

# water proof heat resistant

HOW TO CONFRONT THE CONSEQUENCES OF CLIMATE  
CHANGE WITH OUR WEARABLES, OUR CLOTHING?

A KISD project  
summer term 2025  
supervised by Patricia Hepp

Köln International School of Design  
Ubierring 40  
50678 Köln

Meike Kattwinkel  
Benedikt Bruchhausen  
Olivia Pauline Kolbe  
Nele Stollenwerk  
Anna Koch  
Haruka Ueno  
Vincent Pössinger  
Viola Stein  
Janko Stein  
Helena Logsch  
Lara Schiefer  
Sofia Viktoria Fellinger  
Milan Elsen  
Till Hein  
Jenny Hellebust

*supervised by Patricia Hepp*

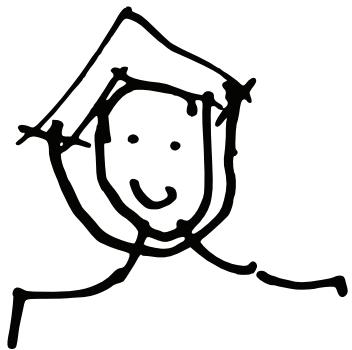
*getting hot in here?*

use me as a sunhat

1. flip me open

2. use the ribbon around me and tie it  
into the eyelets

3. put me on your head and tie under  
your chin



*Teams*  
*Event*

Anna Koch  
Viola Stein

*Location + Choreogarphy*

Meike Kattwinkel  
Olia Pauline Kolbe  
Helena Logsch  
Sofia Viktoria Fellinger  
Viola Stein  
Lara Schiefer

*Sound*

*Light*  
Benedikt Bruchhausen  
Vincent Pössinger

*Catalogue*  
Milan Elsen  
Anna Koch  
Nele Stollenwerk

*Copy Text*  
Jenny Hellebust

# *project intro- duction*

Are we prepared for our future, for optional future scenarios? How to confront the consequences of climate change with our wearables, our clothing? This KISD project with the title "WaterproofXHeatresistant" deals with the design of body coverings that address climate change and its impact on the environment and a life in extreme conditions in our future. Are we prepared to become active in shaping our future?

Consequences of climate change will be our future threats, if its rising sea levels, along with extreme weather events as hurricanes and floods, living beings will have to deal with, as well as droughts and heatwaves. We should get prepared with appropriate equipment to survive.

We looked at our possible futures through this project and thus also considered worst-case scenarios in our research. With this process we can not only strengthen our resilience to deal with worrying realities, but we can also recognize our fears.

Developing ideas about the future can help us in the present to get out of a blocking depression and becoming active in working towards a better future. This medium-term design course was an invitation to develop design solutions that are portable, available, sustainable. Getting involved in a design process that challenges playful experimentation and exploration and to free from conventional thinking. With the objective to develop equipment that allows us to survive the increasing number of extreme scenarios, the conceived designs should be still suitable for everyday use, functional and aesthetically innovative.

We looked at children, who are particularly affected by the climate crisis, even if they do not yet have such loud voices and can only be represented. Their bodies are not as capable of compensating for the rising heat, and they are particularly vulnerable to flooding.

Children, who still have more future ahead of them,

are more exposed to environmental damage and disease. In the research we especially considered the situation of children in extreme scenarios, looking through the eyes of the inner child to find a playful design approach, ready to experiment and improvise.

Some of the prototypes in this catalogue introduce such an unconventional solution, imaginable for children, as well as for grown-ups. Other designs are versatile and challenge the capability to improvise with materials that you can find in your household or immediate surrounding. Other solutions are dedicated to the recycling of materials and the reuse of finished garments, which take on a new meaning and functionality.

How we deal with our resources, how we consume, and trash textiles was identified as part of the environmental causes for climate change. How we can embrace a more sustainable future of fashion was also basis for the design approach. A gender-inclusive, size inclusive design that implies versatility was recognized a way out of material despising mass production of the textile industry. The use of new renewable materials from the petri dish was investigated as forward-looking, circular alternatives to current cradle-to-grave clothing textiles.

The research on the topic was started by an outlook on possible consequences of climate change, that affect the environment, but also health and mental health. It was optional to begin with a focus on a specific scenario and to investigate on the circumstances. Either it is an increasing desertification, extreme heat, or a problem with insects, flooding, water scarcity or social problems in an urban environment. Further these scenarios should be illustrated with pictograms. The pictograms in the following catalogue have been developed on this exercise.

A subsequent step was the material research, which material functions in the investigated situations, still according to the sustainability requirements. A form and material in situ studio-workshop with textiles and objects decorated on the body-initiated investigations about creating unfamiliar silhouettes, deconstructing conventional clothing and recontextualizing pieces of fashion. The outcoming series of photographs were commonly discussed and served as inspiration for the main project.

The outcome of the described investigations projected life-size prototypes that represent concepts for a specific scenario in a dystopic future and function at the same time as a call for action in avoiding potential threats.

In this catalogue the students' final prototypes are presented, that were developed in the first half of summer semester 2025. The spectrum of concepts is broad and reflects an intense engagement with the topic. The outcome are far more than 15 life size prototypes photographed in the KISD photo studio with the helping guidance of Patrick Schwarz, to whom we are very thankful.

These resulting designs will be presented in a life performance at KISD. The show as the catalogue and the media announcement is realized by the whole team of the students with distributed responsibilities. Some students are responsible for the location, others for the choreography, another team developed the graphic appearance and this catalogue, and others are responsible for the sound and the light. Every single course member put all their energy into achieving an excellent overall result. This led to experiencing how working together can achieve so much more than each individual can attain on their own – the whole is greater than the sum of its parts.

It was a great pleasure for me to accompany this mid-term semester project and I thank everyone involved for their commitment. We have achieved a good quality of inspiring thoughts, conversations and creations.

Many thanks also to all those who contributed to the realisation of the Show, if either performing for their fellow design students or helping with technical know-how. And many thanks to the co-workers from KISD for supporting and helping us, and to KISD for inviting me to conduct this project, which is a joyful experience for me.

Patricia Hepp

water

heat

insect

urban

*proof*

*resistant*

*safe*

*dystopia*

Meike Kattwinkel



Benedikt Bruchhausen



Olivia Pauline Kolbe



Nele Stollenwerk



Anna Koch

Haruka Ueno



Vincent Pössinger



Viola & Janko Stein



Viola Stein



Janko Stein



Helena Logsch



Lara Schiefer



Sofia Viktoria Fellinger



Milan Elsen



Till Hein



Jenny Hellebust



*Outfit Index*



Meike Kattwinkel



# *Liquid Burden*

Liquid Burden is a conceptual vest that addresses one of the most urgent global inequalities: gendered access to water. In many parts of the world, the daily task of collecting water falls to women and girls—a physically demanding responsibility that often denies them access to education, healthcare, and future opportunities.

This gender-neutral, size-inclusive vest offers a way to make water transport both more visible and more physically manageable. Instead of balancing heavy water containers on the head or back, the vest distributes the weight evenly across the shoulders and torso. It not only provides physical relief but also stands as a symbolic gesture toward redistributing responsibility. The design embraces

transparency—both literally and metaphorically. Transparent materials and visible strap systems highlight the often-overlooked burden of everyday care work. Functional lines evoke water systems, turning the act of carrying into a visual design element. The vest adapts to various body types and sizes and can be individually adjusted using buckles and straps. Its aesthetic combines functionality with a clear, powerful visual language: protection, visibility, and strength are at its core. Liquid Burden treats clothing not merely as a wearable layer but as an expression of social reality. This vest is a quiet yet powerful statement. It is not only a tool for physical support—but also a symbol of change.



Meike Kattwinkel





Benedikt Bruchhausen



# *A Hat for a Thirsty Future*

In response to the growing threat of desertification and water scarcity caused by climate change, I developed a wearable prototype that functions as both a hat and a dewcollecting device. The design is intended for use in arid, desert-like environments where traditional water sources are unavailable and survival depends on passive, low-tech solutions. The hat is made from plastic tarp, chosen for its waterproof and durable qualities, making it suitable for harsh outdoor conditions. Structurally, it is supported by lightweight tent poles, which also serve to elevate a fine mesh net used for collecting water. The collection method is based on a natural phenomenon: as air cools during the night in desert climates, it can no longer hold as much moisture, causing dew to form. The fine net captures this moisture, which then condenses and is pulled downward by gravity. To function as a water collection device, the hat must be placed upside down and stabilized using the tent poles in a bracket. The form of the hat is not focused on aesthetics, but its

visual resemblance to a tent is intentional. It suggests themes of displacement, transience, and the experience of living without permanent shelter—realities that could affect millions of people as climate conditions worsen. The shape also references the need for mobile, adaptable solutions in uncertain environments. The material choices carry symbolic weight as well. Plastic tarp is often associated with temporary housing and emergency relief, linking the object to situations of crisis and instability. Tent poles evoke the idea of portability and impermanence—qualities that reflect the broader human response to environmental collapse. While the prototype has not yet been tested in real-world conditions, the dew collection principle is based on proven environmental physics. This project explores how wearable design can be used to meet basic human needs in a future shaped by climate extremes—particularly the need for water and protection in desertified regions.



Benedikt  
Bruchhausen





Olivia Pauline Kolbe



# Scarlet

warming is no longer silent  
what began as a hum  
soft at first not yet to name  
grew louder came closer  
until it swallowed quiet whole

they thrive where we suffer  
they use what we fear  
flourishing in the cracks of crisis  
heat-fed fighting floods and drought  
spreading without mercy

restless skin  
swollen and bloody  
itching fire that rages  
carves deep in flesh  
toxin creeping inside

a poisonous swarm  
hunting you down  
wings seeking skin  
blood  
life

soft  
almost weightless  
floating in circles  
keeping what's precious  
untouched

woven to hold you  
softly guarding  
what flows  
in streams  
beat by beat

Scarlet  
whispered promise  
holding hope close  
strong as blood  
soft as skin



Olivia Pauline  
Kolbe





Nele Stollenwerk



# Zuversicht:

## *Facing the future with confidence*

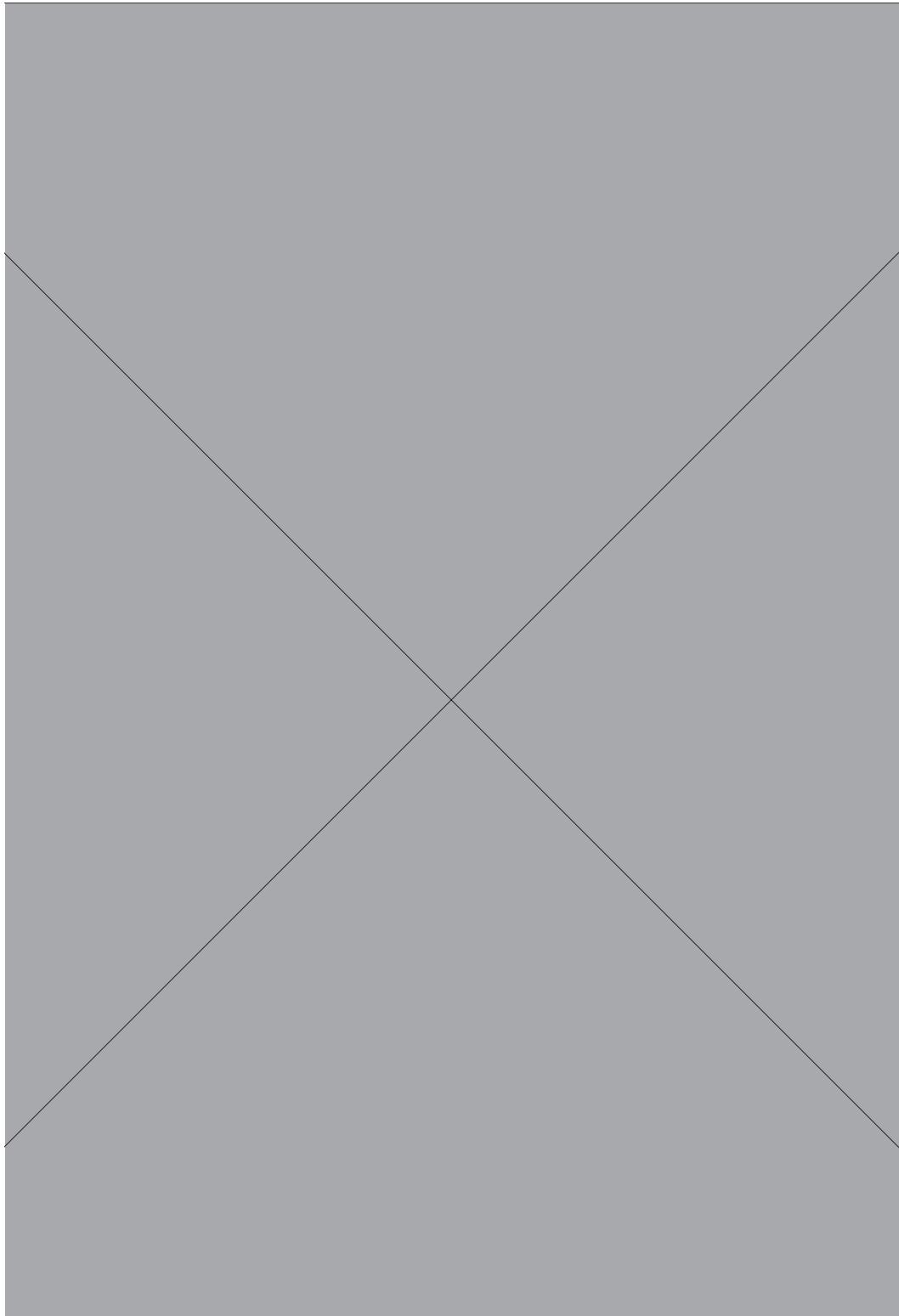
Lots of young people are worried about their future. What will the world we are growing into look like? How will climate change affect this world? My project is about the worries that make us look to the future with fear. It responds to the emotional consequences that climate change triggers deep inside us. It provides comfort and consolation. The look consists of a jacket with long sleeves that invites you to embrace an anxious person, to shield them from the world for a moment and to comfort them. The long, wide sleeves serve this purpose. They provide fabric to create a layer between the anxious person and the outside world. The jacket also has a hood so that you can shield yourself. It is made from a combination of fleece, which is comfortably soft to the touch, and lace. The lace can be found in the long train, which is made from

old screen-printing screens. The train is labelled with the word 'Zuversicht', the German word for confidence. The train also provides the possibility of covering and shielding. I chose the word "Zuversicht" because it describes a hopeful view into the future. The look is complemented by trousers made of sweat fabric, which reflect the soft, comforting character. They are colour-coordinated with the colour of the screen-printing screens. The jacket encourages people to comfort others, reflecting the community spirit in the face of climate change. Everyone must work together for a better future. The wearer can also react to any fear that arises thanks to the wide sleeves and hood to shield themselves for a moment. The look is intended to provide comfort and open up new perspectives for a shared future.



Nele Stollenwerk





Anna Koch



# *Refraction Nomad: Japanese-Inspired Wear with Recycled CDs*

“Refraction Nomad” is a conceptual garment designed for life in arid, desertified environments, blending traditional Japanese design elements with practical, modern materials. Inspired by the ichimegasa, a traditional wide-brimmed hat, and the hakama, this outfit reimagines cultural forms as tools for survival in the face of environmental change.

The full-body ensemble is crafted from lightweight, white fabric that reflects sunlight and minimizes heat absorption. The voluminous ichimegasa has been transformed into a fullbody shield, creating a moving shade that protects the wearer from sun and sand. Broken CDs—cut into equal sections and arranged across the surface—serve as re-

flective accents, bouncing light away while adding texture and shimmer. These repurposed materials offer a small but thoughtful nod toward environmentally conscious design. The lower garment is a minimalist white hakama, featuring vivid red fabric along the side seams. This subtle accent symbolizes inner strength and vitality—standing out in contrast to the garment’s overall simplicity, much like resilience quietly present in harsh climates. Rather than simply dressing for survival, Refraction Nomad imagines survival with grace. It proposes a future where cultural heritage and environmental adaptability coexist, and where beauty and sustainability are not at odds, but intertwined through thoughtful design.







Haruka Ueno



# *Refraction Nomad: Japanese-Inspired Wear with Recycled CDs*

“Refraction Nomad” is a conceptual garment designed for life in arid, desertified environments, blending traditional Japanese design elements with practical, modern materials. Inspired by the ichimegasa, a traditional wide-brimmed hat, and the hakama, this outfit reimagines cultural forms as tools for survival in the face of environmental change.

The full-body ensemble is crafted from lightweight, white fabric that reflects sunlight and minimizes heat absorption. The voluminous ichimegasa has been transformed into a fullbody shield, creating a moving shade that protects the wearer from sun and sand. Broken CDs—cut into equal sections and arranged across the surface—serve as re-

flective accents, bouncing light away while adding texture and shimmer. These repurposed materials offer a small but thoughtful nod toward environmentally conscious design. The lower garment is a minimalist white hakama, featuring vivid red fabric along the side seams. This subtle accent symbolizes inner strength and vitality—standing out in contrast to the garment’s overall simplicity, much like resilience quietly present in harsh climates. Rather than simply dressing for survival, Refraction Nomad imagines survival with grace. It proposes a future where cultural heritage and environmental adaptability coexist, and where beauty and sustainability are not at odds, but intertwined through thoughtful design.



Haruka Ueno





Vincent Pössinger



# MosquitNo

It is getting warmer. Rain falls in floods on parched soils. What remains are pools of water - perfect breeding grounds for the most dangerous animal in the world: the mosquito. The diseases they transmit claim over 650,000 lives every year. In a world where climate change is becoming a physical issue, there is a need to rethink protection. The close-fitting, fine-meshed mesh shirt is a modular garment that combines design and function. A sophisticated system of spacers lies between the body and the textile: thin PE foam that is embedded in the mesh on both sides so that it never touches the skin directly. The shape follows the anatomy, lifts the fabric floating above the skin and creates distance - even against mosquito bites. At the same time, the material gives the garment structure and volume - and even buoyancy in water. The placement of the recyclable spacer elements is orientated towards the muscles and gives the garment a body-hugging, almost organic character. The pattern of the mesh shirt is reminiscent

of tattoos from indigenous cultures, which traditionally served as symbols of protection, identity and status. The design language thus becomes a link between the cultural past and the speculative future. Inspired by natural protective mechanisms such as armour and distance, the design is asking questions about the clothing of the future: How close do we allow the world to get to us? How can we protect ourselves without isolating ourselves? Who or what do we want to be? Are we ready for what is to come? This fashion piece is more than just clothing: it is part of our individual identity, a statement, a shell and a second skin. It deliberately deforms body images, creates new silhouettes and aesthetic spaces between function and fantasy. It is unisex, wearable and changeable - from everyday vests to club outfits. And it remains a promise: Even in a changing world, full of fear and uncertainty, clothing will contribute to our well-being.

Say no to mosquito. Say MosquitNo.



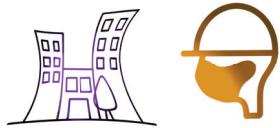
Vincent Pössinger





*Shared project collection by:*  
Viola Stein &  
Janko Stein





# ***VISIBLE ACTS:***

## ***Resist injustice.***

## ***Demand***

## ***responsibility.***

*Collection by Viola Stein & Janko Stein*

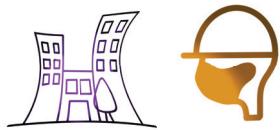
In a time of growing climate injustice and social inequality, fashion should not only reflect, but actively shake things up. This collection uses the powerful symbolism of the safety vest to draw attention to global grievances. The two-piece set, consisting of bright yellow fabric and reflective materials, questions conventions of protection, protest and social cohesion in the midst of a collapsing climate system.

The warning vest takes center stage - an everyday object that was originally developed for road safety. It signals alertness and urgency and demands visibility in moments of danger. In urban spaces, it becomes a reminder: a shining symbol that cannot be overlooked. The collection transforms this functional garment into a political statement that challenges ignorance of the consequences of the

climate crisis and demands attention. While the warning vest stands for protection and safety in everyday life, here it becomes armor against invisibility and social exclusion. It demands attention — — for those who suffer from the consequences of the climate catastrophe, but whose fate often remains hidden. The reinterpretation of the materials creates a dialog between protection and protest, between visibility and ignorance. A reminder that we must remain vigilant and visible in order to resist together against all those who profit from exploitation. This collection is a manifesto for more justice and collective responsibility. It is a reminder that protection from the consequences of the climate crisis must not be a privilege, but a fundamental right for all people. It is a call for solidarity that knows no geographical, economic or social boundaries.



Viola Stein



# Yellow: Cause & Confront

In this part of the collection, the yellow material of the safety vest becomes a symbol of resistance. The warning vest is transformed from a safety feature into political armor used as a statement to demand justice. Functional safety becomes aesthetic revolt. This questions the public perception of protest and security.

The climate crisis does not affect everyone equally. Those who contribute the least to global CO<sub>2</sub> emissions are often those who suffer the most from the consequences: Rising sea levels and droughts are destroying the livelihoods of many people and forcing entire communities to flee their homes. At the same time, the corporations and political elites that profit most from environmental destruction and contribute to global warming remain largely untouched - shielded by wealth and power, unconcerned and without taking responsibility.

This piece is a confrontation - a demand to acknowledge responsibility. The bright yellow hue of the warning vest becomes a cry for solidarity, because we all live on the same planet, breathe

the same air and experience the same decay of natural resources. But justice doesn't just happen - it has to be fought for. Real protection cannot exist as long as inequality persists. Being visible in this garment means defending oneself against invisibility, not only for the individual, but for collective resistance. Yellow - Cause & Confront becomes armour - not against physical danger, but against marginalization and ignorance. It brings the bitter truth to light: protection is a privilege that is often reserved for the few, while the risk is passed on to the many. By reinterpreting this everyday material, Yellow as Resistance raises a clear demand for responsibility. It exposes the blatant injustice of a world in which the powerless must bear the weight of a crisis they did not cause. This is not just visibility - it is protest. It is an uprising against the structures that protect the powerful and abandon the vulnerable. It is a statement that real protection and real justice can only exist when responsibility is shared and inequality is overcome.



Viola Stein



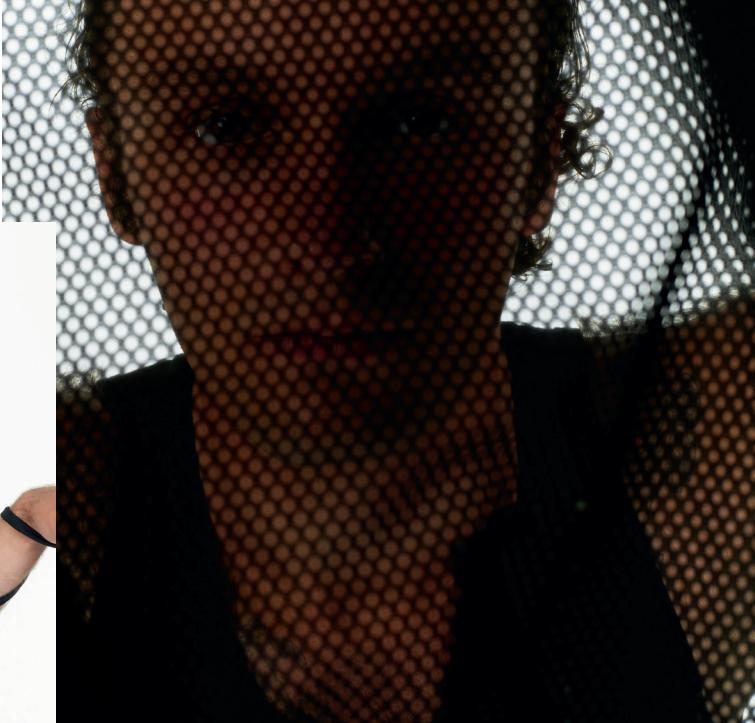
Janko Stein



# *Reflect: Echo & Shield*

This head piece becomes a site of both vulnerability and resistance. The modular headpiece can be worn as a headband, mask, or full covering. its transformation echoing the resilience of those forced to adapt under the pressure of climate injustice. With each knot, it adjusts to different forms, just as affected communities are forced to navigate changing conditions with limited means. The mesh material allows the wearer to see and be seen. It

offers a thin shield,as a protective layer. A barrier that doesn't isolate, but filters. It resists total exposure, while refusing erasure. Reflective stripes, taken from the high-visibility vest, are repositioned around the head to signal urgency. They become beacons for the weak, for those that are invisible through inequality. Those whose suffering remains unseen in the dominant narratives of the climate crisis. This headpiece shines for them.



Janko Stein



Helena Logsch

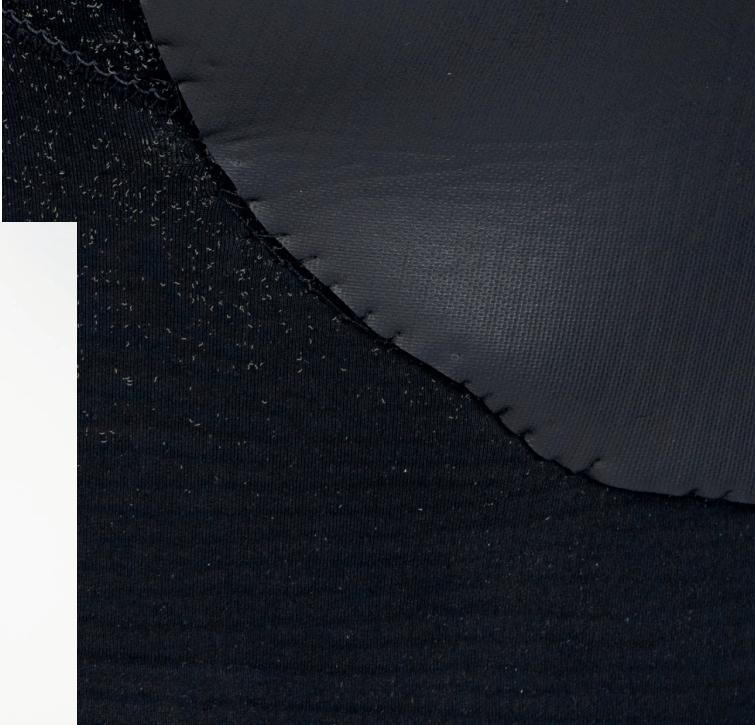


# *Monsuna: Adaptive streetwear for a new climate reality*

Extreme weather events are increasing worldwide due to climate change. This particularly shows in the increase of heavy, monsoon-like rainfall. Global warming is causing the temperature of the atmosphere to rise - warmer air can absorb more moisture. This stored moisture is released in increasingly intense rainfall, often within a very short time. Heavy rainfall, which used to occur in tropical regions, is also becoming more frequent and unpredictable in temperate zones.

MONSUNA is a two-piece neoprene system that does not try to block water like traditional rainwear, but interacts with the water. The material is water-resistant, but not rigidly repellent. Instead, it stores heat for a short time, using the thermal properties of neoprene to keep the body at temperature despite external moisture. The outfit was designed for an urban environment where the boundaries between functionality, protection and aesthetics need to be rethought. The decision to work with neoprene is technically motivated: The material

insulates by trapping air bubbles, even if it gets wet from the outside. In combination with an adapted cut - close to the body but flexible - the result is an outfit that not only protects against the cold, but also allows freedom of movement in adverse conditions. The wearer is not hindered, but feels strengthened and protected. MONSUNA poses the question: What does everyday clothing look like when extreme weather is no longer an exception, but part of our reality? The answer lies in a design that combines functionality, material innovation and self-determination. MONSUNA is not conceived as emergency clothing, but as part of a future street-wear - wearable, aesthetically powerful, but ready for sudden changes in the weather. At a time when fashion must not only be an expression, but also protection and attitude, MONSUNA is a step in a new direction: technological clothing that responds to real challenges without losing cultural relevance. It is clothing that does not shy away from the future, but faces it.



Helena Logsch



Lara Schiefer



# *Soft Armour: A Shelter for Skin and Self*

Soft Armour is a climate-adaptive outfit that I designed to protect both physically and emotionally. It is inspired by the increasing danger of UV rays due to the thinning ozone layer, but also by the feeling that many people—especially young people—are overwhelmed by the current state of the world. The idea behind the outfit is to create something that feels like protection on different levels. The oversized hood creates shade and a feeling of hiding from the outside world. The shoulder pads and the knee bandages are inspired by armor, but in a soft and wearable way. They stand for the emotional weight people carry, and the need to feel strong and safe in a time of climate crisis.

The skirt can be worn as a cape, showing that the outfit is flexible and can change depending on the situation. I also made arm warmers with thumb-holes and a belt with pockets to store a few needed things. The look is very sci-fi inspired but instead of focusing on survival through toughness, I wanted to make something that shows softness, adaptability, and emotional depth.

This project is about more than just protecting the skin from the sun. It's also about the psychological side of climate change, and how fashion can be used as a way to feel stronger, safer, and more prepared for the future.



Lara Schiefer



Sofia Viktoria Fellinger



# *Veilwalker Solar: DIY Mosquito- Repellent Survival Armor for Heatwaves*

Veilwalker Solar is a handmade protective cloak for the future, designed for surviving extreme heatwave conditions in an apocalyptic world. Crafted in crisis, it serves as your silver second skin against the burning sun and insect bites. Built from materials easy to find in any crisis, it offers reliable defense that you can make yourself at home.

The main body consists of two emergency rescue blankets taped together with strong tape. Every seam is carefully sealed to ensure maximum tear resistance. The blankets are folded, a hole is cut for the head, and then taped again. The sides are fully sealed, except for two arm openings. The bottom edge is weighted down with small sticks and stones, also taped in place to keep the cloak stable

and prevent it from blowing up in the wind. The headpiece is made by attaching a rescue blanket to an old cap. A mosquito net covers the head and neck for insect protection, while mosquito net sleeves shield the arms from stings and bites. Accessories include sunglasses, a strap for attaching essentials, a water bottle, and a car windshield sunshade — which doubles as a sitting pad or extra sun protection when held overhead. Veilwalker Solar is not a style or standard clothing, but a practical, simple gear for survival. Made without machines and from materials that are easy to find, it offers reliable protection during heatwaves against intense sun exposure and insect bites to help you survive.



Sofia Viktoria  
Fellinger



Milan Elsen



# *Un-Identikit: Clothing for Solidarity in a Post-Body World*

*Un-Identikit* is a speculative garment exploring how clothing can act as both camouflage and signal in a world where identity is entirely detached from the body. Set in a speculative future, shaped by the effects of a total climate collapse: A hyper-surveilled urban dystopia. The scenario imagines a public space saturated with LIDAR tracking, AI facial recognition, thermal cameras, gait analysis, and even neural pattern recognition. Simply entering public space becomes an act of radical defiance. Protection of identity, becomes a necessity to evade repression and ensure collective safety.

This project proposes a uniform uniform for collective resistance—concealing biometric markers like face, body shape, and heat signature.

It resists technological methods of identification and tracking while reimagining identity as fluid and subverting a loss of individuality in the collective. An interchangeable aesthetic element is central: A full face mask—easily swapped among wearers. This swapping allows group members to express a strong individual identity and message, without tying signals to a single body. Individuality doesn't dissolve in community, it emerges from it.

Fluid, adaptable and untraceable.

The prototype includes three symbolic masks representing *hyper-surveillance*, *post-body identity*, and *solidarity*. A body garment reduces the human silhouette to a rectangular form using thick layered fabric. A base mesh fabric blocks radio waves like a Faraday cage; camouflage patterns and optical films in the side panels visually distort the underlying body; a metallic insulating coating makes the garment resistant to environmental hazards such as heat and rain.

Yet this is no vision of a bleak dystopia. Its aesthetic is not grim or oppressive, but playful—asserting that resistance can be imaginative and bold.

In an imageined futuer, *Un-Identikit* speaks to contemporary issues of fluid identity and the ever-present tension between the individual and the collective. Through clothing, agency can be reclaimed even in the most controlled environment imaginable. It turns uniformity into a tool for individual expression. Power lies not in the isolated figure, but in the unified, anonymous collective—resistant, resilient, and ungovernable.



Milan Elsen



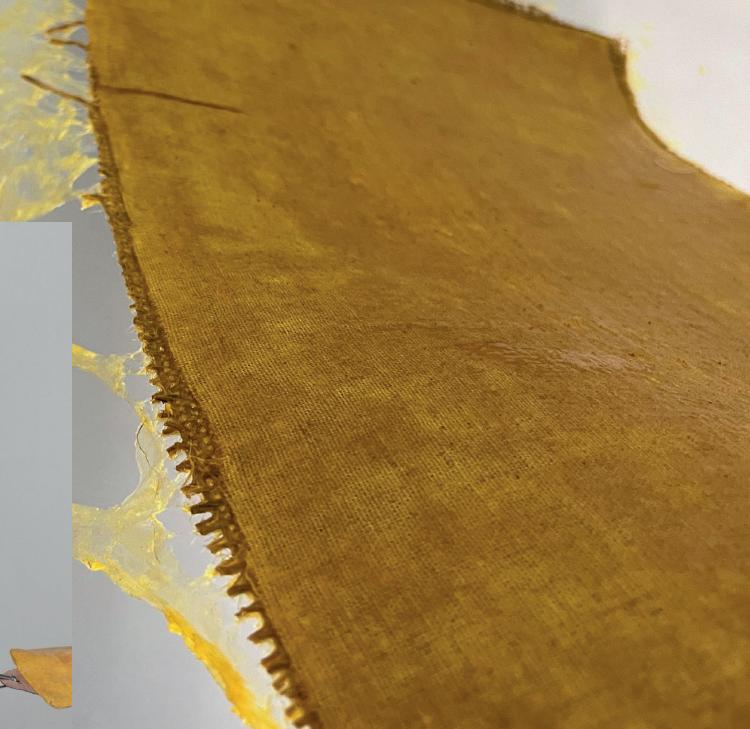
Till Hein



# *Protectopus: A floating guardian for a changing world*

Protectopus is more than a backpack. It's a call to rethink how we protect the next generation—through design, through material, and through care. Most decisions—especially those concerning climate change—fail to consider children and the safety of their future. This prototype addresses the often-overlooked vulnerability of children in climate-related disasters, particularly flooding. The floating backpack system acts as a playful yet confidence-building everyday guardian in times of crisis. Inflatable arms function like a life vest and can be adjusted to fit diverse body types. Additional arms can be attached depending on the wearer's weight, increasing buoyancy. The arms also serve a symbolic and practical function of solidarity—users can connect to one another for mutual support. By rolling and locking the individual components, Protectopus inflates and keeps the wearer safely afloat.

Designed for daily use, Protectopus is lightweight, comfortable to carry, and familiar in form—encouraging children to take ownership of their own safety. In emergency situations, it transforms instantly into a life-saving device, bridging the gap between everyday life and crisis response. The prototype also addresses the modern material crisis by introducing a biodegradable, plant-based alternative to conventional waterproof textiles made from plastic. The backpack's main body consists of a sturdy jute mesh combined with a linenviscose fabric, fused with natural rubber and dyed with turmeric. These materials form a durable, waterproof, and airtight textile. For increased flexibility, the inflatable arms are made without the heavier jute layer. Protectopus is not only a response to the climate crisis—it is a vision of design as protection, connection, and care.



Till Hein



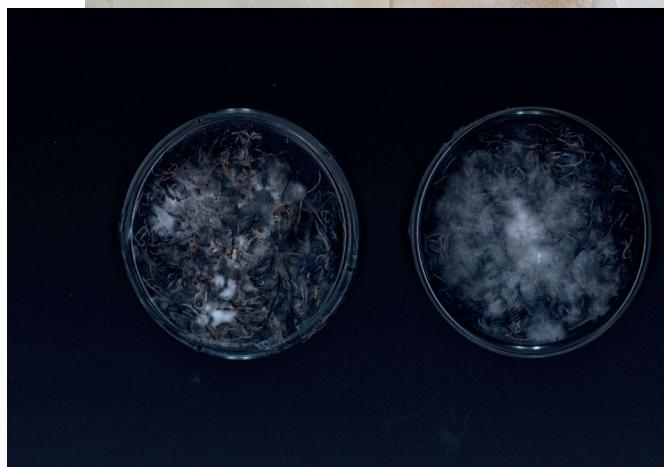
Jenny Hellebust



# *Mycelium Knightcap: a modern take on medieval armour*

Playful and protective, this scaled hood combines historical craftsmanship with contemporary material technology. The Knightcap is designed to be made out of mycelium, which is the threaded underground network of mushrooms. When cultivated and dried it creates a leather-like material, which is biodegradable, waterproof and fire resistant. In a world where animals are scarce and circularity is key, it provides an alternative to traditional leather or plastic textiles. In a radically warmer future, humans will need protection in multiple ways; against the elements, but also against the dangers of living in destabilised cities. The concept of armour signals us to prepare for a world where the safety we enjoy in the West can no longer be taken for granted. The mycelium leather is waterproof, and the layered design adds to its functionality as a protective garment in times of heavy rain. Because it is fire resistant, it shields the wearer from flames in

times of burning. Perhaps it can even inspire some chivalry in a time where it is sorely needed. Experiments with growing the mycelium in Petri dishes gave it a characteristic circle shape. This roundness, along with the protective qualities of the material, inspired research into medieval leather scale armour. I worked with multiple ways of growing the mycelium - the one shown in the close up picture is oyster mushroom, grown in a liquid substrate. Due to the time frame of this project, the other mycelium leather prototypes were still growing when the photos were taken. The most promising is a denim composite, which is grown in shredded denim and coffee grounds. This will then be heatpressed, to end the mycelium growth and create a durable textile. The potential uses of fungi as material are only just being discovered, so watch this space!

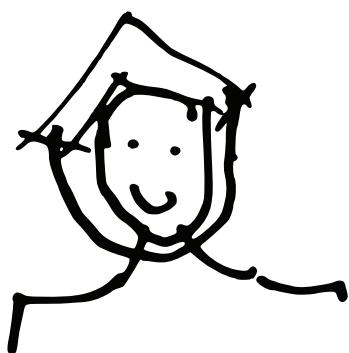


Jenny Hellebust



*getting hot in here?  
use me as a sun hat:*

1. flip me open
2. use the ribbon around me and tie it into the eyelets
3. put me on your head and tie under your chin



*Teams*  
*Event*

Anna Koch  
Viola Stein

*Location + Choreography*

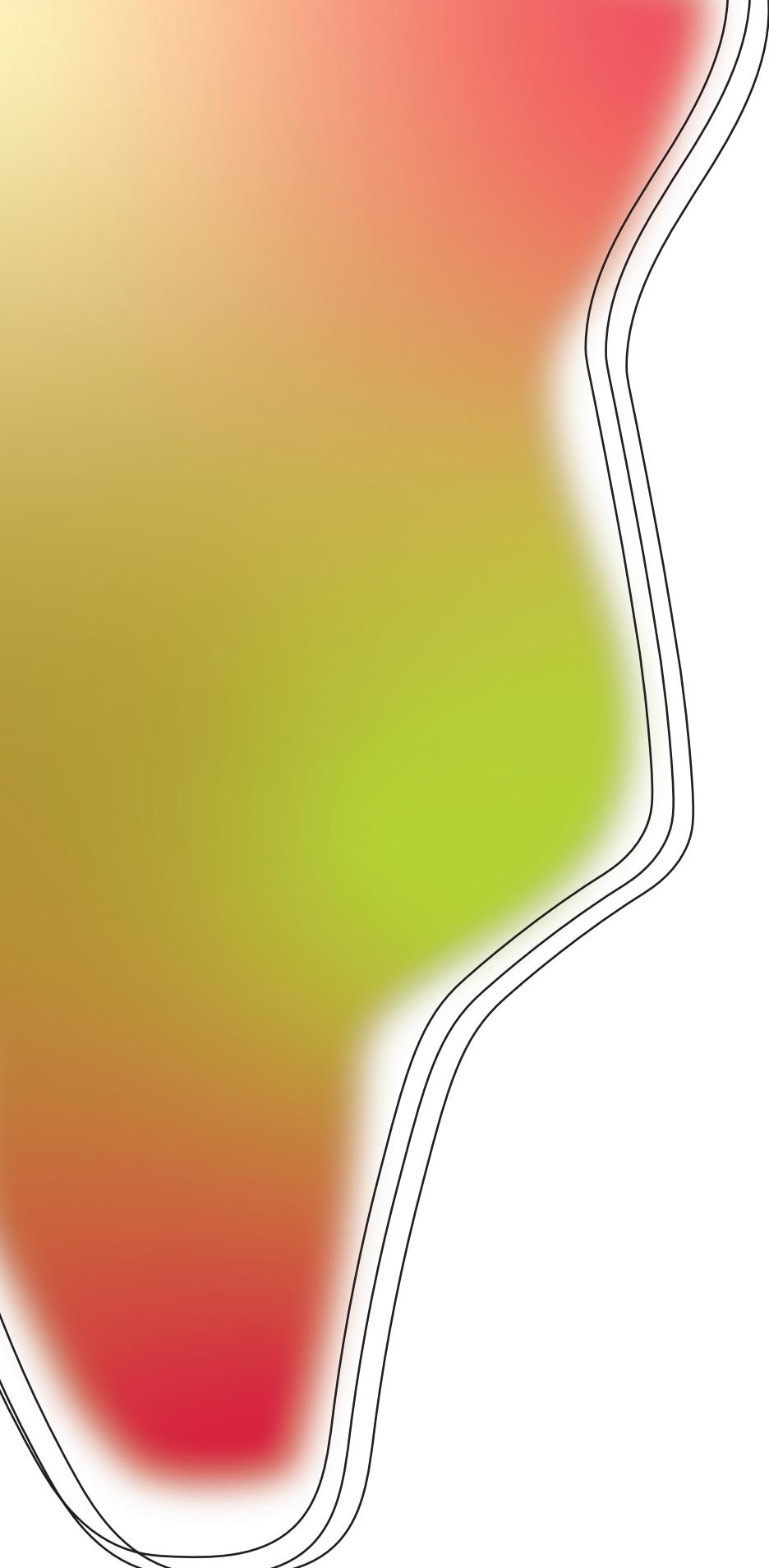
Meike Kattwinkel  
Olia Pauline Kolbe  
Helena Logsch  
Sofia Viktoria Fellinger  
Viola Stein  
Lara Schiefer

*Sound*

*Light*  
Benedikt Bruchhausen  
Vincent Pössinger

*Catalogue*  
Milan Elsen  
Anna Koch  
Nele Stollenwerk

*Copy Text*  
Jenny Hellebust



Meike Kattwinkel  
Benedikt Bruchhausen  
Olivia Pauline Kolbe  
Nele Stollenwerk  
Anna Koch  
Haruka Ueno  
Vincent Pössinger  
Viola Stein  
Janko Stein  
Helena Logsch  
Lara Schiefer  
Sofia Viktoria Fellinger  
Milan Elsen  
Till Hein  
Jenny Hellebust

*supervised by Patricia Hepp*