



# DESIGN FOR DEMOCRACY

Atmospheres for a better life

Exposé for WDC Campus Exhibition  
Frankfurt am Main 2026

HOCHSCHULE NIEDERRHEIN  
FACULTY OF TEXTILE AND CLOTHING  
TECHNOLOGY

**Resource Management**

**Moores**

# **Young Talents at work**

**Vulnerability as Strength**

**Designing Togetherness**



@chalin huege

**Participation**

**Reducing inequality**

**Democracy**

**Textile Heritage**

**COIL - International  
togetherness - across  
continents**

**Hybrid Design Spaces**

**Re Covering Crafts Strength**

**04** "(dis) solve me" with future design strategies

Michèle Lemper

**10** A Textile Journey to the Moors of Norway

Nina Becker

**06** The Art of Vulnerability- Philo-physical Insights in Textille Creations

Chalin Hüge

**12** Cottongras: Sustainable Fibres From Peatland

Marc Küpperkoch

**08** I'll be your mirror- a comparison of two generations

Lisa Moritz

**14** COIL: Upcycling Fast Fashion to design survival items with fishermen from Tanzania

**16** Salzburg Festival- Sustainable music theatre management in the future of the Salzburg Festival

Jonna Prange & Flora Claßen

**19** Where Silence Folds- a slow design offer

Lilo Stephan

# Contents

# “(dis) solve me” with future design strategies

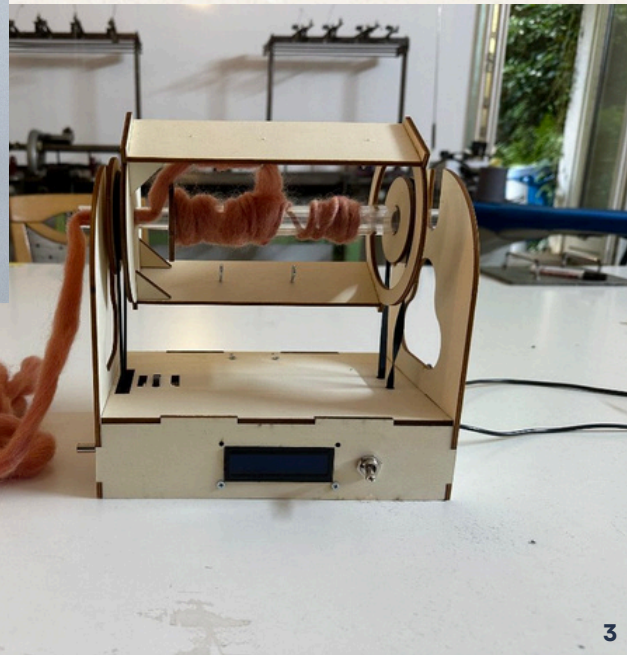
By **Michèle Lemper**, B.Sc. Clothing Technology & Productdevelopment  
M.Sc. Textile Products Design

Coach: Prof.in Dr.in phil. Marina-Elena Wachs  
Prof. Dr. Ing.-habil. Maïke Rabe

The master's thesis ‘(dis)solve me’ explores how design strategies can support mechanical recycling processes for natural fibres and thus contribute to a more conscious, circular approach to textiles. The focus is on how design itself can become a tool for social transformation – by placing participation, education and transparency at the centre.



**Michèle Lemper**  
**”(dis) solve me” with future design strategies**



**Textile Heritage  
 Transparency  
 Participation**

By combining industrial and artisanal processes, such as the use of a modified open-source spinning machine, an approach emerges that combines technical innovation with cultural responsibility. The project understands recycling not only as a method, but as an attitude – as a new creative habitus. Workshops, repair formats and collaborative experiments with materials open up spaces for knowledge exchange and democratic participation in the manufacturing process.

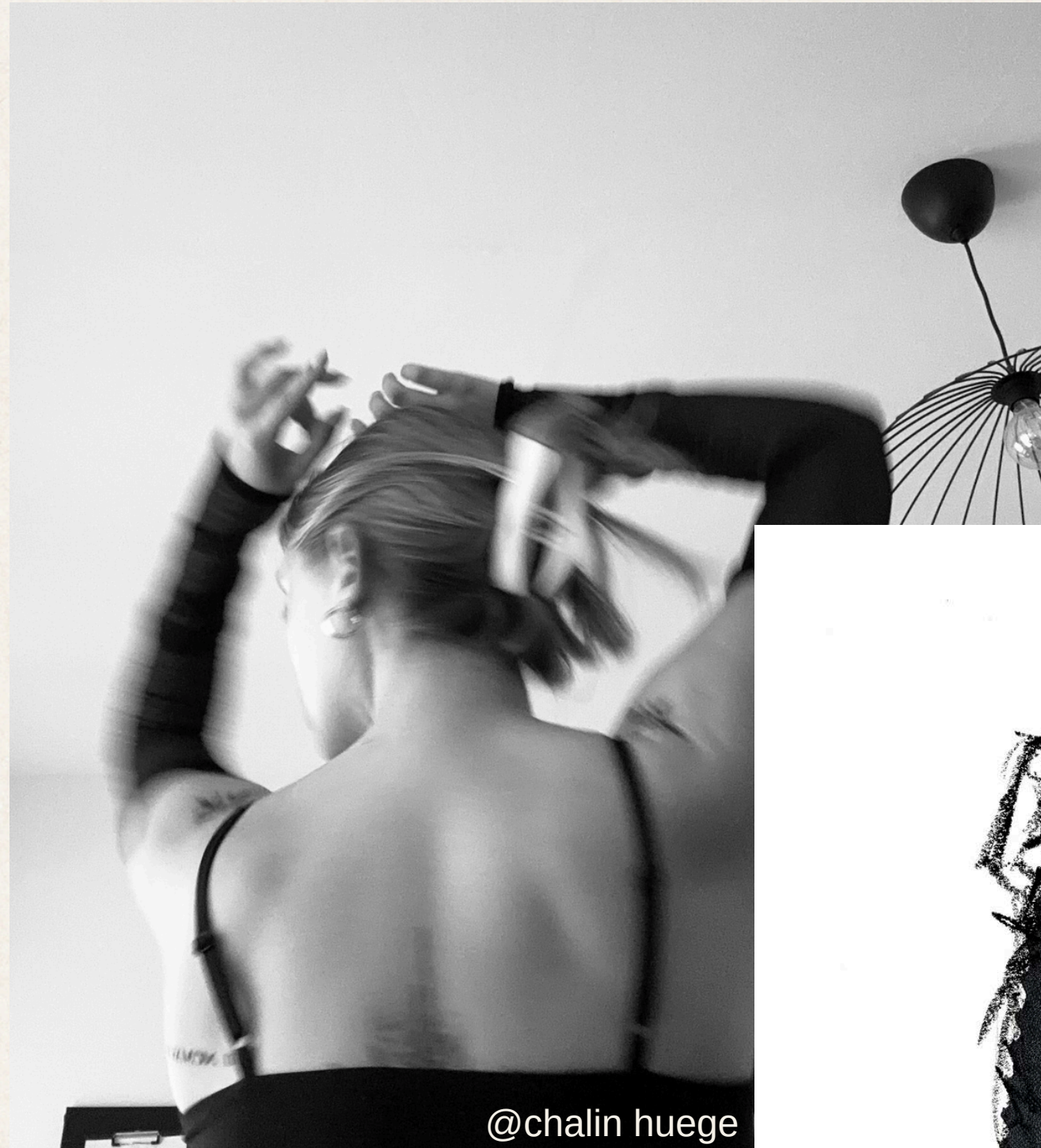
‘(dis)solve me’ shows that design can make cycles visible, re-establish craft practices and shape the relationship between people, materials and cities.

In this way, design becomes a medium that not only shapes products, but also creates new atmospheres of coexistence – transparent, participatory and future-oriented.

**Exhibition objects: Open-source-spinningmachine, film, outfits, textile surfaces**

©17Ziele.de





@chalin huege

**Vulnerability as Strength  
Connection  
Responsibility**



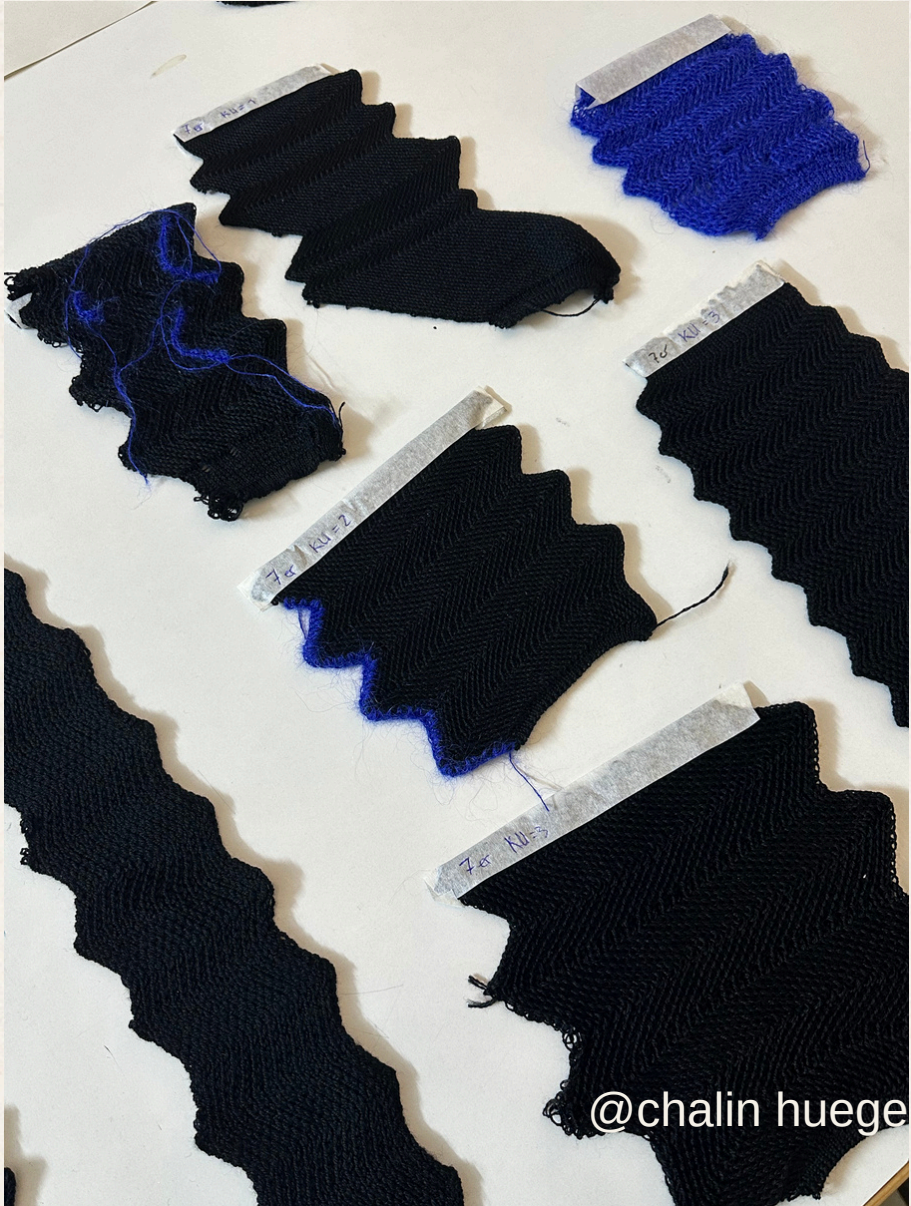
# **The Art of Vulnerability - Philo-physical Insights in Textile Creation**

By **Chalin Hüge**, B.Sc. Textile Design-Engineering,  
Current degree programme: M.Sc. Textile Products Design  
Coach: Prof.in Dr.in phil. Marina-Elena Wachs  
Prof. Dipl.-Des. Marion Ellwanger-Mohr

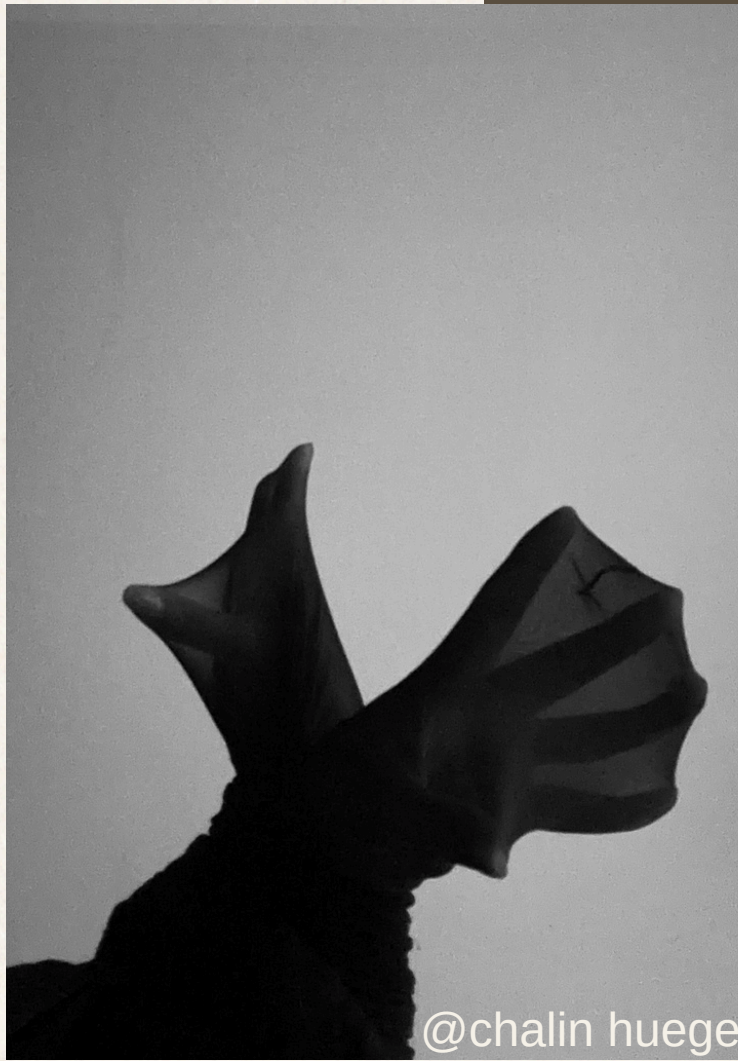
In "The Art of Vulnerability: Philo-physical Insights in Textile Creations", Chalin Hüge creates striking textile works that explore the beauty and complexity of vulnerability in a profound and experimental way.

**Exhibition objects: outfit, textile samples, image/video material**

Influenced by her experience in dance, Hüge explores a particular sensibility that embodies movement and fragility through elastic fabrics and innovative manipulation techniques. Her textile process combines aesthetic craft with philosophical depth, inviting viewers to become aware of the state of vulnerability in a positive way.



Scan for dance experiment





@ Lisa Moritz



@ Lisa Moritz



# I'll be your mirror

## A COMPARISON OF TWO GENERATIONS

By Lisa Moritz, B.Sc. Textile Design-Engineering,  
Current degree programme: M.Sc. Textile Products Design  
Coach: Prof.in Karin Stark  
Prof. Dipl.-Des. Anna Koch

I'll be your mirror,  
graduate collection by Lisa Moritz



@ Lisa Moritz



@ Lisa Moritz



@ Lisa Moritz

The bachelor's thesis „I'll Be Your Mirror“ explores the social, cultural, and fashion-related influences of the Baby Boomer generation and Generation Z. It focuses on examining prejudices and commonalities between the two generations and how these dynamics are reflected in fashion. Based on a detailed analysis of societal developments, youth cultures, and the evolving roles of women, an experimental collection was created that merges stylistic elements from both eras.

**Lisa Moritz**  
**I'll be your mirror**  
**- a comparison of two generations**



Archival family photographs documenting Baby Boomer fashion serve as the foundation for a contemporary reinterpretation, aligning with current trends and the growing emphasis on sustainability. This work builds a bridge between generations, offering a new perspective on change, continuity, and identity within fashion.

**Exhibition objects: Collection, printed media, short film**



@ Lisa Moritz

I'll be your mirror,  
graduate collection by Lisa Moritz



@ Lisa Moritz

Margund Berger-Opitz  
Lisas grandmother

**Designing Togetherness**

**Democracy**

**Textile Heritage**

**Vulnerability as Strength**

# A Textile Journey to the Moors of Norway

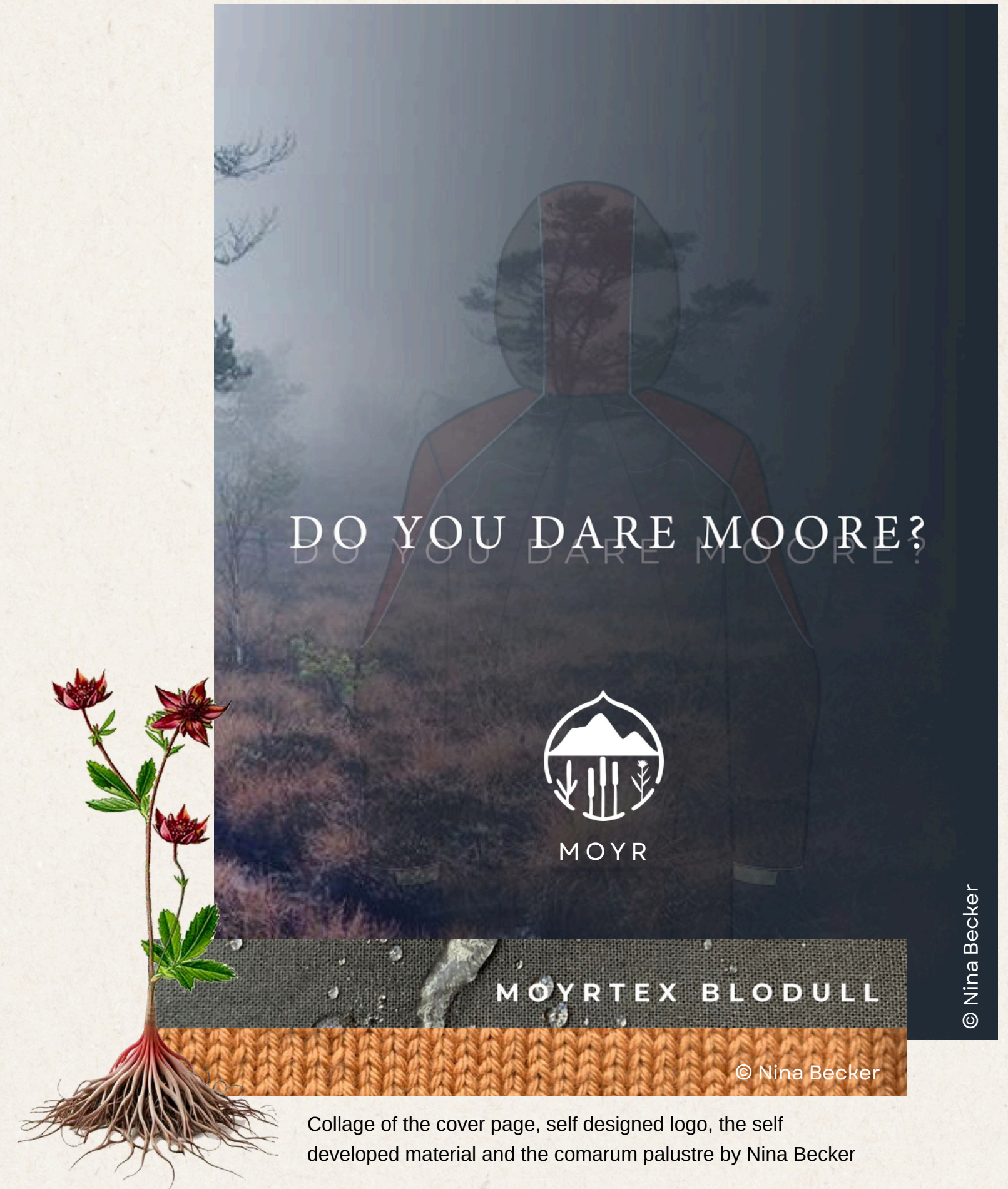
By **Nina Becker**, B.Sc. Fashion Design Engineering  
Current degree programme: M.Sc. Textile Products Design

Coach: Prof.in Dr.in phil. Marina-Elena Wachs

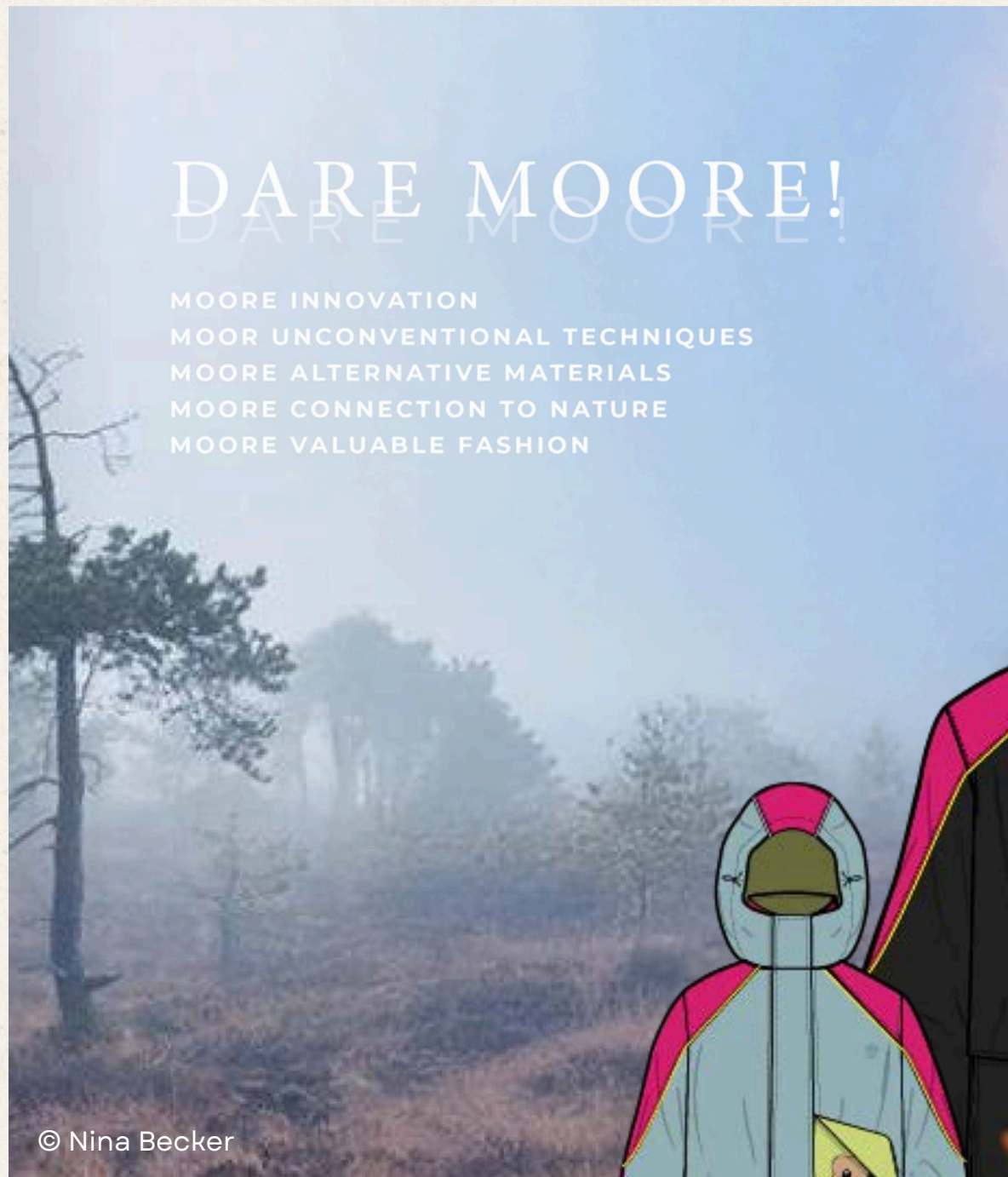


This work examines the rewetting of Norwegian bogs and their compelling potential in the context of paludiculture. Shrouded in mist and silence, the bogs embody both decay and renewal, serving as symbols of the duality of nature. The project promotes creative innovation through 'design for democracy' and uses design to engage with the uncanny beauty of nature and promote a more sustainable future.

This dialogue gave rise to the fictional brand MOYR, which combines Norwegian craftsmanship, ecological awareness and the question of the uncanny. A textile made from moor birch and reed cellulose is combined with a merino wool lining dyed with the rhizomes of *Comarum palustre* - a plant rooted in the shady wetlands of Norway. Its deep, natural hues reflect the melancholic landscape from which it originates.



Collage of the cover page, self designed logo, the self developed material and the comarum palustre by Nina Becker



# DARE MOORE!

- MOORE INNOVATION
- MOOR UNCONVENTIONAL TECHNIQUES
- MOORE ALTERNATIVE MATERIALS
- MOORE CONNECTION TO NATURE
- MOORE VALUABLE FASHION

© Nina Becker



Technical drawing of the interactive products for children and adults,  
© Nina Becker

**Moores**

**Textile Heritage**

**Democracy**

**Resource Management**

Inspired by Umberto Eco's reflections on ugliness, MOYR questions conventional beauty in fashion and reveals the quiet power of imperfection and the dignity of decay - a reminder that true beauty can dwell in the darkness of the moor. The products have various functions that connect the outfits in a playful way. These include inserts made of hydrophilic and thermochromic materials, as well as LED piping that lights up when the sensors in the hand area are activated by holding hands.

Ultimately, the rewetting of moors becomes not only an ecological necessity but a democratic act - inviting collective responsibility, shared participation, and a renewed commitment to protecting the fragile landscapes that shape both our environment and our cultural imagination.



**Exhibition objects: Prototype of substitute material, printed media, short film**

**Nina Becker  
A Textile Journey to the Moors of Norway**

# Cottongras

## Sustainable Fibres from Peatlands

By **Marc Küpperkoch**, B.Sc., Master Textile Products - Textile

Coaches: Prof.in Dr.in phil. Marina-Elena Wachs (HSNR)

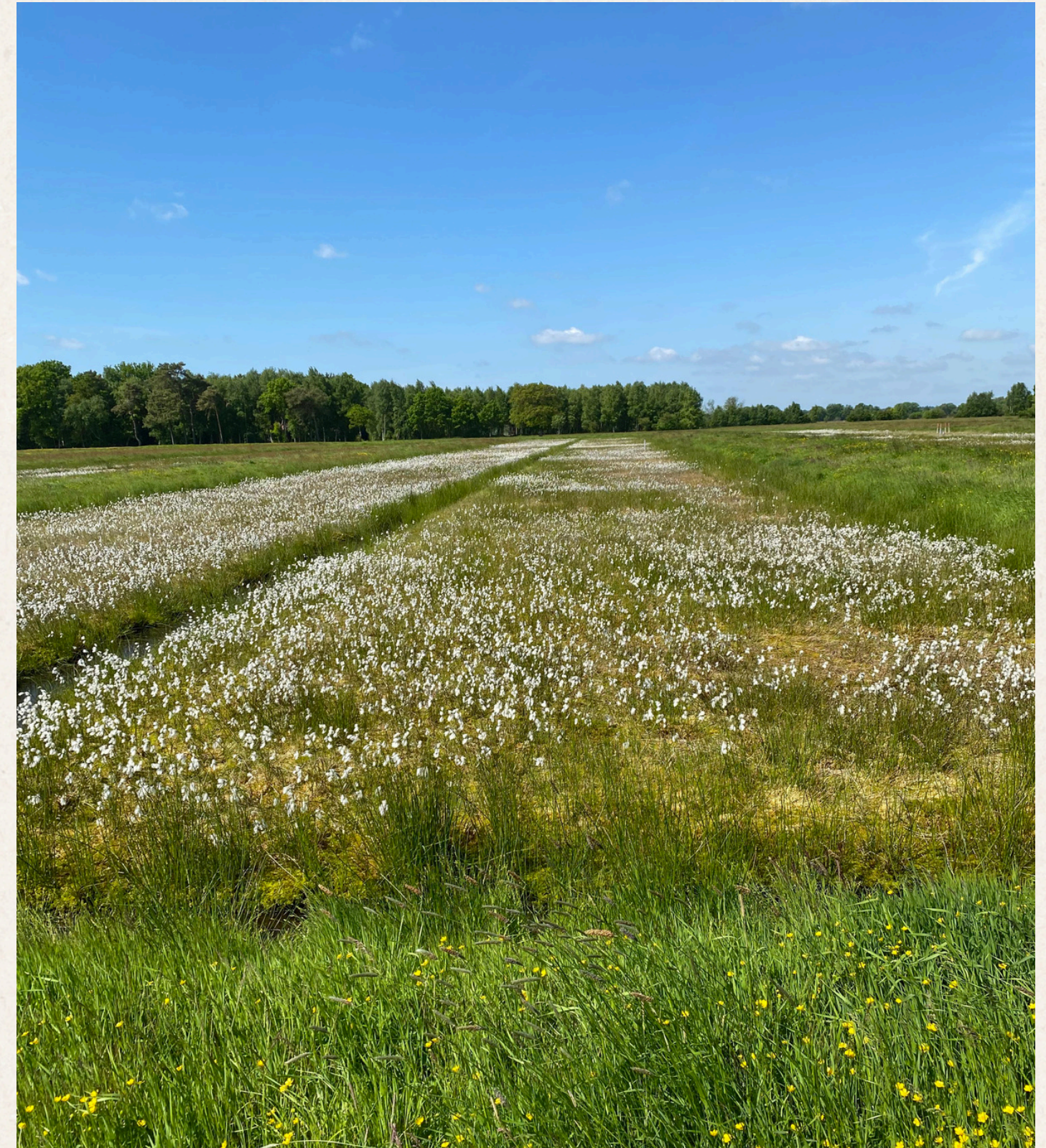
Prof. Dr. rer. nat. Lutz Vossebein (HSNR)

Prof. Dr. Dr. hc. Joosten (University Greifswald),

Dr. Mutschler (HSNR)

Acknowledgement: Greifswald Mire Centre, Thünen Institut, HSNR

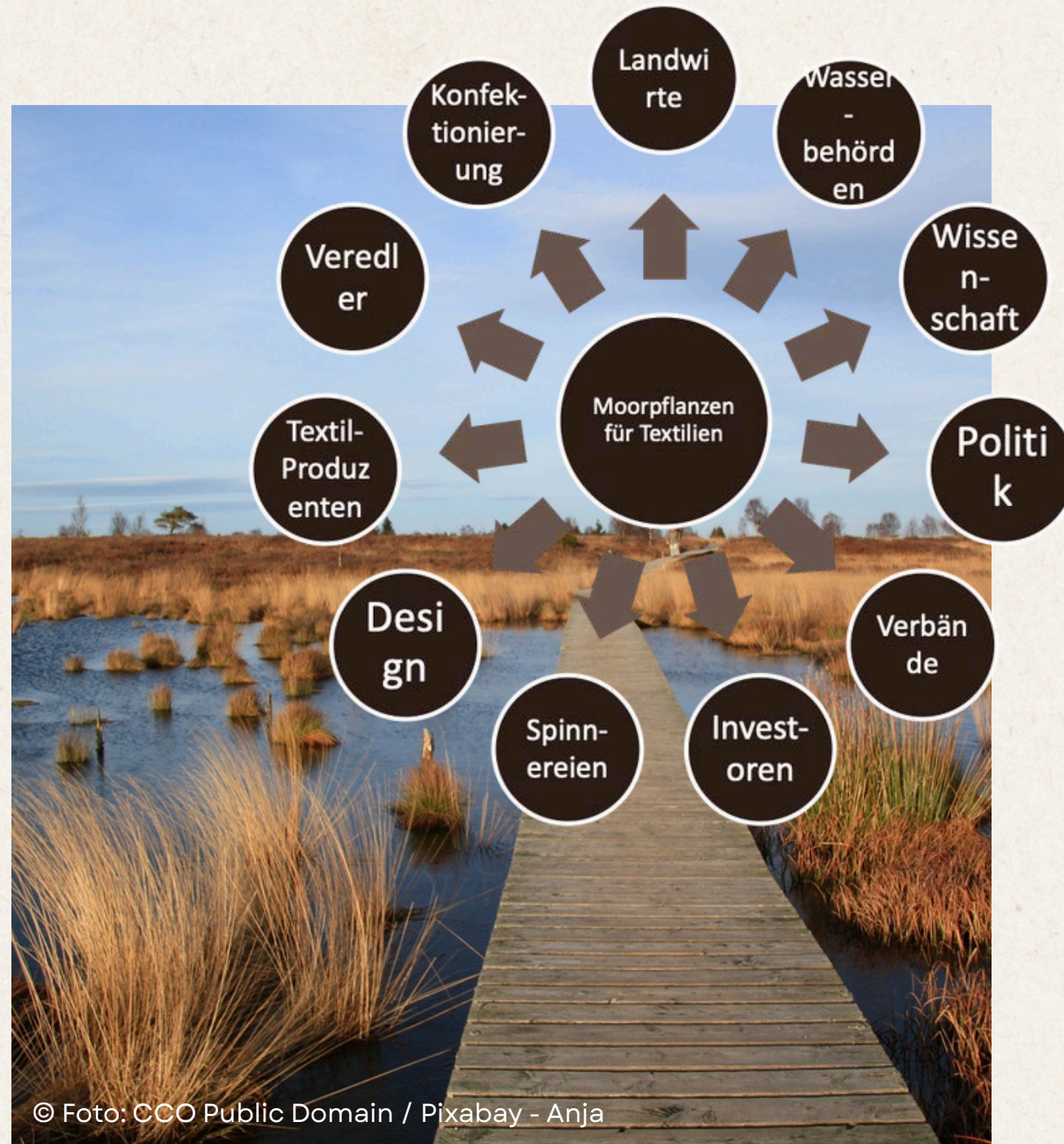
Wetlands are unique habitats. They store about twice as much carbon as all the forests on Earth combined, regulate groundwater and ambient temperature, and prevent flooding. But what do we do with the 95% of drained peatlands that harm the environment instead of helping it?



Peat moss at the Hankhauser Moor, Niedersachsen, with extensive growth of cotton grass

**Marc Küperkoch**  
**Cottongras: Sustainable Fibres From Peatlands**

7% of German greenhouse gas emissions can be attributed to drained peatlands, and degradation continues to progress. Agriculture must change, and that means switching to PALUDICULTURE - the cultivation of wet soils. The challenge: there are hardly any tried and tested approaches, only a few suitable plants and a high financial risk. This research project was launched to counteract this problem and minimise the risk for farmers. Cotton grass fibres from rewetted peatland for textile technology applications and as a high-quality raw material for producers and consumers. Cotton grass seed hair was already being used in the 18th century for blankets, pillows, wicks, gloves and hats. However, cheap cotton imports and the emergence of industrialisation in the early 19th century made cotton grass unattractive, resulting in the loss of knowledge about how to process it. An example of the urgency of preserving knowledge, especially craftsmanship, and passing it on to future generations. The use of cotton grass fibres today has unique added value that contributes significantly to the achievement of SDGs 6, 12, 13, 15 and 17. For this reason, I will dedicate my doctoral thesis to the comprehensive and holistic research of cotton grass and cotton grass fibers for textile technology applications.



© Foto: CCO Public Domain / Pixabay - Anja

# COIL:

## Collaborative Online International Learning

UPCYCLING IN FAST FASHION TO DESIGN SURVIVAL ITEMS WITH FISHER MEN FROM TANZANIA.

Coach and contact: Prof.in Dr.in phil. Marina-Elena Wachs, Marina.Wachs@hs-niederrhein.de

This case study - of COIL - Textile Design Project 2025/26 - explores the intersection of material reuse, cultural context, and human-centred design through the development of survival and safety items for artisanal fishermen on Lake Victoria, Tanzania. Building on the premise that fast-fashion waste, often exported to sub-Saharan Africa as second-hand clothing, represents an underused local material resource, the project investigates how these textiles can be reimagined as functional, buoyant design solutions.

Developed under the guidance of Prof. Dr. Marina-Elena Wachs (Hochschule Niederrhein, Germany), Sue Fairburn (Wilson School of Design, Canada), and John Powell (Bournemouth University, UK), and in collaboration with Arthur Mugema from the Environmental Management and Economic Development Organization (EMEDO) in Tanzania, the project was carried out by six international student teams. Each team addressed the shared challenge from a unique perspective, resulting in diverse outputs - ranging from wearable flotation aids and upcycled safety gear to educational and communication tools for community engagement.



Testing of the prototype floating device from Group 6



**co-creation**

**paricipation**

**fisher men**

**designing togetherness**

**3 continents**

**climat action**

**14**

**students**

**international learning**

## COIL - Textile Design Project 2025/26

Development process  
of the prototype from Group 6



Testing of the prototype floating device from  
Group 6



Workshop with Janet Chemitei on  
second-hand clothing in different  
African countries

The collective designing process merges upcycled textile waste with local craftsmanship and contextual knowledge of life on and around the lake. Grounded in the principles of Human-Centred Design (HCD), the project emphasizes co-creation, local adaptation, and cultural sensitivity. Valuable contextual understanding was further enriched through the contribution of Janet Chemitei, a Slow Fashion Educator, whose visit provided deep insights into local realities and fishing practices in Kenya. By producing and refining the buoyant elements locally, these product developments have the potential to contribute to community-driven innovation, job creation, textile waste reduction, and greater safety on the boats - suggesting how design solutions could be developed with, not for, the people who use them.

This COIL Design Project aims to raise awareness of our own role in the issue - highlighting how excessive consumption and the export of second-hand clothing from the Global North contribute to the overburdening of local markets and environmental challenges in regions such as East Africa.

It also seeks to emphasize the importance of Human-Centred Design as a method for developing solutions that are contextual, collaborative, and truly responsive to human needs with the user.

The COIL Design projects bringing the interests of all participants integratively and sustainable together, creating a cross cultural understanding for the needs of democratic rules: co - creation with the user and participation is key designing a sustainable future.



# Salzburg Festival

## Sustainable music theatre management in the future of the Salzburg Festival

By **Jonna Prange & Flora Claßen**,  
Current degree programme : Fashion Design-Engineering B.Sc.  
Coach: Prof.in Dr.in phil. Marina-Elena Wachs  
Prof.Dr. Norman Lupa

Good ideas gain relevance through resonance.

Project Group 09 at the Niederrhein University of Applied Sciences, supervised by Prof. Dr. Marina-Elena Wachs, illustrates how international and interdisciplinary collaboration can drive sustainable innovation in the cultural sector. In partnership with the Salzburg Festival and costume director Jan Meier, the team developed a sustainable costume design management system that increases production efficiency while expanding artistic freedom - demonstrating how cooperation can merge creativity with ecological responsibility.

The project builds on Michèle Lemper's research and her "sustainability traffic light," a tool that evaluates costume pieces across their life cycle and identifies pathways for upcycling, recycling, and downcycling. This structured method provided the conceptual foundation for the group's practical work and highlights how shared knowledge can accelerate sustainable transformation.

Three complementary mask-modelling approaches were employed: manual prototyping enhanced by 3D scanning, AI-assisted idea generation, and fully digital construction. This hybrid workflow broadens design possibilities, accelerates decision-making, and unites traditional craftsmanship with precise, low-waste digital manufacturing. A VR fitting process developed in collaboration with the Krefeld Campus and Prof. Dr. Norman Lupa enabled early testing of proportions and performance effects on an avatar, significantly reducing the need for physical prototypes and materials.

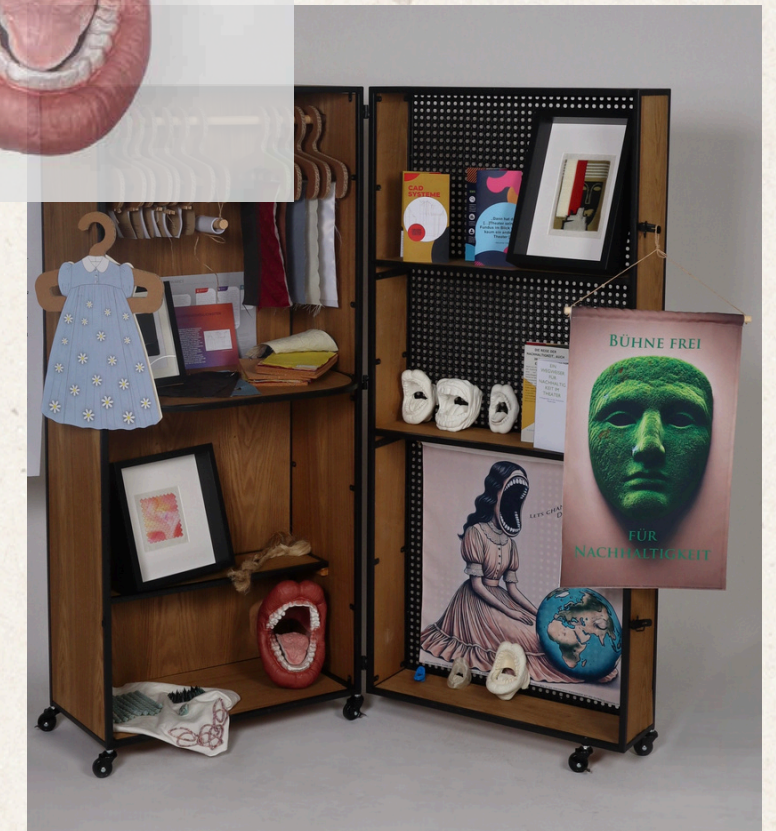
Guided by the Theatre Green Book, the team explored sustainable material choices and innovative finishing techniques using CAD and digital simulation technologies. These analyses informed practical decisions on fibre selection, care strategies, and durability requirements.

All findings were consolidated into an open-ended sustainability toolkit containing methods, guidelines, and digital workflows. Designed as a living resource, it supports long-term knowledge transfer and empowers theatre productions to work more responsibly, efficiently, and creatively.



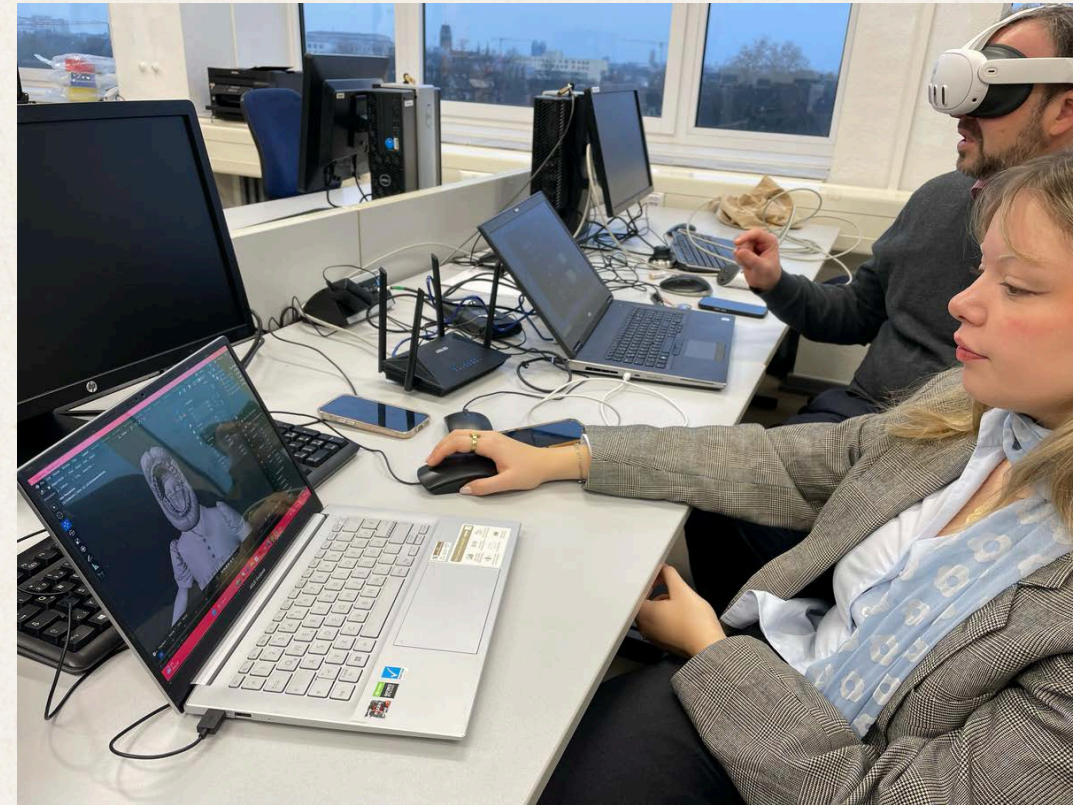
**Hybrid Design Spaces  
Resource Management**

**Exhibition objects: costume including mask & Open-ended sustainability toolkit**



**Designing in a cross generational space,  
the societies impact could be described**

**- FOR THE micro-perspective: The  
comparison...**



# Where silence folds

**a slow design offer inspired by the legacy of Jil Sander  
– between textile heritage and sustainability**

By **Lilo Stephan**,  
Current degree programme : Fashion Design-Engineering B.Sc.  
Coach: Prof.in Dr.in phil. Marina-Elena Wachs

*"Where Silence Folds"* reinterprets the design philosophy of **Jil Sander**, whose **purist approach** and commitment to quality continue to inspire more responsible directions in fashion.

Drawing on **Bauhaus** principles and German textile heritage, the project explores how timeless design and material awareness can become tools for **sustainability, equality and democracy**.

**Exhibition objects: Sander's iconic white blouse translated in traditional smocking techniques, printed media**



© Lilo Stephan

"Where Silence Folds" 2025, Lilo Stephan

**Lilo Stephan**  
**Where Silence Folds**



© Lilo Stephan



© Lilo Stephan

**textile heritage**  
**shared responsibility**  
**democratic design thinking**  
**participation**  
**designing togetherness**

By translating Sander’s iconic white blouse through traditional **smocking techniques**, “Where Silence Folds” reconnects contemporary fashion with handcraft, durability, and cultural memory.

This act of **sharing knowledge** and skills builds a sense of participation and shared responsibility — a **responsibility** each of us carries, and whose recognition means caring for one another and for the natural environment. Democratic design thinking emerges in a space of **dialogue between generations, cultures, and identities**.

In its calm aesthetic, the work becomes a quiet act of resistance against fast fashion. Not only is the smocking process inherently slow, but the choice of *second-hand, natural-fibre* material and a neutral design also forms a deliberate statement for slow and responsible fashion.

It reflects on how silence, care, and craftsmanship can open new pathways toward **mindful and democratic design**.



“Where Silence Folds” 2025, Lilo Stephan

**Contact us:**

# DESIGN FOR DEMOCRACY

**Atmospheres for a better life**

Exposé for WDC Campus Exhibition  
Frankfurt 2026

**Michele.lemper@stud.hn.de**

**Chalin.huege@stud.hn.de**

**Nina.becker@stud.hn.de**

**Marc.kueperkoch@gmail.com**

**Jonna.prange@stud.hn.de**

**Flora.classen@stud.hn.de**

**Lilo.stephan@stud.hn.de**

**Lisa.moritz@stud.hn.de**

**Marina.wachs@hs-niederrhein.de**

Reducing inequality

Moores

Designing Togetherness

Resource Management

Textile Heritage

COIL - International  
togetherness - across  
continents

Re Covering Crafts Strength

Participation

Hybrid Design Spaces

Vulnerability as Strength



# **YOUNG TALENTS AT WORK**

**Design for Democracy**

**WDC Campus 2026**

