

mapping  
water  
futures



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water  
futures

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# Introduction

Water covers more than 70% of the earth's surface, and thus constitutes a major section of the ecosystem on Earth. It is a vital element on earth, all life (as we know it) depends on water to be able to thrive.

The climate has always changed a bit, but in recent years, due to greenhouse gases, the climate has experienced extreme changes which have also strongly impacted the global water cycle. From melting glaciers to ocean acidifications, flash floods, and prolonged droughts, disruptions in ecosystems now happens faster than most species can adapt to. Because of global warming, the atmosphere can hold and transport more moisture.

Water doesn't have the opportunity to fully infiltrate the soil. This accelerates the hydrological cycle. While it is still important to decelerate this process as much as we can, it is also important to look into strategies of adaptation and think ahead to a future with water that will be compromised.

In this book, we explore water futures through the speculative design approach. This design practice aims to challenge preconceptions, raise questions, and provoke debates. It opened the doors for designers to imagine and explore possible water futures globally.

We start with the water spring in India where the Ganga river starts, then travel further down the river stream. We end up in the Netherlands where different rivers connect to the sea. We continue where the river meets the sea and travel to the salterns in France and Croatia. Here water changes form, turning into gas and flowing through the air as evaporating steam in the geothermal region of Iceland. Eventually this book will end up with the condensation of the fog net in the Namib Desert.

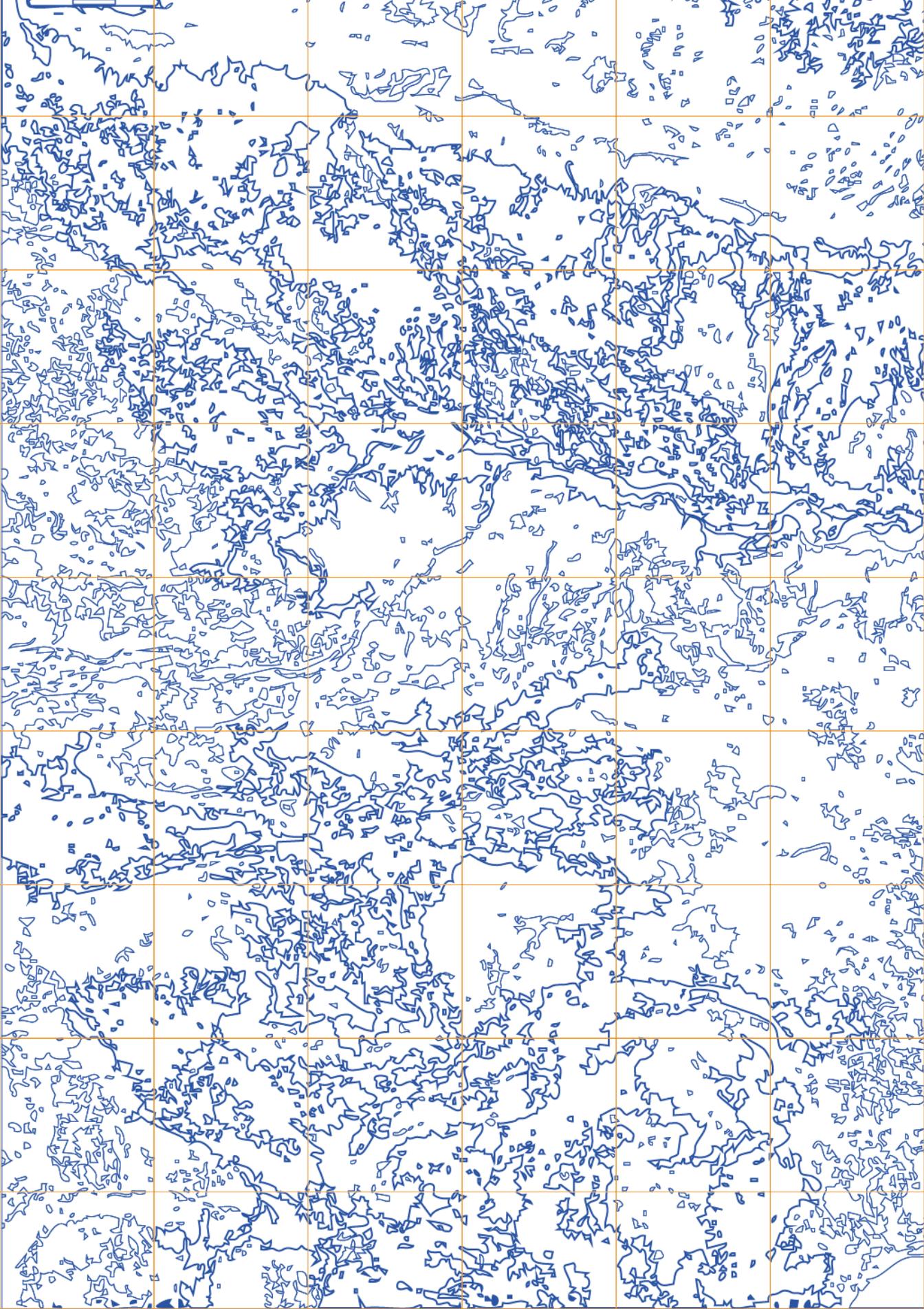
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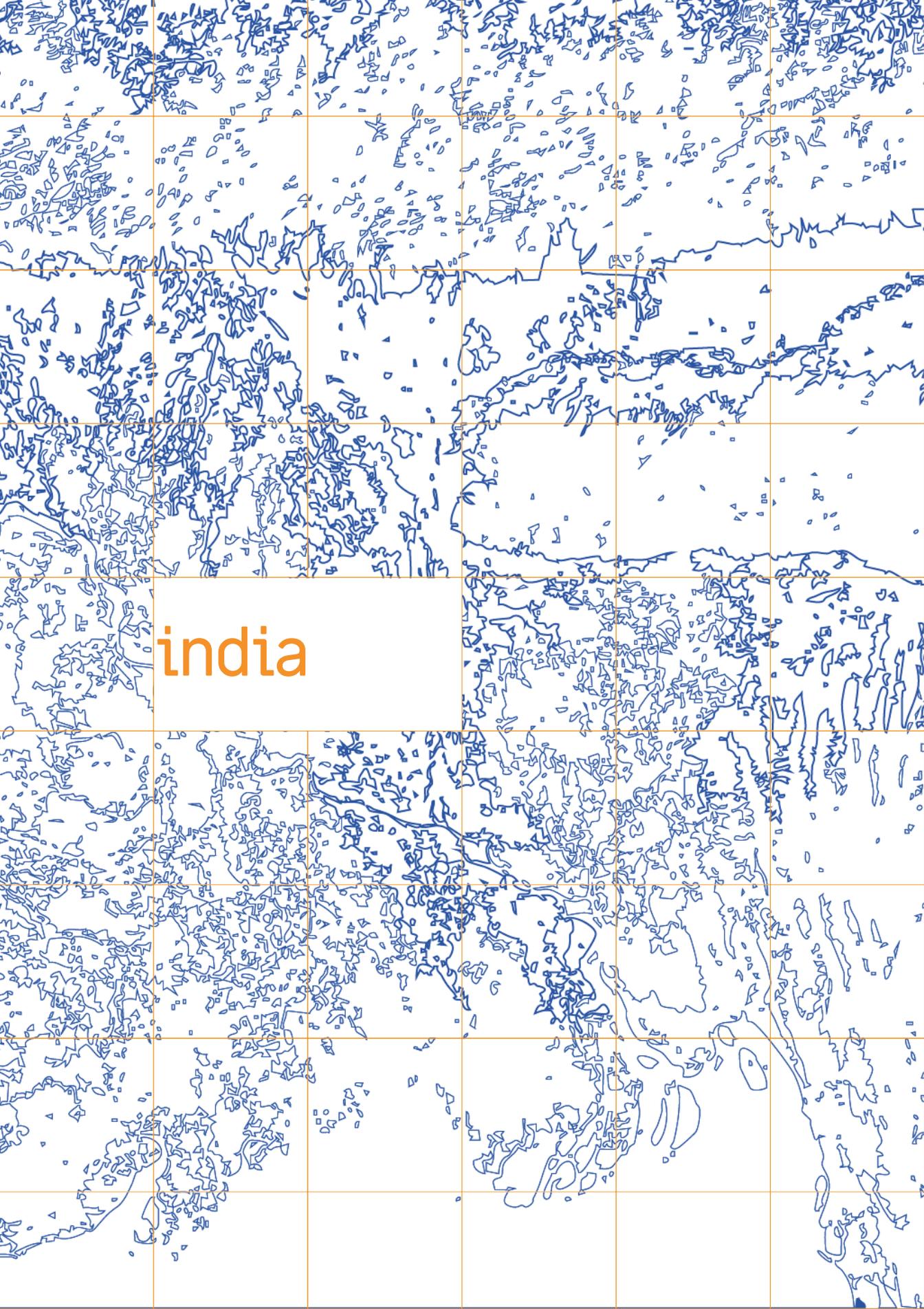
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for how the world is  
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futures  
fictional functions  
change the world to suit us  
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in the service of society  
for how the world could be  
social fiction  
parallel worlds  
functional fiction  
change us to suit the world  
narratives of consumption  
applied art  
research through design  
implications  
design for debate  
satire  
conceptual design  
citizen  
person  
education  
makes us think  
provocation  
rhetoric

*A/B by Dunne & Raby [Speculative Everything], "A/B began as a list we created a few years ago called A/B, a sort of manifesto. In it, we juxtaposed design as it is usually understood with the kind of design we found ourselves doing. B was not intended to replace A but to simply add another dimension, something to compare it to and facilitate discussion".*



A stylized map of India is shown in white outlines against a light blue background. The map is overlaid with a grid of orange lines. The word "india" is written in a bold, orange, lowercase sans-serif font, centered horizontally and vertically over the map. The map shows the outline of the Indian subcontinent, including the Arabian Sea to the west, the Bay of Bengal to the east, and the Indian Ocean to the south. The word "india" is positioned in the lower-left quadrant of the map's bounding box.

india



# Ganga Goddess Retirement

*“The last remains of the Ganges river embodied in an urn”*

Lee Hun, Lida Andritsou and  
Zizi Mitrou

Goddess Retirement” envisions the retirement of the Ganges River goddess in 2075. For centuries, Ganga has been a guardian of humanity, purifying souls, waste, and all else carried by her waters. However, the river has endured relentless pollution from human and industrial activities.

In 2017, the government granted the Ganga human rights to protect her, aiming to shift our perception of nature and God. In our opinion we think it’s contradictory, so we asked ourselves “What if she retired?”.

Moreover, after 58 years of formal recognition and continued service, the goddess steps into retirement—a poignant reflection of the river’s uncertain future, as it faces the possibility of drying up within five decades.

25.3006258, 83.0104205\_GANGES RIVER, INDIA

This project challenges the exploitative relationship between humans and nature while reinterpreting their correlation with rituals.

It imagines a future where humanity must acknowledge the consequences of environmental degradation and re-establish a balanced, respectful connection with Mother Nature. Through this speculative lens, “Goddess Retirement” proposes creating new rituals to honor and coexist with nature, moving beyond the transactional dynamics of the past.

The narrative underscores the urgency of fostering sustainability and reverence for the planet, advocating for a profound cultural shift to ensure the survival of our rivers and the ecosystems they sustain.





The background of the entire page is a detailed blue line-art map of the Netherlands, showing its intricate network of canals, rivers, and land parcels. Overlaid on this map is a grid of thin orange lines, creating a structured layout. The text 'the netherlands' is positioned in the middle-left area of the page.

the  
netherlands



# Farming in a future dominated by water

*“The future of farming in the Netherlands, adapting to the tides and learning to live in harmony with water, rather than fighting against it.”*

Ziqi Mao, Mila Tešić and  
Linnis van Kampen

This project explores what farming might look like 100 years in the future, in a version of the Netherlands where the mindset has shifted from fighting water to tolerating and allowing it in.

We drew inspiration from the Biesbosch area, where some dikes have already been lowered, and controlled flooding of rivers is used to protect nearby cities.

Our project takes this concept further, imagining a future where farming is shaped entirely by the tides. We drew inspiration from the research by Wageningen University.

The ratio of water to land in this hypothetical Netherlands of 2120 closely resembles how it was before 1900. This sparked the idea of “returning to your roots.”

-25.4001623, 15.2580219\_BIESBOSCH, THE NETHERLANDS

With this in mind, we envisioned how this modern farmer might still retain some very traditional traits and habits. The farmer lives on a terp, descending to work only when the tide is low.

We designed a tide clock for this farmer that helps him keep track of the tide situation.







france and  
croatia



# Out of the box: Salt Narratives

*“A saltern worker’s lunchbox to celebrate the customs emerging from climate adaptation in a saline future for water.”*

Eva Rodinis and  
Léonie Hanen

Connecting traditions of solar salt-making in France and Croatia, Out of the box speculates on salted narratives, elaborating on future habits and cultures of adaptation to (climate) changes that affect the saltern, its community, and its ecosystem.

With sea water evaporating faster, rising salinity and freshwater loss, the effect of these climate fluxes will be most clearly observed in the saltern as a landscape directly affected by the changes in natural water cycles – eventually reaching even the worker’s lunchbox.

This project recognizes small rituals in everyday life as signs of new emerging customs that grow from working with what is given from the particular rich context of salt-making heritage and the salt marsh landscape itself.

The lunchbox adapts local recipes for life in a hypersaline environment, adding sugar and beta-carotene to the diet for climate protection. The meal must be accompanied by new cutlery, specifically crafted for harvesting freshwater and halophytes.

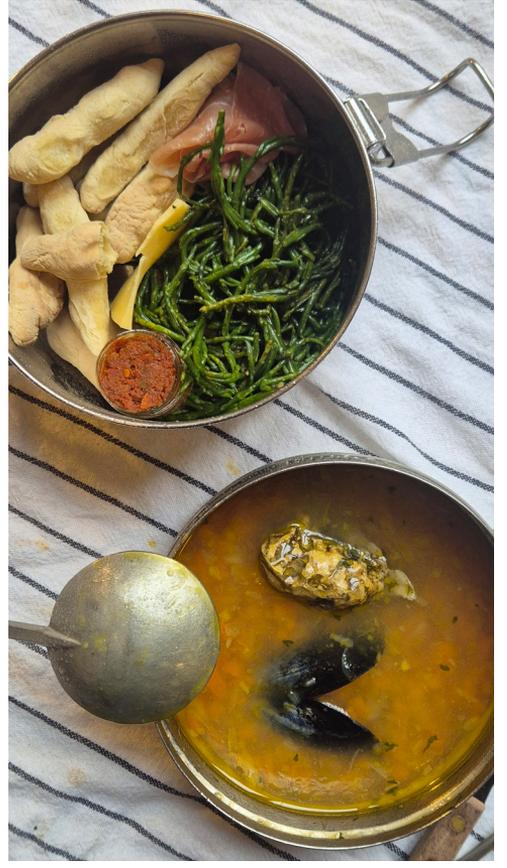
By situating the scenario of the climate future in a personal story through the medium of food – Out of the Box addresses the importance of communities, small-scale rituals and crafting adaptability in a changing climate future.

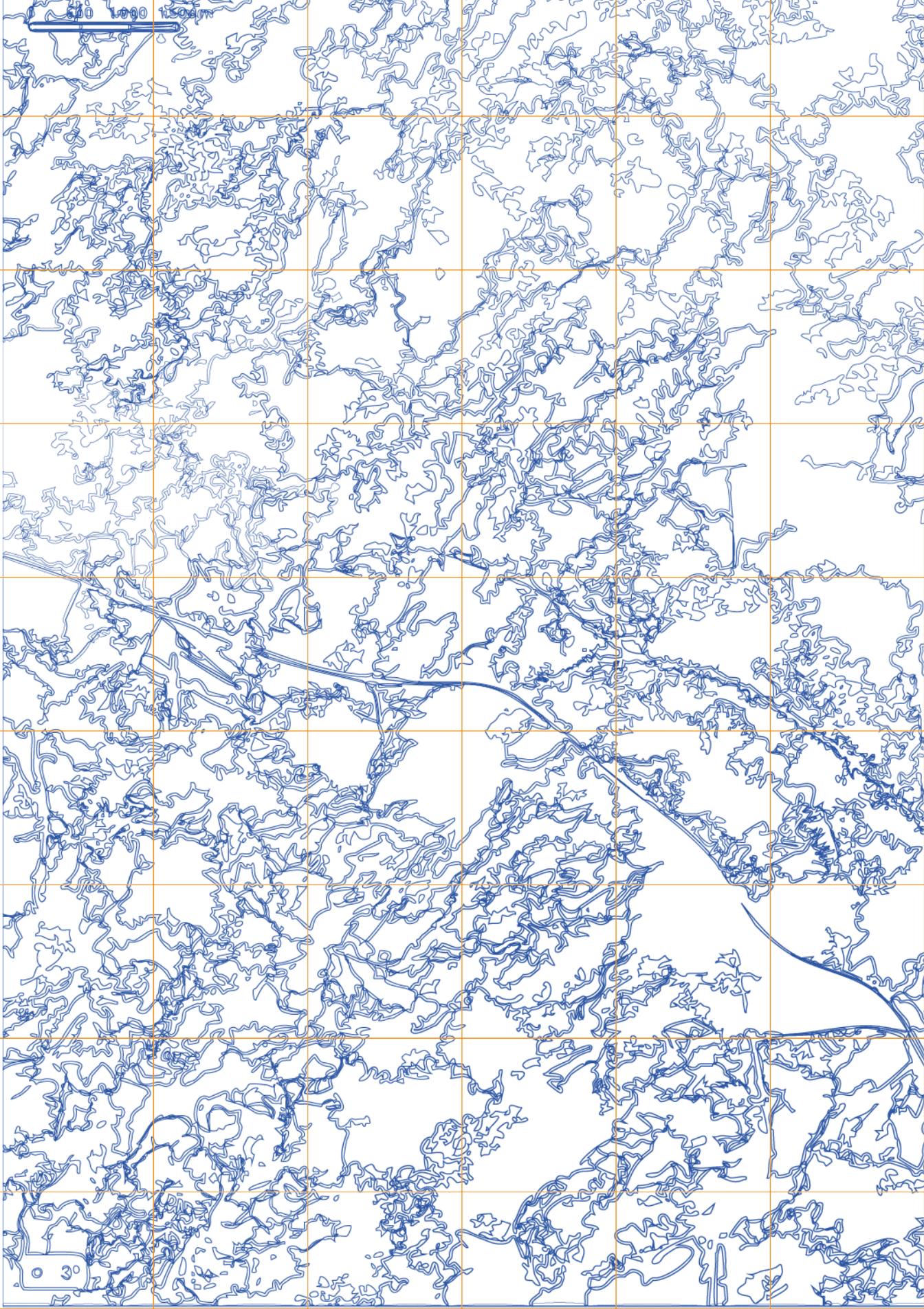
47.2863045, -2.4501140\_GUÉRANDE AND CAMARGUE, FRANCE  
44.2411881, 15.1932221\_NIN, CROATIA

This project challenges the exploitative relationship between humans and nature while reinterpreting their correlation with rituals.

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610 1090 1500



iceland



# The Symphony Alarm

*“By transforming natural steam into a tool for safety, the Symphony Alarm symbolizes resilience and adaptation, giving nature a voice.”*

Lot Dik, Fatima Kane and  
Benedetta Faccani

The Symphony Alarm is a robotic system designed for Iceland’s Hengill region, to protect the people and the animals that live there by warning them of earthquakes.

The Hengill region of Iceland, a region once known for its geothermal power plants, buzzed with human activity, extracting energy from the earth’s core. However, today’s landscape seems like a different world. The machines have stopped, and the land bears the scars of exploitation. The geothermal area is now disturbed due to power plants abusing the area’s hot water sources. This caused a rise in induced seismicity, and, over time, these earthquakes have contributed to the formation of surface cracks, allowing hot steam and gases to escape to the surface, creating an otherworldly fractured landscape.

The Symphony Alarm is created as a tool for safety by harnessing geothermal steam from fumaroles to create harmonic sounds, serving as a gentle yet urgent alarm for people and animals. The artifact, a rock-like robot, is hollow and contains vents ending in small holes. The steam will run through these vents and escape through the small holes, producing a whistling sound.

When fumaroles stop, the robots uses thermal cameras and GPS sensors to locate new ones, navigating Iceland’s rugged and unpredictable terrain.

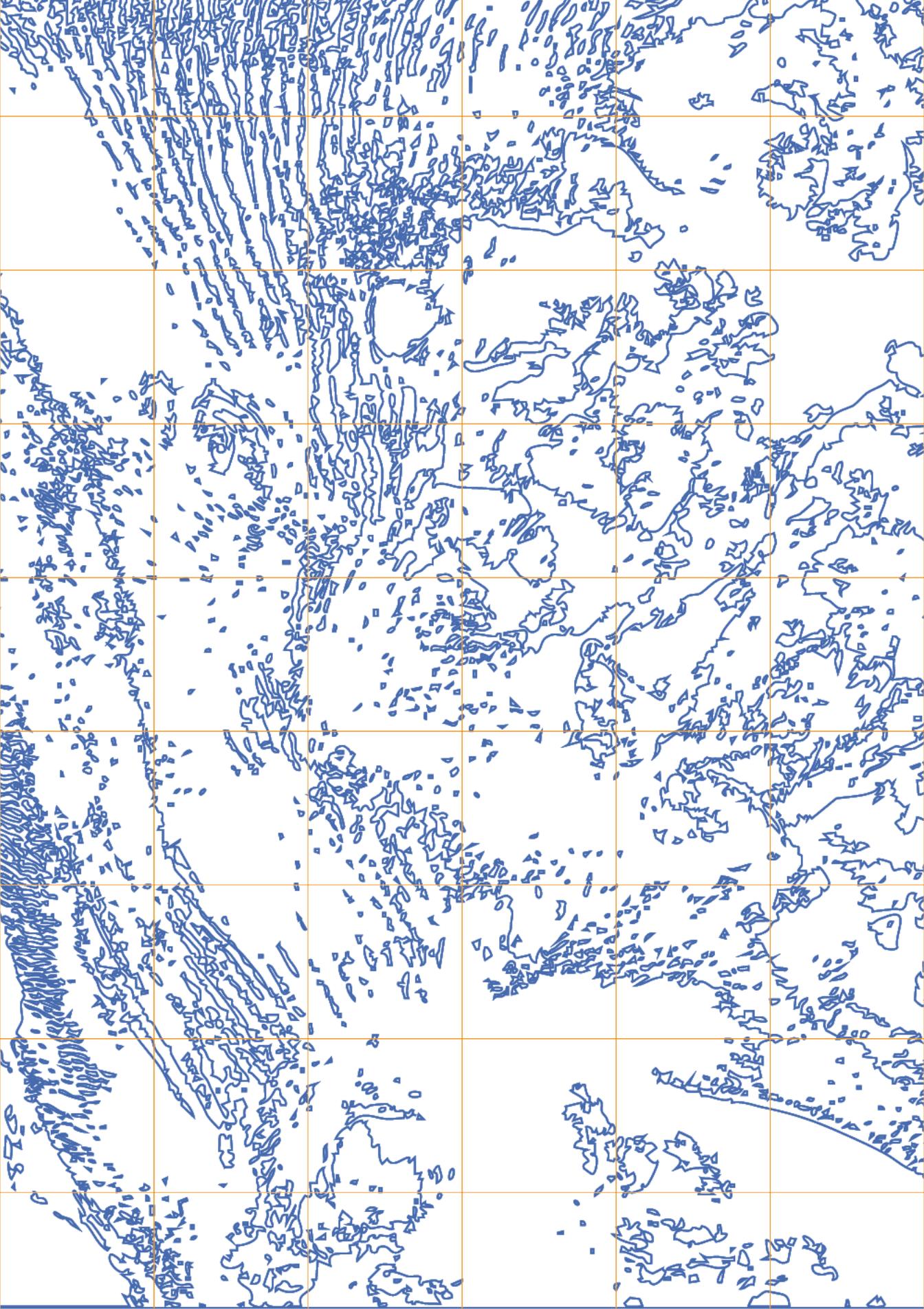
64.1095111, -21.2571498\_HENGILL, ICELAND

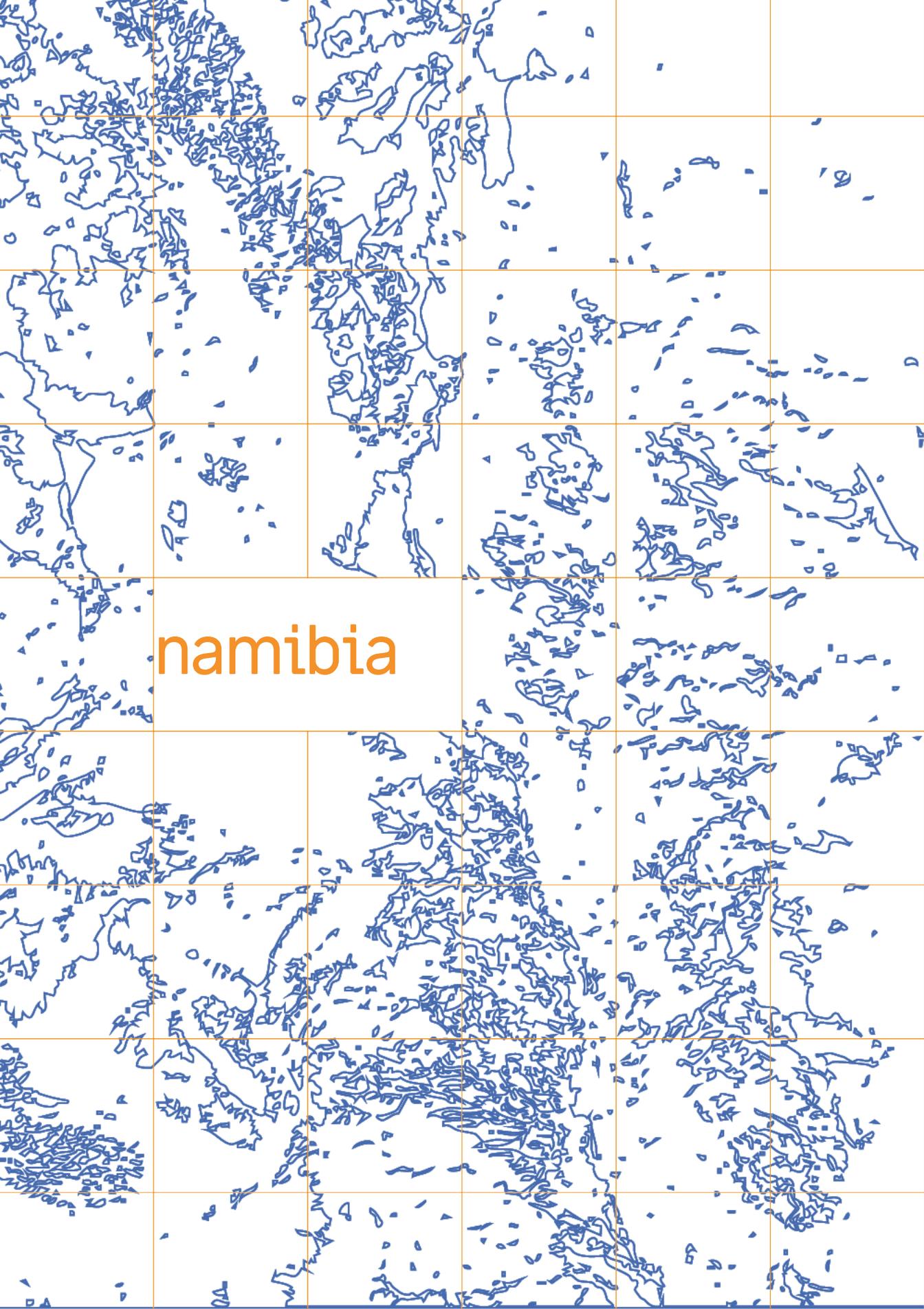
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namibia



# Namib Desert 2124

*“In 2124, a nomad in the Namib desert looks towards the coastal wind to collect moisture.”*

Riekje Marie Paruschke and  
Mike Sullivan

In May 2024, Namibia experienced the worst drought in 100 years.

This makes us fear the worst, how will the water supply in Namibia differ in the next century?

In this project, we imagine a future scenario where water scarcity has made survival in the Namib desert nearly impossible:

Finding safe drinking water is the main objective of desert dwellers. We follow a lone nomad that travels through the desert, meandering from place to place, foraging for what spare resources the land has to offer.

The Namib Desert Beetle is native to the harsh environment and has adapted the ability to harvest water from the coastal winds that bring in moisture from the South Atlantic Ocean.

-25.4001623, 15.2580219\_NAMIB DESERT, NAMIBIA

It harvests fog using hydrophilic bumps and hydrophobic valleys on its carapace to condense fog. Inspired by the desert beetle, the desert nomad has hand-crafted two tools to harvest fog: a fog net and a clay collection bottle. The fog net uses its large surface area and texture to condense the coastal wind which is then channeled into a clay vessel for storage and drinking.

The bottle is designed to be screwed into the sand and it has points to attach to the fog net and a carrying strap.

Fog harvesting has been previously implemented large-scale, as a permanent piece of infrastructure in a water-challenged environment.

This project adapts fog net technology to be viable at a smaller scale. Fitting with a setting where extreme self-reliance has become necessary due to conflicts over resource scarcity.



Master Industrial Design  
Royal Academy of Art, The Hague  
Prinsessegracht 4  
2514 AN The Hague  
[www.kabk.nl](http://www.kabk.nl)  
[m.roozenburg@kabk.nl](mailto:m.roozenburg@kabk.nl)  
[z.roelse@kabk.nl](mailto:z.roelse@kabk.nl)

# Production

## In collaboration with

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## Coordinator

Maxime Benvenuto

## Production

Hun Lee  
Lida Andritsou

## Editorial

Eva Rodinis  
Linnis van Kampen

## Image team

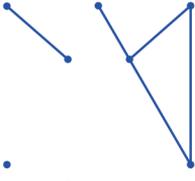
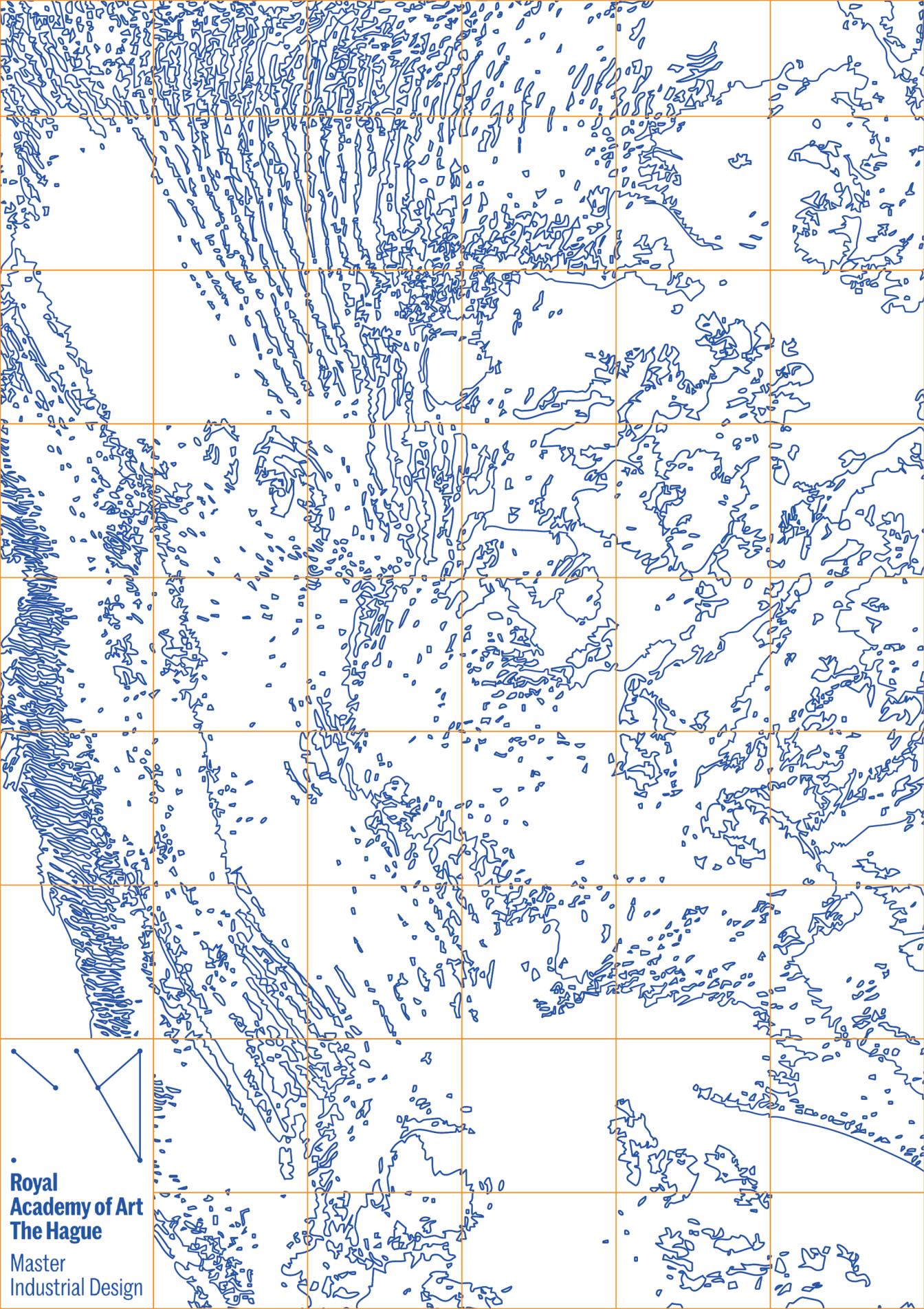
Hun Lee  
Léonie Hanen  
Zizi Mitrou

## Graphic design

Lot Dik  
Mila Tešić  
Riekje Paruschke

## Online production

Lot Dik



Royal  
Academy of Art  
The Hague

Master  
Industrial Design