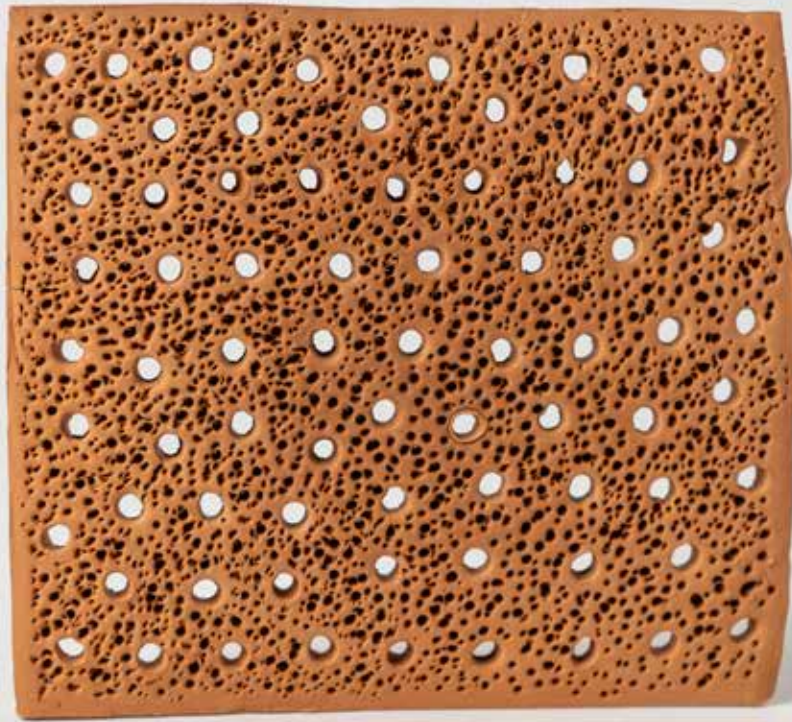
DIMITRA  
ALMPANI-LEKKA

# Water-driven Membranes: Methods of Activating the Building Envelope for More-Than -Human Commoning

*Spongia agaricina* poriferan from the island of Kalymnos, in Greece. Sea sponges are filter-feeders and form mutualistic relationships with endosymbionts that are carried within them by the pulling of sea water. Their high porosity, internal anatomy and kinetic systems can provide valuable information for water distribution infrastructures and their form.  
Photo: Richard Ley

Object Space Agency





Hand-built clay sample inspired by traditional ceramic water filters for large particles that were common in historic Cairo.  
Photo: Richard Ley

In her thesis, Dimitra investigates architectural design protocols of activating the building envelope with water to support multi-species urban commons. The building envelope is approached as a voluminous, infrastructural space that can integrate the building into the ecosystem's metabolisms. By studying biological systems with similar roles, principles are extracted that can evolve the envelope from an inactive border to a programmatic, semi-permeable membrane that stores, disperses and filters matter, energy and activities, leading to growth, the regulation of the microclimate and the creation of probiotic relationships. Water is crucial for life, but in the context of the climate crisis, chain reactions caused by extreme weather phenomena and water scarcity are becoming increasingly devastating to human societies and the biodiversity. A design approach that hosts functions such as greywater harvesting, circulation and

bioremediation parallel to caring and supporting infrastructure for local biodiversity requires a multi-scalar study of local ecosystems and water related strategies, functions and properties. Those span the macro- (urban), meso- (building) and micro- (matter's inherent properties) scales. With the use of dynamic design tools, the architectural design is formed by the dynamics and temporalities of water. Additionally, the thesis investigates models of care and their entanglement with the way humans inhabit spaces under a mutualism perspective.

Dimitra Almpanti-Lekka is an architect (Dipl. Arch. Eng.) and bio-designer from Greece. During the last years she is working in Berlin in the field of landscape architecture with a focus on urban biodiversity and rainwater management in the public space. She joined the Cluster »Matters of Activity« in 2021 and is working on the »Myko. Plektonik« project in parallel to her doctoral project, exploring fungal mycelium as a co-designer in the architectural context. Her thesis is supervised by Prof. Dr. Yannis Zavoleas, Prof. Dr. Claudia Mareis and Prof. Sven Pfeiffer.





Hand-built water harvesting module with porous bio-receptive texture made from natural clay.  
Photo: Richard Ley

MAXIE  
SCHNEIDER

Architecture & Design

# Polymorph Textility

Weaving & Material Form Function



Modular shading with shape memory alloy  
and biobased textile membrane.  
Photo: Maxie Schneider



The subproject »Solarscapes« explores elastic instabilities by taking inspiration from biological systems such as plants' thermonastic behaviour.  
Photo: Maxie Schneider

Maxie's dissertation explores »polymorph textility« as a design approach that utilizes elastic instabilities of architectural materials which respond to their environment through the integration of shape memory alloys into textiles. In light of the current climatic changes towards hotter and longer summers and the pressing need for energy improvements, bioclimatic architecture that adapts to the local climate and aims to ensure thermal comfort is gaining importance. Adaptive textiles are investigated as a central enabler of climatic adaptation within the context of facades and urban areas. Taking inspiration from textile crafts, the work presents »smart stitchings« as a textile practice for integrating Shape Memory Alloys (SMA) into membrane structures to amplify their reactive and elastic material properties. Through-

out the dissertation three case studies show how material- and textile design and digital prototyping can facilitate the transfer of nanotechnology to an architectural scale. Within a multiscale design paradigm, smart materials such as shape memory alloys, which intrinsically require no energy to operate, incorporate a sensor-actuator duality and are programmable, are employed for adaptive textiles to modulate interior spaces, buildings ecology and urban environments.

Maxie Schneider is an architectural design researcher and lecturer. Her work combines physical and digital prototyping to develop textile building techniques and fibre-based material systems. As a doctoral researcher at the Cluster »Matters of Activity«, Max Planck Institute for Colloids and Interfaces and TU Berlin, she investigates adaptive textile structures and the functionalization of softness in architecture. Her thesis is supervised by Prof. Ignacio Borrego and Prof. Christiane Sauer.





Designing polymorph textility by fusing fiber based materials shape memory alloy actuators and biobased membranes (bottom) to achieve bistable elastic modules (middle) for adaptive urban shades (top).  
Photos: Maxie Schneider



PELIN  
ASA

Architecture

# Building with Insect-damaged Timber: Reversible Components from Low-grade Wood

Hexagonal tiles made from damaged reclaimed timber by Pelin Asa,  
Dhruv Kohli, Joseph Michael Tuegel, Olga Luise Warning, 2024.  
Photo: Richard Ley

Material Form Function





Frézier tiles made from damaged reclaimed timber. Pelin Asa, Aleksandar Dukov, Bridget Staal, Joel Tito, 2024.  
Photo: Richard Ley

Since 2018, forests in Germany have been hit by a growing rate of insect damage. While with this increase there are more studies on the impact of bark beetles on the trees, research and applications on beetle-infested wood use are scarce. In the localities with high levels of infestation, despite its increasing quantity and strain on timber resources, damaged wood is mostly burned or used for low-value applications. Pelin's research analyzes bark beetle-infested spruce wood from Feldbuch, Bavaria, to compare its properties to non-infested wood and to study its potential for higher-value uses. A computational model is developed to connect material characterization data with design geometry and to determine elements that can be obtained from infested logs and allow for load-bearing applications. Modular building units are joined with reversible connections to promote material reuse. This study aims to contribute to the understanding of infested wood and its potential uses, and thus to local forestry industries and economies.



Bark beetle larvae under an infected spruce bark.



Bark beetle galleries on an infected spruce log.  
Photos: Pelin Asa, MPICI, 2023

Pelin Asa received her bachelor's in civil engineering from Princeton University in 2016 and a master's in architectural design research from the University of Stuttgart in 2022, where her thesis focused on building with reclaimed timber. As a doctoral researcher at the Max Planck Institute for Colloids and Interfaces, she studies methods of using infected wood for construction and teaches timber construction and computational design courses at TU Berlin School of Architecture. Her thesis is supervised by Prof. Dr. Karola Dierichs, Dr. Michaela Eder and Prof. Dr. Kathrin Dörfler.

JOHANNA  
HEHEMEYER-  
CÜRTEN

Fashion & Textile Design

# REVALUATING PINE BARK (*Pinus sylvestris*)

Material Form Function



Folded vessel made of flexibilized pine bark, 2023.  
Photo: Johanna Hehemeyer-Cürten





Bark bag manufactured and assembled exclusively through folding and interlocking, 2024.

Swelling and shrinking: tests on changes in dimension in contact with water, 2023.

Photos: Johanna Hehemeyer-Cürten

In nature, according to Julian Vincent (Professor of Bionics and Biomimetics), »shape is cheap but material is expensive«<sup>[5]</sup>. This means that organisms use a limited number of building blocks and achieve functionality by structure rather than composition. Consequently, the properties of natural materials are highly diverse and this diversity is only partly understood, leading to considerable limitations in using natural materials. »Revaluating Pine Bark« is an interdisciplinary research project that explores the characteristics, properties and potentials of pine bark, a highly variable waste product of the wood industry. The material is studied in a combination of basic research in material science and design, using techniques and concepts of folding, interlocking and the extraction of color. With the aim to keep the ecological footprint as small as possible and to facilitate subsequent material use after the utilization phase of a product, modifying the raw material is limited to a minimum extent. In this process, exploring and understanding the structure-function relationships form the basis. Following a material-driven design approach, the material is viewed as a carrier of potential stories and uses, rather than a resource to be dominated. This results in the development of recipients and vessels as important research objects.

Johanna Hehemeyer-Cürten is a fashion and material designer with a strong interest in biomaterials. She studied at Maastricht Institute of Arts and weissensee school of art and design berlin and graduated with a master in fashion design in 2021. As a doctoral researcher at the Max Planck Institute for Colloids and Interfaces, her research focuses on the characteristics, properties and potentials of pine bark and the development of holistic design strategies using folding and interlocking techniques. Her thesis is supervised by Dr. Michaela Eder, Prof. Dr. Dr.h.c. Peter Fratzl and Prof. Dr. Bodo Wilts.





Vase made of flexibilized pine bark, 2024.  
Photo: Johanna Hehemeyer-Cürten

## Growing Biodiverse SCOBY With and From Plants: A Transdisciplinary Multi-sited Approach in the Field of Biodesign

Weaving



SCOBY pellicle and inoculum.  
Photo: Richard Ley



Plant materials transformed into ingredients and comparative SCOBY tests showing their effects on pellicle growth (Hengge Lab, Department of Biology, HU Berlin).

Photo: Richard Ley

The emergent field of Biodesign focuses on harnessing the capacity of microorganisms to develop regenerative biomaterials by integrating design and scientific methods. However, tension exists between the field's advocacy for interconnectedness and biodiversity and the tendency toward decontextualization and standardization of procedures related to the extraction, experimentation, and selection of microbial species which are currently used in the niche. While this efficiency-driven process is inevitable in emergent approaches, opportunities arise in exploring research practices that increase biodiversity in microbial materialities. Emma's doctoral project focuses on SCOBY (Symbiotic Culture of Bacteria and Yeasts), a non-extractive source of fibers produced by microorganisms commonly used for Kombucha production and developing biomaterials in Biodesign. In this research, SCOBY acts as a relational means that can reflect a high diversity of human-plant-microbe interactions. Experimental investigations on how to grow SCOBY from and with plants are conducted in settings ranging from microbiology laboratories to situated practitioners in Germany, Crete, and Thailand. Multispecies relationalities, infused with situated cultural techniques and knowledge about plants

and fermentative practices, provide epistemological, ontological, and praxiological insights that could foster Bio-cultural diversity in biodesign research. Through a transdisciplinary approach, this investigation suggests broadening the sets of methods used in the niche as well as the roles and scopes of multispecies biomaterials.

Emma Sicher is a designer and fermenter working on materials and foods made with microorganisms. She holds an MA in eco-social design from the Free University of Bozen-Bolzano, where she held a research assistant position at Design Friction Lab. Projects she has worked on have been exhibited in various museums across Europe and Asia. She was selected as a TEDx speaker in 2022. Currently, she is pursuing her doctorate in design studies, affiliated with HfG Offenbach in Offenbach am Main and the Cluster »Matters of Activity«. Her doctoral research is supervised by Prof. Dr. Markus Holzbach and Prof. Dr. Regine Hengge and focuses on developing a transdisciplinary and multi-sited approach in the field of Biodesign, merging design, microbiology, and anthropology.





Production of apple cider vinegar with Thai fruits by Tanyaporn Tan-tasathien / Khlong Luang, Thailand.  
 Photo: Emma Sicher



KAJA  
NINNIS

Cultural History and Theory

# Histories of Transformation. Tracing Materials in the British Arts and Crafts Movement

Material Form Function





Piece of flamed birch wood representing one of many material transformations that the birch went through before becoming a chair.  
Origin: region of Lower Bavaria, Upper Palatinate and northern Upper

Bavaria, acquired from Alkmona Woodart Schnitzholzraritäten.  
Photo: Richard Ley



Mackay Hugh Baillie Scott (design), Dresdner Werkstätten für Handwerkskunst (maker): Armchair, 1903. © Archives Bröhan Museum, Berlin.

Photo: Sebastian Stöhr

In her doctoral project, Kaja investigates the material trajectories of several museum objects from the context of the British Arts and Crafts Movement (c. 1880-1914). In 1903, the Dresdner Werkstätten für Handwerkskunst held an exhibition showcasing 30 interiors designed by renowned national and international designers. Among them was Mackay Hugh Baillie Scott, who contributed a bedroom, including an armchair constructed from flamed birch wood and inlaid with mother-of-pearl and ivory. The armchair, now in the collection of the Bröhan Museum in Berlin, is a visually striking example of the transnational exchange between the British Arts and Crafts movement and Karl Schmidt's reform furniture enterprise in Dresden. Following an ecocritical, materials-based approach to design history, the project explores the environmental implications of the sourcing and transformation of the »raw« materials, or »stuff«<sup>[6]</sup> from which the objects are made, in the hope of uncovering what Laura Turner Igoe has termed the »environmental unconscious of art matter«<sup>[7]</sup>. Thus, the armchair can also be understood as a »physical knot«<sup>[8]</sup> of wood, shell, elephant tusk, and more, resources that had to be extracted, processed, transported and traded along multiple supply chains in order for the armchair to be made. By tracing these material histories – from airborne seed, to forest, to sawmill, to timber yard, to workshop, to museum – Kaja aims to extend the history of museum objects and complicate the question of their origin.

Kaja Ninnis is an art and design historian and material culture scholar researching, teaching and curating at the intersection of materials, art and design history, and ecology. She's currently a doctoral researcher at the Department of Cultural History and Theory at Humboldt-Universität zu Berlin and part of the Cluster »Matters of Activity«. Her dissertation supervised by Prof. Dr. Claudia Mareis investigates museum objects from the British Arts and Crafts movement, exploring their material histories from an ecocritical perspective.

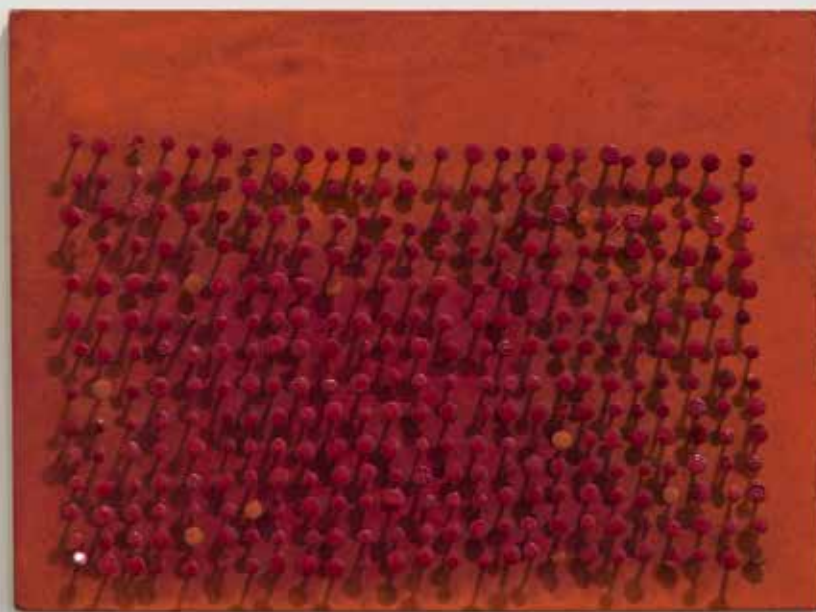
CLAUDIA  
KUDINOVA

Art & Visual History

# Color in Space. Hal Busse's Work 1950–1960

Hal Busse, o.T. (Nagelbild rot), 1959, nails, casein paint and lacquer  
on chipboard, 28 x 38 x 3 cm, detail. Photo: Marcus Schneider.  
Courtesy: Galerie Volker Diehl, Berlin

Object Space Agency







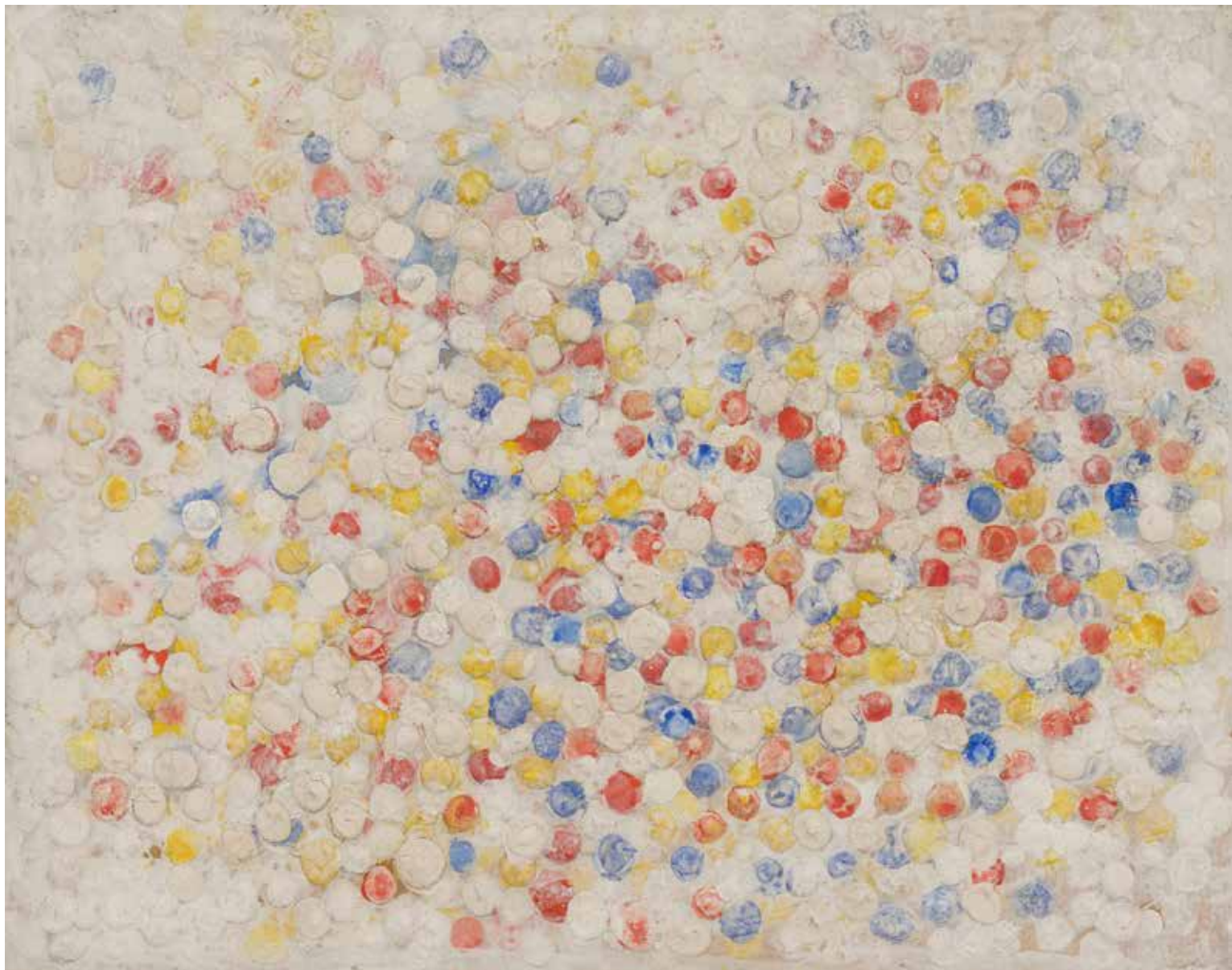
Hal Busse, o.T., 1958, mixed media on hardboard, 40 x 49,5 cm.  
 Photo: Marcus Schneider. Courtesy Galerie Volker Diehl, Berlin

»Color, as a physical FORCE, shall jump on to the viewer. Not altered nor alienated by any subject matter«. <sup>[9]</sup> In her thesis on Hal Busse's painterly work stage between 1950 and 1960, Claudia aims to shed light on a largely unknown painter that moved in the epicentre of the contemporary artistic discourse of the German Post-War Avant-Garde. Located between Art Informel, ZERO and concrete-constructive artistic tendencies, Busse holds a specific position among these. The thesis focuses on the artist's creative attention to »color in space« and its activation as matter as well as an optical phenomenon that is to be experienced in the viewer's space. Busse's dynamic approach to color – through pictorial strategies such as reduction, structure, facture <sup>[10]</sup> or the monochrome – is further complemented by the engagement of natural elements such as light. While the ephemeral and dynamic impact of light

determines Busse's impasto, relief-like paintings as well as her nail reliefs – that she developed specifically as a painterly medium – the imaging agency is also transferred to the viewer, in whose perception the pictorial experience is permanently reconstituted. <sup>[11]</sup>

By investigating the specifics of pictorial experience Busse's painterly work stage between 1950 and 1960 provides, Claudia's art historical research is largely formed by an approach stemming from the visual studies as a way of reevaluating an artistic position overlooked by the historical and scientific canon. Furthermore, Claudia aims to expand the research on the German Post-War Avant-Garde through the research on Busse's pictorial strategies and to render its specific artistic relations visible and comprehensible in new contexts. <sup>[12]</sup>





Hal Busse, Struktur, 1958, oil on hardboard, 42,5 x 54 cm.  
Photo: Marcus Schneider.  
Courtesy Galerie Volker Diehl, Berlin

Claudia Kudinova is an art and visual historian with a focus on the Post-War Avant-Garde and Contemporary Art. Since 2019, she has been managing the Galerie Volker Diehl for Contemporary Art based in Berlin, realizing and curating multiple exhibitions. Her dissertation on the work of the artist Hal Busse between 1950 and 1960 is supervised by Prof. Dr. Claudia Blümle. The doctoral project is funded by the Gerda Henkel Stiftung and is part of the Cluster »Matters of Activity«.

## »One big green thought«: Repair, Regeneration, and Rewilding as Artistic Practices in Damaged Environments

*Yucca filamentosa*, originally grown in the town of Mannheim in close proximity to the open-cast lignite mining site of Hambacher Forst, evacuated and replanted in Berlin by the artist Silke Schatz as part of the project »Mannheim calling« and the exhibition »Vanishing point« at the gallery Meier Riegger in January 2024. Photo: Richard Ley

Material Form Function





With plants, trees, and forests as her object of investigation, in her dissertation, Rahel is exploring site-specific artistic practices, which are set in »damaged but still ongoing living worlds«,<sup>[13]</sup> advocating for narratives of rehabilitation and continued life in ruined landscapes.<sup>[14]</sup> By analyzing selected case studies from the field of contemporary art and recent art history,<sup>[15]</sup> the project aims to discuss arboreal politics, their medial modes of representation and the epistemologies brought together in them. Set at the intersection of plant studies, art history, and cultural theory and against the background of current discourses in posthumanism, and queer ecologies, the doctoral project is particularly interested in investigating concepts of »repair«,<sup>[16]</sup> »regeneration«<sup>[17]</sup> and »rewilding«,<sup>[18]</sup> and bringing these notions in a dialogue with a wider eco-social context. Currently, working with the artworks »Tree Mountain« by Agnes Denes and »Manheim calling« by Silke Schatz, Rahel is exploring commoning<sup>[19]</sup> as a practice of regeneration, researching the artwork's ability to (re-)create, appropriate, inhabit, host and, maintain a variety of relations, responsibilities, and identities on site, grounding the abstract notion of situatedness<sup>[20]</sup> within a site-specific environment of more-than-human communities.<sup>[21]</sup>



*Yucca filamentosa*, growing in the former town of Manheim. The area has been evacuated and demolished to make way for the open-cast mining site of Hambacher Forst. The plant was photographed and archived by Silke Schatz as part of her art project »Manheim calling« in November 2023.  
Photo: Silke Schatz



While existing gardens, buildings, and infrastructure around the mining site of Hambacher Forst are being destroyed, former cultivated plants and ruderal vegetation are thriving in the deserted area.

Photo: Rahel Kesselring

Rahel Kesselring is a cultural researcher and artist with a background in scenography and performance studies. Currently, she is a doctoral researcher at the Department of Cultural History and Theory of Humboldt-Universität zu Berlin and part of the Cluster »Matters of Activity«. Her dissertation is supervised by Prof. Dr. Robert Stock. As an artist, she is working in the field of performance in various collaborations across Europe, i.a. for steirischer herbst, Frankfurter Positionen, Maerzmusik Berlin, Wien Modern, Ashkal Alwan Beirut, Mousonturm Frankfurt, and Gessnerallee Zurich.

# Marine Un/commons: On Why Maybe We Shouldn't Be Here

Material Form Function



Prototype of underwater coral nursery from Bejuco liana for the project »Symbiotic Coral Nursery« in Tierra Bomba, Columbia, 2023. Material: Bejuco liana. Design: Rasa Weber & Andry Carrasquilla. Artisan: Jaime & Ofelia Torres, Paluato Atlántico, Columbia. Design & Research: Polynesian Biomimicry Institute (IPB) & design studio Rasa Weber, 2024.  
Photo: Franziska Wegener



Who owns the ocean? And who has the right to »safeguard« it? Reef ecologies have been transformed into ruinous spaces. Continued anthropogenic pressure on marine keystone species has led to death and destruction of marine habitats. The effects of the climate crisis appear to be becoming irreversible damage not only to corals, but also to all species (such as »Posidonia oceanica«) that are responsible for the formation of marine »common ground«, including the human. However, in rare cases, unlikely ecosystems have managed to establish themselves in »blasted seascapes« (following Tsing and Kirksey's term »blasted landscapes«<sup>[221]</sup>), which, as Alexis Shotwell reminds us, »can still be spaces of hope«.<sup>[231]</sup> They illustrate neither the fall of an »untouched paradise« nor the irreversible destructiveness of the human species alone: in their resistance to being wiped off the ecological map, despite all the devastating forces to which they were and are still exposed, they could be read as islands of hope in a largely ruinous ocean. This hope, however, is contaminated.

The »SymbiOcean« project brings together design, anthropology, and marine biology to develop a new approach to the creation of feral,<sup>[241]</sup> unruly, and locally situated marine habitat in collaboration with ocean dwellers, marine communities and their diverse materials, technologies, and cultural approaches. These newly emerging ecosystems, resulting from commoning artistic practice across species boundaries, could be called »queer reefs«. They act as a counter to the established norms of conservation policies that traditionally advocate for a return to a »pristine«, »pre-human« or »untouched« ecology. »Queer reefs« seek to contribute to the recently emerging field of queer ecologies<sup>[251]</sup> by specifically addressing conservation practices and policies in marine environments in messy and compromised times. Through forms of submerged<sup>[261]</sup> practice, the project approaches »Symptotic Design«<sup>[271]</sup> as a new model for shaping the future of reefs and the intricately interwoven life of marine communities.



SYNTOPOLIS prototype with *Chromis chromis*. Part of the doctoral thesis »SYMBIOCEAN«. Design: Rasa Weber. Artisanal Production: Marie Drouet. Assistance: Élie Hascoet, Emma Mende, Lisa Pinot, Zélie Portoles, Marion Taupin, Eva Themyr. Location: STARESO Corsica. July 2024.  
Photo: Rasa Weber

Rasa Weber, an experimental designer based in Zurich and Berlin, focuses on narrative-driven, ecologically critical design. She is a research associate at Zurich University of the Arts and doctoral researcher at the Cluster »Matters of Activity«. Her practice-based PhD, »SymbiOcean«, supervised by Prof. Dr. Karmen Franinović and Prof. Dr. Karin Harrasser, explores artificial reefs and Symptotic Design, fostering multispecies underwater spaces. As part of the Swiss National Science Foundation's »Interfacing the Ocean« project, she merges design, marine biology, and anthropology through scuba diving. Weber teaches internationally, advancing ecological design discourse.





SYNTOPOLIS prototype with *Chromis chromis* and on land at scientific research station STARESO. Part of the doctoral thesis »SYMBIOCEAN«. Design: Rasa Weber. Artisanal Production: Marie Drouet. Assistance: Élie Hascoet, Emma Mende, Lisa Pinot, Zélie Portoles, Marion Taupin, Eva Themyr. Location: STARESO Corsica. July 2024.  
Photo: Rasa Weber

BABETTE  
MARIE  
WERNER

Art & Visual History

# Strategies of (Re-)Staging Process-based Art by Otto Piene Within the Context of the 1960s

Object Space Agency



Otto Piene, hand-painted glass slides in metal frame, 1964.  
© Otto Piene Estate and VG-Bild-Kunst, 2024.  
Photo: unknown



In her thesis, Babette explores the notion of an ecological aesthetic at the intersection of art and visual history, conservation and curatorial studies. It focuses on artist Otto Piene, who experimented with natural phenomena, light and slide installations. Two of Piene's early performative and kinetic slide installations from the 1960s are selected as main examples. In the hybrid performance and installation, »The Proliferation of the Sun« (1964/2014), hand-painted glass slides are the main component of the immersive work. For the installation Light ballet »Hommage à New York« (1966/2016), colored glass slides are used selectively alongside diapositives. Both works, which belong to Piene's typology of the light ballet, are not only entangled through the use of similar materials such as hand-painted glass slides, carousel projectors, sound, diverse textiles and kinetic light elements. Furthermore, due to conservation regulations, the original slides can no longer be activated.

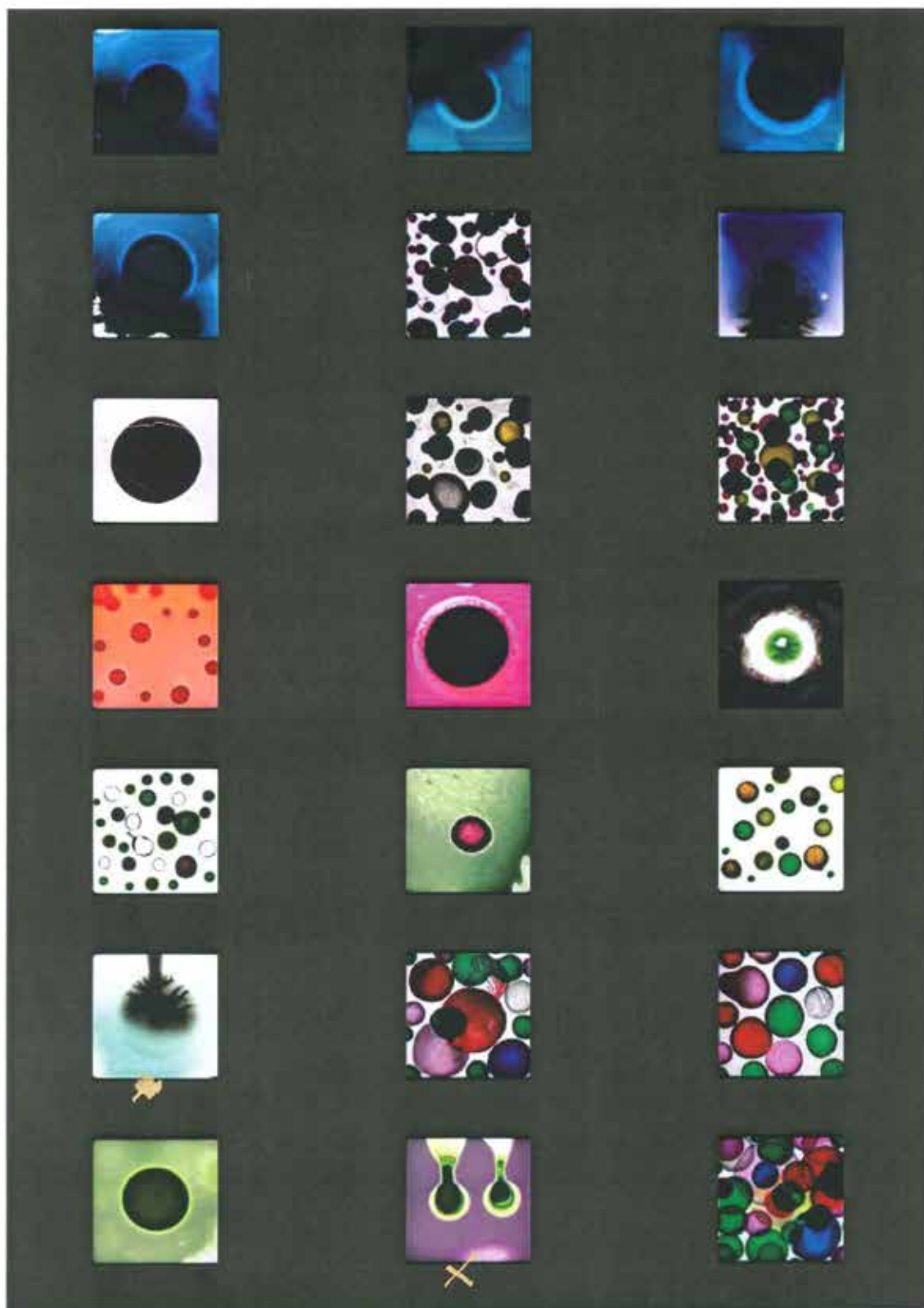
In view of their (re-)stagings in 2014 and 2016, the fragile slides were therefore elaborately reproduced in analog and digital form. Combined with other factors, these media transfers led to different outcomes of display and (re-)experience.

By researching process-based and intermedia works of art at the intersection of technology and ecology from the late 1950s until today as well as their (re-)stagings at the beginning of the 21<sup>st</sup> Century in analog and virtual spaces, Babette not only seeks to close research gaps in Piene's work. The project offers an urgently needed contribution to the media-reflexive caretaking of process-based art and its potential for sustainable archival and curatorial practices.<sup>[28]</sup> The framework for this is the notion that »(re-)staging«, understood as an extended sculptural genre, can be made usable at the interplay between memory and imagination – as an archival strategy, and as a method of exhibition practice.<sup>[29]</sup>



Otto Piene, hand-painted glass-slides in metal frame, 1964.  
© Otto Piene Estate and VG-Bild-Kunst, 2024 .  
Photo: unknown

Babette Werner is an art and visual historian with a focus on interdisciplinary approaches at the intersection of art, ecology and technology, dealing with time, space and transformation. She researches (in-)visible relations of visual interpretations of natural phenomena and social discourses and seeks to contribute to a genealogy of an ecological aesthetic. She works as researcher and curator and has developed and implemented interdisciplinary publication projects and exhibitions in the field of visual and performing arts. In her new role as editor of the Clusters upcoming final publication (together with Claudia Mareis and Carolin Ott), Werner seeks to highlight the ongoing research and discourse at the Cluster within the framework of a »book as exhibition«. Her doctoral project, supervised by Prof. Dr. Claudia Blümle and Prof. Dr. Stefan Neuner, was funded by Gerda Henkel Stiftung (2020–2023) and is part of »Matters of Activity«.



x ist oben

OP, danke

# Bibliography

[1] Cf. e.g. V. Hofmann, J. Euler, L. Zurmühlen, S. Helfrich (eds.), *Commoning Art. Die transformativen Potenziale von Commons in der Kunst*, 2022; S. Federici, *Re-Enchanting the World: Feminism and the Politics of the Commons*, 2019; M. Hardt, A. Negri, *Commonwealth*, 2009; S. Harney, F. Moten, *The Undercommons: Fugitive Plannings and Black Study*, 2013

[2] Cf. D. Garcia, »Introduction«, *(Un)Common Ground: Creative Encounters across Sectors and Disciplines*, ed. by C. Brickwood, B. Ferran, D. Garcia, T. Putnam, 2007.

[3] For the notions messy, feral and undisciplined, cf. e.g. J. Halberstam, *Wild Things: The Disorder of Desire*, 2020; J. Law, *After Method: Mess in Social Science Research*, 2004; J. Halberstam, »Introduction: Undisciplined«, *The Queer Art of Failure*, 2011, 6–15; A. Tsing, J. Deger, A. Keleman Saxena, F. Zho, *Feral Atlas: The More-Than-Human Anthropocene*, 2020.

[4] Cf. D. Haraway, »Situated Knowledges: The Science Question in Feminism and the Privilege of Partial Perspective«, *Feminist Studies*, Vol. 14, No. 3, 1988, 575–599.

[5] J. F. V. Vincent, »Survival of the cheapest«, *Materials Today*, 2002. 5(12): 28–41. [https://doi.org/https://doi.org/10.1016/S1369-7021\(02\)01237-3](https://doi.org/https://doi.org/10.1016/S1369-7021(02)01237-3)

[6] T. Ingold, »Materials against Materiality«, *Archaeological Dialogues*, Vol. 14, Issue 1, 2007: 1–16.

[7] L. Turner Igoe, »Creative Matter: Tracing the Environmental Context of Materials in American Art«, *Nature's Nation. American Art and Environment*, ed. by A. Braddock, K. Kusserow, 2018: 140–169.

[8] F. Domínguez Rubio, *Still Life. Ecologies of the Modern Imagination at the Art Museum*, 2020: 3.

[9] H. Busse, *Diary 1959-1965*, entry of January 20, 1960, Hal Busse Archive, WVZ-HB-J-TB-07720.

[10] T. Hildebrandt, *Entwurf und Entgrenzung. Kontrasdispositive der Zeichnung 1955-1975*, 2017: 129–138., M. Lüthy: »Vom Raum in der Fläche des Modernismus«, *fRaktur Gestörte ästhetische Präsenz in Avantgarde und Spätavantgarde*, ed. by A. Hennig, B. Obermayr, G. Witte, 2006: 149–178.

[11] M. Imdahl, *Farbe. Kunsttheoretische Reflexionen in Frankreich*, 2003: 143–154.

[12] G. Celant, *Piero Manzoni 1933-1963*, 1973: n.p.; B. Eickhoff, *John Anthony Thwaites und die Kunstkritik der 50er Jahre*, 2004: 177f.

[13] D. Haraway, *Staying with the Trouble. Making Kin in the Chthulucene*, 2016: 33.

[14] Cf. e.g. K. Barad, »No Small Matter: Mushroom Clouds, Ecologies of Nothingness, and Strange Topologies of Spacetime-mattering«, *Arts of Living on a Damaged Planet*, ed. by A. Tsing, N. Bubandt et al., 2017: 103–120; D. Haraway, *Staying with the Trouble: Making Kin in the Chthulucene*, 2016; A. Tsing, *The Mushroom at the End of the World: On the Possibility of Life in Capitalist Ruins*, 2015.

[15] Case studies by the artists Lara Almarcegui, Maria Thereza Alves, Ursula Biemann, Agnes Denes, Pierre Huyghe, Marcus Maeder, Otobong Nkanga, Silke Schatz and Alan Sonfist.

[16] Cf. e.g. D. Papadopoulos, M. Puig de la Bellacasa, M. Tacchetti (eds.), *Ecological Reparation. Repair, Remediation and Resurgence in Social and Environmental*, 2023; F. Hertweck et al. (eds.), »The Great Repair. Politiken der Reparaturgesellschaft«, ARCH+, No. 250, 2022.

[17] Cf. e.g. J. Maienschein, K. MacCord, *What is Regeneration?*, 2022.

[18] Cf. e.g. D. Jørgensen, »Rethinking Rewilding«, *Geoforum*, Vol. 65, 2015: 482–488, E. Marris, *Rambunctious Gardens: Saving Nature in a Post-Wild World*, 2011; A. Tsing, »The Buck, the Bull and the Dream of the Stag: Some Unexpected Weeds«, *Suomen Antropologi*, Vol. 42, No.1, 2017: 3–21.

[19] Cf. e.g. S. Federici, *Re-enchanting the World: Feminism and the Politics of the Commons*, 2018.

[20] Cf. D. Haraway, »Situated Knowledges: The Science Question in Feminism and the Privilege of Partial Perspective«, *Feminist Studies*, Vol. 14, No. 3, 1988: 575–599.

[21] Cf. e.g. E. Gan, A. Tsing, »How Things Hold: A Diagram of Coordination in a Satoyama Forest«, *Social Analysis*, Vol. 62, No. 4, 2018: 102–145; E. Tuck, M. McKenzie, *Place in Research: Theory, Methodology and Methods*, 2015.

[22] A. L. Tsing, »Blasted Landscapes (and the Gentle Arts of Mushroom Picking)«, *The Multispecies Salon*, ed. by Kirksey, 2014.

[23] A. Shotwell, *Against Purity. Living Ethically in Compromised Times*, 2016:198.

[24] J. Halberstam, *Wild Things: The Disorder of Desire*, 2020.

[25] G. Gaard, »Towards a Queer Ecofeminism«, *Hypatia. A Journal of Feminist Psychology*, 12 (1), 1997: 114–137; C. Mortimer-Sandilands, B. Erickson, *Queer Ecology: Sex, Nature, Politics, Desire*, 2010; T. Morton, »Guest Column: Queer Ecology«, *PMLA*, 125 (2), 2010: 273–283; M. Gandy, »Queer Ecology: Nature, Sexuality and Heterotopic Alliances«, *Environment and Planning D: Society and Space*, 30(4), 2012: 727–747; C. Sandilands, »Queer Ecology«, *Keywords for Environmental Studies*, ed. by J. Adamson, W. A. Gleason und D. Pellow, 2012.

[26] M. Gómez-Barris, *The Extractive Zone: Social Ecologies and Decolonial Perspectives*, 2017.

[27] R. Weber, »A Sympoietic Ocean. Design research with/in the marine holobiont«. *ISEA 2023. 28rd Symposium on Electronic Art: Symbiosis*. Doi: 10.69564/ISEA2023-90-full-Weber-et-al-A-Sympoietic-Ocean.

[28] O. Piene, »Light Ballet«, *Piene: Light Ballet*, ed. by Howard Wise Gallery 1965; M. Dobbe, »The Medium is the Medium. Von den Rasterbildern zum Lichtballett«, *Die Sonne kommt näher. Otto Piene Frühwerk*, ed. by B. Engelbach, 2003: 6–13, 9; U. Ströbele, A. Greiner (eds.), »Notes on Sculpture«, *24H Skulptur. Notes on Time Sculptures*, 2015: 17–37, 34; T. J. Huss, E. Winkler (eds.), »Wiederholung. Revision eines ästhetischen Grundbegriffs«, *Kunst und Wiederholung. Strategie, Tradition, ästhetischer Grundbegriff*, 2017: 7–26, 11.

[29] G. Deleuze, *Differenz und Wiederholung*, 1968, transl. By J. Vogl, 2007: 17, 106; I. Arns, »Strategies of Re-Enactment«, *History will repeat itself. Strategien des Reenactment in der zeitgenössischen (Medien)Kunst und Performance*, ed. by I. Arns, G. Horn, 2007: 38–63, 62; C. Bishop, »Reconstruction Era: The Anachronic Time(s) of Installation Art«, *When Attitudes Become Form*. Bern 1969/Venice 2013, ed. by G. Celant, 2013: 429–436, 431; P. M. Meyer, »Die Bewegung machen. Wiederholung und Ko-Affektion in Philosophie und künstlerischer Praxis mit Bezug auf Archiv, Gedächtnis und Performance«, *Re\*: Ästhetiken der Wiederholung*, ed. by H. Loreck, M. Ott, Quer-durch - Schriftenreihe der Hochschule für bildende Künste Hamburg 5, 2014: 148–161, 153; T. Caianiello, »(Re)-constructing memories: some thoughts about conservation«, *ArtMatters*, Special Issue 1, 2021: 1–9, 2; E. Fischer-Lichte, »Performance, Inszenierung, Ritual. Zur Klärung kulturwissenschaftlicher Schlüsselbegriffe«, *Geschichtswissenschaft und »performative turn«. Ritual, Inszenierung und Performanz vom Mittelalter bis zur Neuzeit*, J. Martschukat, S. Patzold (eds.), 2003: 33–54, 40–41; E. Fischer-Lichte, *Ästhetik des Performativen*, 2004: 327f.





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