

The background of the entire image is a complex, abstract pattern of thick, wavy lines. The lines are primarily black and white, creating a high-contrast, maze-like effect. Interspersed within this pattern are several thick, vibrant green lines that curve and flow through the composition, adding a sense of movement and depth. The overall aesthetic is modern and graphic.

**A5, UNIVERSITY OF KONSTANZ,
2/12/2022, 12-16**

HERDS & HOVERING

**DOCUMENTARY PALACES
PROJECT EXHIBITION**

Merz Akademie

The Merz Akademie is a college of higher education in Stuttgart. The fields of study are: Crossmedia Publishing, Film and Video, New Media, and Visual Communication with special interest in theory and cultural studies.

The Centre for the Advanced Study of Collective Behaviour

At the Centre for the Advanced Study of Collective Behaviour (CASCB), we create a global hotspot for the integrated study of collective behaviour across a wide range of species and across scales of organization. We are a Cluster of Excellence within the framework of the Excellence Strategy of the federal and state governments.

The Max Planck Institute of Animal Behavior

The Max Planck Institute of Animal Behavior aims to achieve a quantitative and predictive understanding of animal decision-making and movement in the natural world. Pursuing an integrative approach, they combine physiological, neural, ecological, and evolutionary perspectives, questions, and methods.

The Herd Hover project

The Herd Hover project is harnessing state-of-the-art field techniques and computing technologies to explore the complex dynamics of collective behaviour of ungulates in Kenya. Using drones and machine learning, we are answering questions relating to collective detection, decision-making, and movement of wild animals in their natural environments.

The project is based in the Department of Collective Behaviour at the Max Planck Institute of Animal Behavior and the Centre for the Advanced Study of Collective Behaviour at the University of Konstanz.

Herds & Hovering

While the visualization of (scientific) data and information has become a well-developed part of a graphic and media designer's repertoire, the design of a comprehensible documentation and representation of a whole field of knowledge often is the result of individual and complex standalone solutions.

That is why a semester course at the Merz Akademie hosted by Prof Joost Bottema, Prof Mario Doulis, and Jörg Frohnmayer focused on this aspect. Like in the project Re-Shaping Nature, the art students worked, once again, with data from the Centre for the Advanced Study of Collective Behaviour and the Max Planck Institute of Animal Behavior. This time, Dr Blair Costelloe shared her knowledge and research data of the Herd Hover project.

Goal and Approach of the Project

The goal was to develop artistic approaches for the design of knowledge spaces within the field of animal behaviour science. Besides the visualization of the related scientific data and documents, the course leaders and students curated the arrangement of the content, revealing the "big picture" and/or a unique sub-story-line. The title "Documentary Palaces" refers to the terms "documentary theatre" (using pre-existing material as source material for stories about real events) and "memory palace" (a memory enhancement strategy using visualizations of familiar spatial environments to enhance the recall of information) which serve as the design base for this project.



NICLAS RÜDIGER

A WEEK OF ZEBRA MOVEMENT



NORMANTAS MATONIS

CHAOTIC WORKFLOW OF NORMANTAS

LUIS LAVADINHO & LUIS WEILER

TRAIL TEXTILES



ISABEL KOHLHAGEN

PREDATOR-PREY INTERACTIONS



VINCENT GÖSSLER

EXPLANATORY ANIMATION



TIM FRITZSCHE

COLLECTIVE MEMORY



ALEYNA ARSLAN

TO BECOME A ZEBRA



MARIE WEILACHER

ZEBRA DEFENCE STRATEGIES





A WEEK OF ZEBRA MOVEMENT

HOW CAN ANIMAL DATA BE INCORPORATED INTO AN ARTISTIC DESIGN?



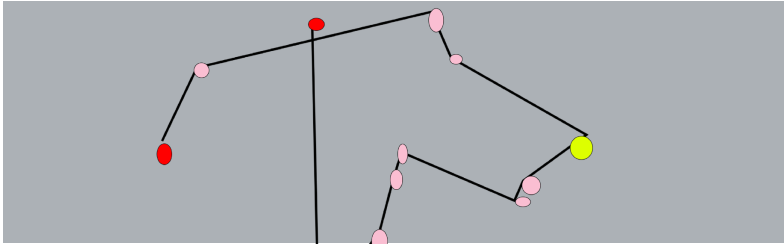
For my approach to this question, I illustrated different groups of zebras moving. I extracted movement from a project called Satellite-Stories where you can follow different groups of zebras in Kenya over a timespan of a week.

After I had tracked these groups, I pictured them in an animation that you can see by scanning the QR code. If you take a look at the poster, you can see eight groups in the right lower corner. Every dot of the group symbolizes a zebra that follows the one in front.

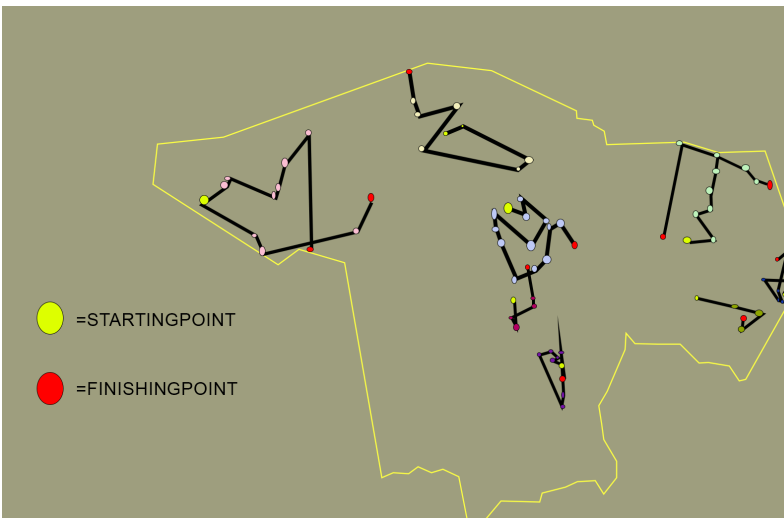
Where did they start and where did they end up? Scan the QR code and see for yourself!

NICLAS RÜDIGER





Tracking Group 3



Grid of animal movement in Kenya



CHAOTIC WORKFLOW OF NORMANTAS

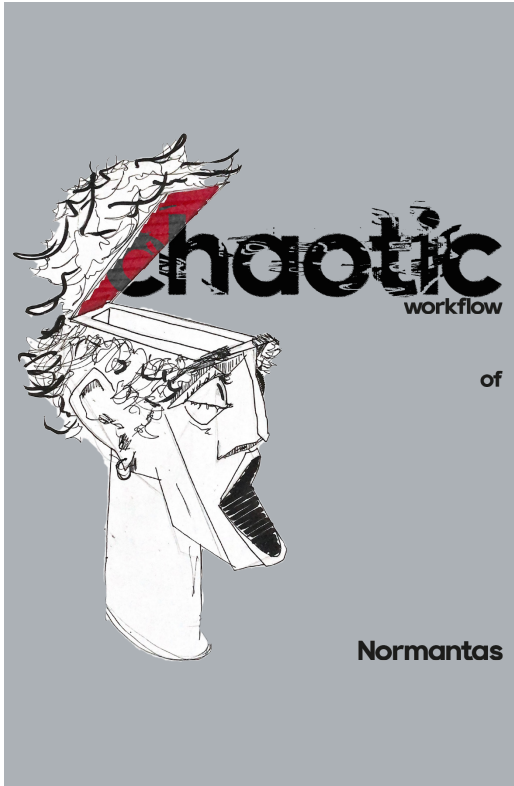
VR EXPERIENCE THROUGHOUT MY PROJECT WORKFLOW



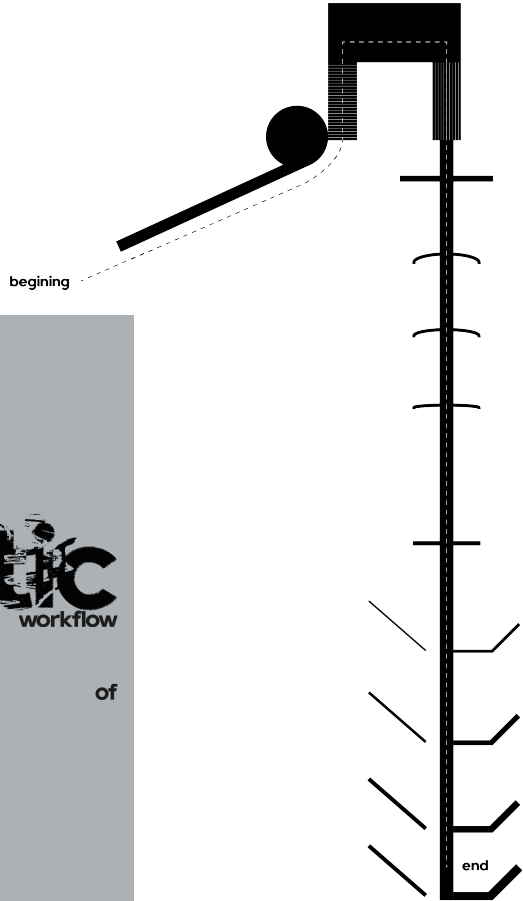
During the process my thoughts were revolving around Blair Costelloe's Herd Hover project. The idea of Blair's project made me consider human and animal collective behaviour.

Taking her concept into consideration, I am presenting individual solutions to expose ideas in the basic level of animal and human behaviour. For the presentation of my project, I decided to make a VR space. In this space one is literally able to flow through the information that I have gathered as well as witness works of art. The idea is to expose a chronological path of information and chaotic workflow of Normantas.

NORMANTAS MATONIS



map
from above





TRAIL TEXTILES

ETHNIC INSPIRED FASHION AND FUNCTIONAL SAFARI WEAR



Trails in the Kenyan savanna serve as a collective memory of efficient escape routes for prey animals in a herd. For humans, fashion preserves the memory of a culture. This two-piece outfit can be worn inside out. Either as functional clothing for safari trips that will help you blend into your environment or as a colourful and striking everyday outfit inspired by Kenyan fashion trends. When do we as humans behave like predators and when do we belong to the herd? When do we want to stand out and when do we want to blend in?

LUIS LAVADINHO & LUIS WEILER



Flamboyant colors and traditional African knitwork to wear in every day life



Animal trails in the savanna left by zebra herds turned into earth toned camouflage patterns to wear during your safari



PREDATOR-PREY INTERACTIONS

A PUZZLE-CARD GAME ABOUT ANTI-PREDATOR BEHAVIOUR OF GAZELLES



A Thomson Gazelle's most important task in life is probably not to become dinner. My project deals with the topic Predator-Prey Interactions: Anti-Predator behaviour.

I want to playfully educate our little ones with a puzzle card game where they have to place illustrated cards in the right order to understand the whole story.

The game contains three main stories about a gazelle encountering different predators like cheetahs, jackals, and wild dogs. When placed in a different order the story may end sooner with a lucky outcome or you play through a whole chase which has two potential endings.

ISABEL KOHLHAGEN



EXPLANATORY ANIMATION

A 3D ANIMATION TO INTRODUCE NEW PEOPLE TO THE HERD HOVER PROJECT



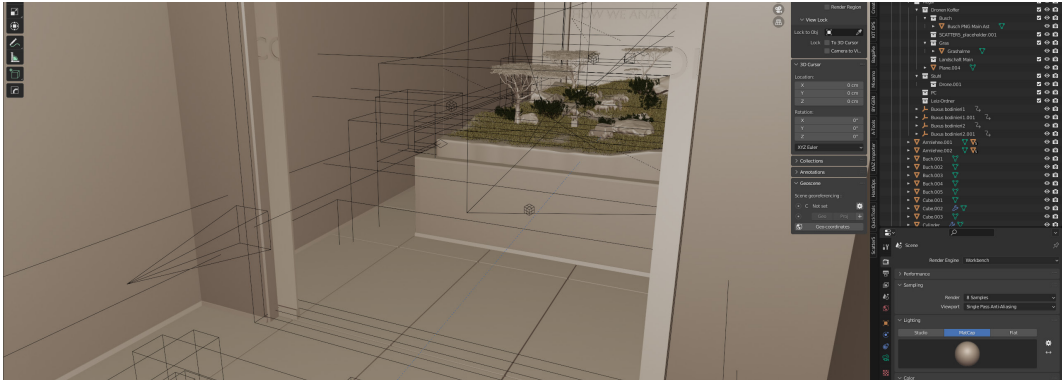
The first part of the animation is designed to look like a small exhibition, with a diorama of the Kenyan landscape. It shows how the drone captures the footage from the herd and then transfers it onto the computer, for further processing. The colours of the first part are supposed to resemble the colours of the reddish Kenyan soil. The atmosphere is as calming as being in nature is, where the scientists spend a lot of their time.

The second part illustrates, in an abstract way, how a computer handles the data which it receives. Then he compiles them and analyzes them individually.

Out of the GPS, landscape, and individual animal data, the scientists can reconstruct how an individual of the herd moved through the terrain and interacted with its group. The reconstruction is symbolized by the abstract landscape you see at the end.

VINCENT GÖSSLER

Corridor overview





COLLECTIVE MEMORY

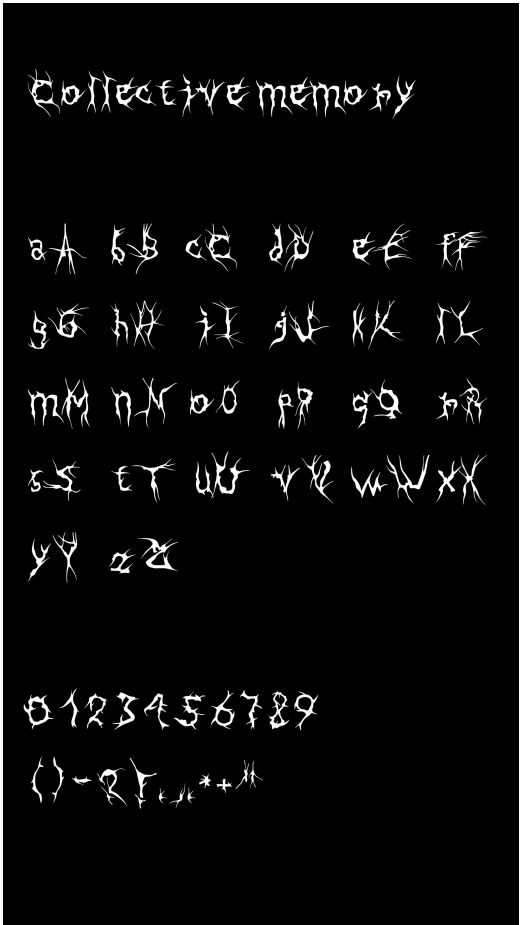
ANIMAL TRAIL FONT & TURNING MOVEMENTS INTO CHROME



For my project, I extracted the trails animals leave in nature from drone footage and turned them into a font whose form is significantly influenced by nature. The initial idea was to work with the traces that animals leave in the wild. For me, they are a collective memory, i.e. they communicate to the herd, where the nearest water source can be found. I am relating this thought to the role that typography plays for humans.

The second part of the project is a brief digression through the different realities that data can take during the course of a design process. Starting with the recording of a movement in nature, through a virtual environment, to an abstract 3D model in printed form.

TIM FRITZSCHE



Animal trail font



Sculpture made from Zebra movements, photographed in VR environment



TO BECOME A ZEBRA

**IS IT BLACK WITH WHITE STRIPES, OR WHITE
WITH BLACK STRIPES?**



Everyone of us has experienced this at least once in their life: you are in your bed, trying to sleep and suddenly your brain reminds you of something you did five years ago when you were younger.

Right at that moment, so many thoughts are flowing into your mind. You feel sadness, anger, or even depression. These are emotions that we carry with us for many years to come. It may sound silly but zebras can teach us a little lesson with how they behave in their natural habitat. This is a story of how I became a zebra.

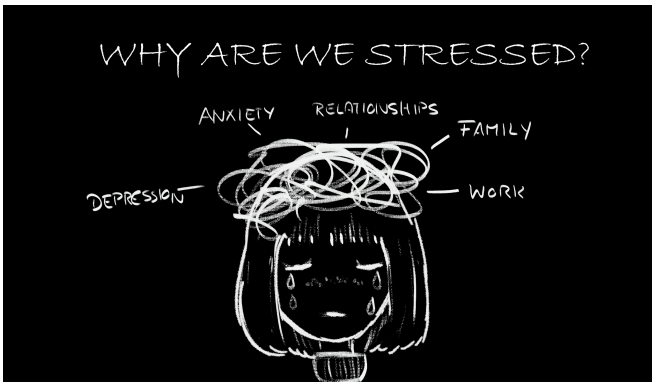
A storytelling website based on "Why Zebras Don't Get Ulcers" by Robert Saplosky and the Herd Hover project.

<https://become-zebra.webflow.io/>

ALEYNA ARSLAN



An example of how I 2D animated the drawn elements on my website



What is it that stresses us out so much more than zebras? Example of an animated sketch



ZEBRA DEFENCE STRATEGIES

QUARTET CARD GAME ABOUT THE ANTI-PREDATORY BEHAVIOR OF A ZEBRA

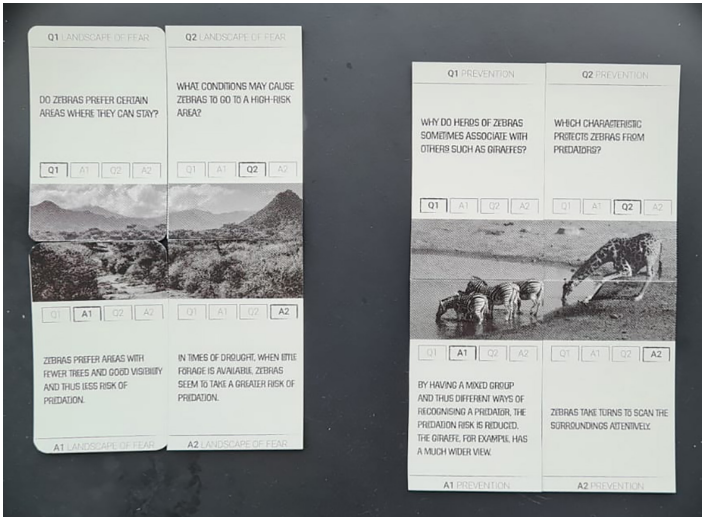


How does a zebra escape a predator? That is one of the questions that drives scientists.

In this project, I focused on zebra behaviour. How a herd of zebras lives, and how they behave to avoid predators and escape them when they encounter them.

From this, I developed a quartet card game where players collect two questions and two answers on a topic of the zebra-predator relationship as a quartet. A complete quartet, whose cards are placed next to each other, results in a composite picture.

MARIE WEILACHER



First test prints



Final game





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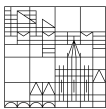
JB&DC

Layout

Tim Fritzsche



Universität
Konstanz



Centre for the Advanced Study
of Collective Behaviour



Merz Akademie
Hochschule für Gestaltung,
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staatlich anerkannt