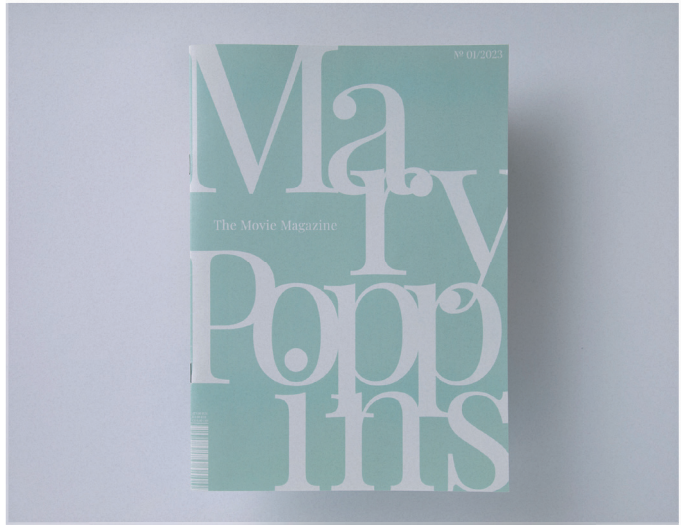
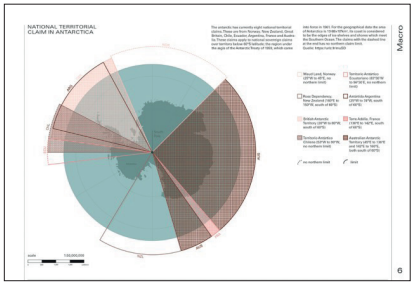
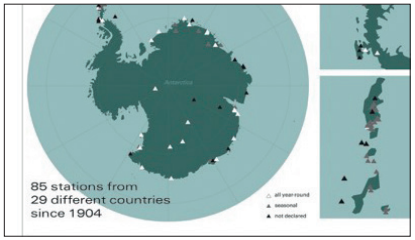
portfolio

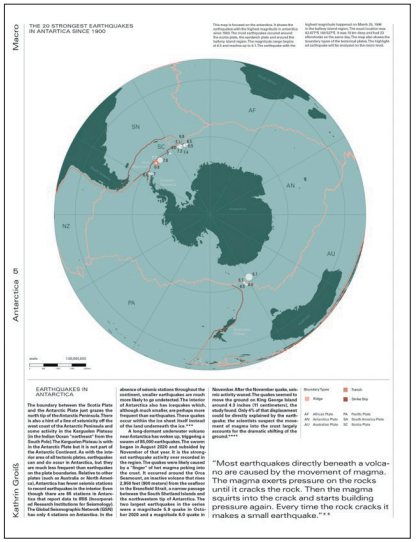
Meine Name ist Kathrin Groiß, ich habe meinen Bachelor für Grafik- und Informationsdesign an der New Design University in St.Pölten absolviert. Seit April 2022 arbeite ich für ein Familienunternehmen und bin dort für das Redesign und das Marketing zuständig. Ich bin ebenso nebenbei Selbstständig in dem Gewerbe tätig, mit einem Fokus auf Editorial- und Grafikdesign. In meiner Freizeit töpfere ich gerne, biete Kindersportkurse bei der Sportunion Großweikersdorf an und bin dort im Vereinsvorstand tätig.

Meine Projekte









Zeitungsartikel Thema Erdbeben

Die Inhalte sind in vier Analysestufen unterteilt. In eine Meta, eine Macro, eine Meso und eine Micro Ebene. Analysiert und Visualisiert wurde mithilfe von 16 Datenvisualisierungen und Karten. 2024 hat die Zeitung den European Design Award in Bronze gewonnen hat.

EARTHQUAKES SINCE 1900 WORLDWIDE

scale 1:100,000,000

These maps show the earthquakes worldwide with the highest magnitude since 1900. There are a total of 1,488 earthquakes with a magnitude range from 5 till 9.2. I wanted to highlight the big amound of earthquakes and also the location of these around the plate boundaries. For the first map I chose the mercator projection with europe in the center. This is the most commonly known projection and easy to read for a lot of people. For the second map I chose to put the Pacific Plate in the center. The earthquakes which happen here around the Earasian, Indo-Australian and Pacific Plate form the Pacific Ring of Fire.

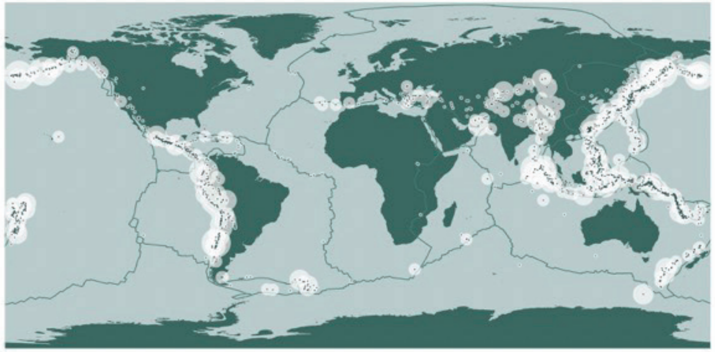


PLATE TECTONIC, VOLCANOES AND EARTHQUAKES

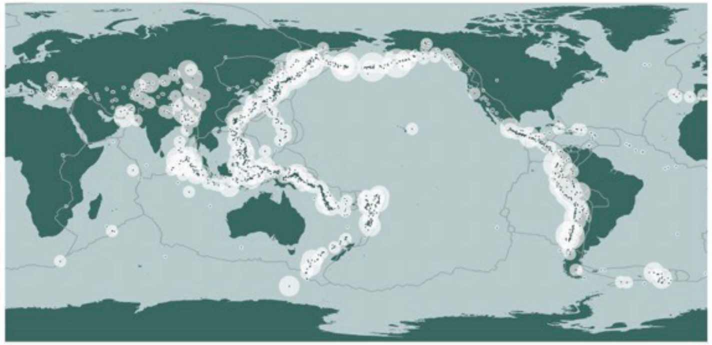
Plate tectonics, earthquakes and volcanoes are closely related. In fact because of the behavior of earthquakes and volcanoes the core of the theory of plate tectonics has been proved. Earthquakes and volcanoes also allow geoscientists to indirectly study the interior of the earth. Over a million earthquakes happen annually, including those too small to be felt. About 80,000 earthquakes happen every month, about 2,600 per day, 2 earthquakes per minute, and one earthquake happens every 30 seconds. Individual plates of varying size move about the surface of the Earth at varying speeds. Friction causes the plates to get stuck. This causes pressure to build up. When this stress is realeased an earthquake will occur. Where plates pull apart, slide by each other or collide, there is tectonic activity manifested as earthquakes.*

THE RING OF FIRE

The Ring of Fire, also referred to as the Circum-Pacific Belt, is a path along the Pacific Ocean characterized by active volcanoes and frequent earthquakes. Its length is approximately 40,000 kilometers (24,900 miles). It traces boundaries between several tectonic plates—including the Pacific, Juan de Fuca, Cocos, Indian-Australian, Nazca, North American, and Philippine Plates.

Seventy-five percent of Earth's volcanoes—more than 450 volcanoes—are located along the Ring of Fire. Ninety percent of Earth's earthquakes occur along its path, including the planet's most violent and dramatic seismic events.

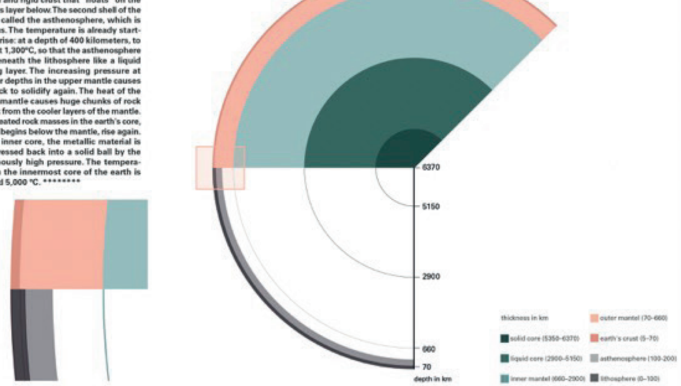
The abundance of volcanoes and earthquakes along the Ring of Fire is caused by the amount of movement of tectonic plates in the area. Along much of the Ring of Fire, plates overlap at convergent boundaries called subduction zones. That is, the plate that is underneath is pushed down, or subducted, by the plate above. As rock is subducted, it melts and becomes magma. The abundance of magma so near to Earth's surface gives rise to conditions ripe for volcanic activity. A significant exception is the border between the Pacific and North American Plates. This stretch of the Ring of Fire is a transform boundary, where plates move sideways past one another. This type of boundary generates a large number of earthquakes as tension in Earth's crust builds up and is released.**



SHELL STRUCTURE OF THE EARTH

The top shell is the earth's crust, from which the continents and the sea floor have formed. The earth's crust and the top layer of the earth's mantle form the lithosphere. Just below the earth's crust is the mantle, which is divided into an upper and a lower mantle. This uppermost layer of earth forms a solid and rigid crust that "floats" on the viscous layer below. The second shell of the Earth, called the asthenosphere, which is viscous. The temperature is already starting to rise: at a depth of 400 kilometers, to almost 1,300°C, so that the asthenosphere lies beneath the lithosphere like a liquid sliding layer. The increasing pressure at greater depths in the upper mantle causes the rock to solidify again. The heat of the lower mantle causes huge chunks of rock to sink from the cooler layers of the mantle. Also heated rock masses in the earth's core, which begins below the mantle, rise again. In the inner core, the metallic material is compressed back into a solid ball by the enormously high pressure. The temperature in the innermost core of the earth is around 5,000 °C. ********

This Visualisation shows the shell structure of the earth. The earth is represented by the circle, which is cut in half. The legend to the right explains the colors used and names the layers. The numbers in the brackets are the thickness in km. The bottom half of this visualisation of the earth's inner structure highlights the lithosphere and the asthenosphere. The lithosphere is the rigid outermost layer of Earth's geosphere. It consists of the Earth's crust and the uppermost part of the mantle. The asthenosphere is a layer with a thickness of about 200 km in the upper mantle of the Earth.



TECTONIC PLATE SPEED

length im cm

The Tectonical Plates are in a constant state of change. They move in different directions on an average rate of about 1.5 centimeters a year. The visualisation underneath shows the approximate distant of traveling in 15 years. Quelle: https://urlz.fr/mumA

THE MOVEMENT OF TECTONIC PLATES

The rigid plates of the Earth's surface are in constant motion relative to each other. These plates are moving at a very slow pace of about a few centimeters a year. This is because solids move, flow, and deform very, very slowly. Materials such as water that have shorter timescales of flow have lower viscosities, while solids such as rocks have higher viscosities. Hence, the rate at which solids will move will be extremely slow. Similarly, the viscosities of various layers in the Earth's mantle differ. The viscosity of the lithospheric plates is a hundred times more than that of the upper layer of the mantle, the asthenosphere. So, in comparison, the asthenosphere will flow much faster and is more deformable compared to the lithosphere.

Despite the slow movement of the tectonic plates, the boundaries between these plates could be geologically active. This is because these tectonic plates move relative to each other. The movement of the plate tectonic boundaries can be classified as follows:

Transform Boundary—This occurs when two plates slide past one another. One example is the Pacific plate sliding northwest relative to the North American plate; this is marked by the famous San Andreas Fault. Earthquakes are common along these faults and the San Andreas fault causes some of the strong earthquakes in California.

Divergent Boundary—This occurs when two tectonic plates move away from each other. When the plates move apart, a fissure opens up and the molten rock rushes from the mantle to the surface. The opening or fissure helps lower the pressure of the mantle layer and allows the molten material to the surface. The molten rock then solidifies to create a new surface crust. Instances of divergent boundary motions in the middle of the Atlantic Ocean include the African and South American Plates, as well as the Eurasian and North American Plates. The divergent plate movement in the mid-Atlantic has led to the formation of the Mid-Atlantic Ridge, a giant mountain range in the middle of the Atlantic Ocean. Spanning a length of about ten thousand miles and height of over a mile, it is the longest mountain range on Earth.

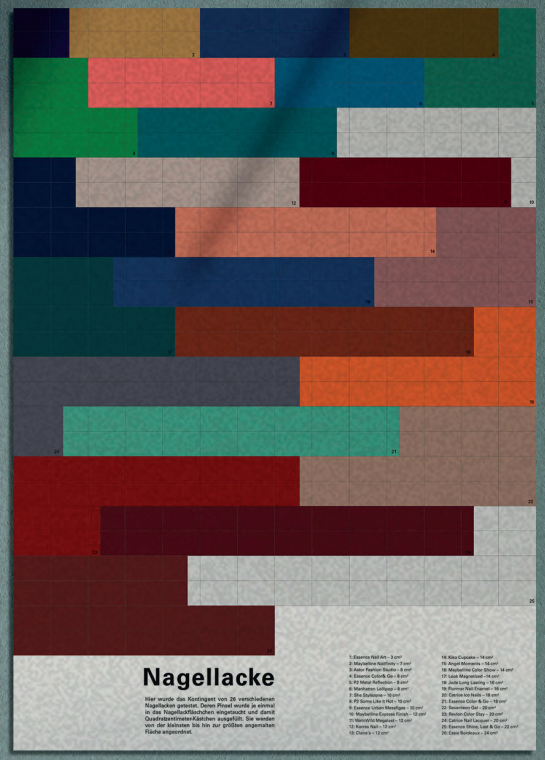
Convergent Boundary—This occurs when two plates are moving towards each other. The new crust formed at the ridges cools down and starts moving towards another plate. The denser of the two plates will buckle beneath the other plate into the mantle. The zones where the plates sink back into the mantle are known as subduction zones and are geologically active. Strong earthquakes around the Pacific Plate are consequences of the subductions in these regions.

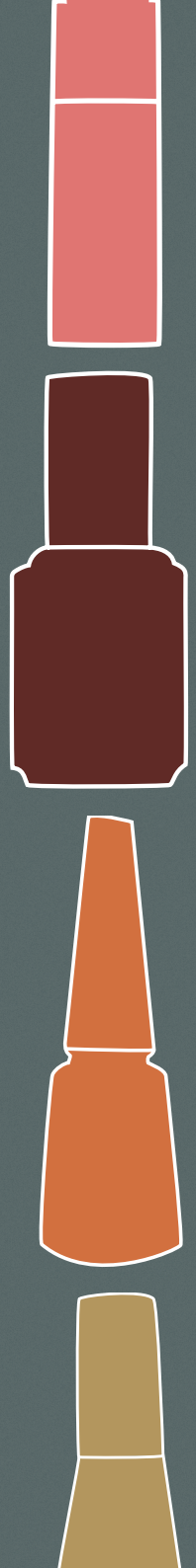
In addition, the subducting zones can also cause volcanic eruptions as the subducting plates experience higher temperatures and pressures deep inside the Earth. In fact, there are volcanoes all along the rim of the Pacific Plate from the west coast of North and South America to the east coast of Asia. The series of volcanoes associated with the plate is known as the 'The Ring of Fire'.***

"Faults distant from plate boundaries can also generate large earthquakes, this major earthquakes can occur sometimes far from the typically high-relief terrain of plate-boundary regions."*******

Informationsdesign

Hier habe ich zwei Plakate mit verschiedenen Abstraktionsgraden gestaltet. Ausgangspunkt waren Informationenen aus einer Datenerhebung von 26 Gegenständen mit ähnlicher Typologie.





Sachbuch Thema Ozeane

Eine Publikation über die komplexen Wechselwirkungen zwischen dem Klimawandel und den fünf Weltmeeren. Der Inhalt beschreibt die Auslöser und die daraus resultierenden Kettenreaktionen, die nicht immer auf den ersten Blick sichtbar sind. Diese Reaktionen bringen direkte und indirekte Auswirkungen aufs weltweite Ökosystem, wirtschaftliche Aktivitäten und die menschliche Gesellschaft. Aufgearbeitet und unterstützt wird mein Thema durch 18 Karten, 36 Visualisierungen, 18 Grafiken und ein selbst entwickeltes Leitsystem inklusive eines Iconsets mit 32 Icons. Die Publikation besteht aus 144 Einzelseiten, wurde selbst gebunden und eingebunden in einem mit Siebdruck bedrucken Umschlag, welcher ebenso als Poster verwendet werden kann.

RING-STRÖMUNG

Die antarktische Ringströmung, oder auch als Zirkumpolarstrom bekannt, ist eine der einflussreichsten Meeresströmungen der Weltmeere. Sie nimmt eine entscheidente Rolle bei der Regulation des globalen Klimas und der Meeresströmungen ein.

Beschleunigung der Ringströmung

Eine Ringströmung ist eine zirkuläre Meeresströmung, die sich um einen bestimmten Bereich oder ein bestimmtes geografisches Merkmal im Ozean bildet. Diese Strömungen können nun auf verschiedene Weise entstehen, aber oftmals sind sie das Ergebnis physikalischer Eigenschaften des Ozeans, wie den Landmassen, den Unterwasserbergen oder auch den Meeresströmungen.

Ringströmungen können sich in verschiedenen Größen und Intensitäten bilden, von kleinen Wirbeln bis hin zu großflächigen Zirkulationen, die ganze Meeresgebiete umfassen. Diese spielen eine wichtige Rolle bei der Verteilung von Wärme, Salzgehalt und Nährstoffen im Ozean und beeinflussen damit das Klima und die marinen Ökosysteme.

Im Antarktischen Ozean gibt es beispielsweise die sogenannte Antarktische Zirkumpolarströmung, oder auch Westwinddrift. Diese Ringströmung umkreist die Antarktis und ist die größte und mächtigste Meeresströmung der Welt. Sie spielt eine wichtige Rolle bei der Regulation des globalen Klimasystems, indem sie den Wärme- und den Stoffaustausch zwischen den Ozeanen verschiedener Breitengrade fördert.

Ringströmungen können auch lokale Auswirkungen haben, indem sie die Verteilung von Nährstoffen und Plankton in einem bestimmten Meeresgebiet beeinflussen. Sie können die Lebensbedingungen für marine Organismen verändern und haben damit Auswirkungen auf Fischerei und andere wirtschaftliche Aktivitäten haben, die von den marinen Ressourcen abhängen.

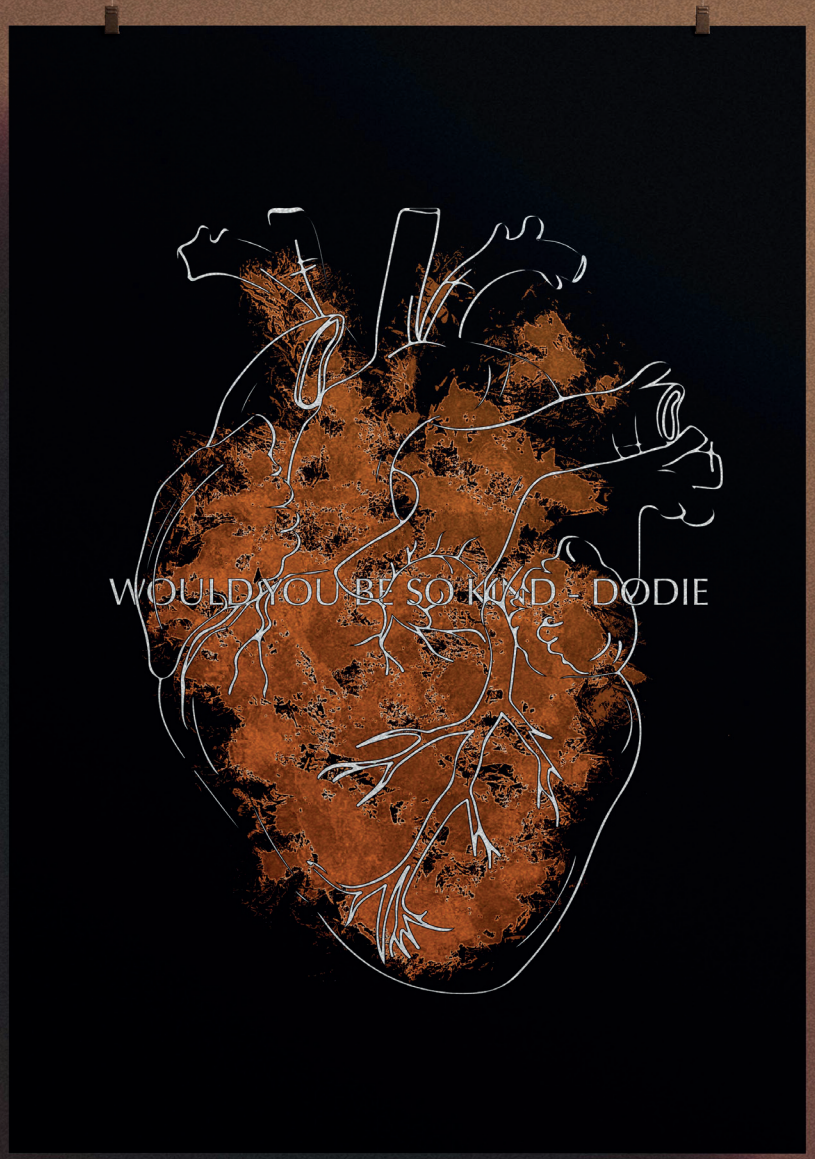
Die Beschleunigung der Ringströme im Antarktischen Ozean ist ein faszinierendes Phänomen, das sowohl Wissenschaftlerinnen als auch für diejenigen, die sich für die Dynamik unserer Ozeane interessieren, seit langem begeistert. Diese Ringströmung, auch bekannt als Antarktischer Zirkumpolarstrom, ist eine mächtige Meeresströmung, die den Südlichen Ozean umkreist und nun eine der wichtigsten Komponenten des globalen Ozeanzirkulationssystems darstellt. In den letzten Jahrzehnten haben Forscherinnen eine Beschleunigung der antarktischen Ringströme festgestellt, was zu einer verstärkten Dynamik und einem erhöhten Transport von Wasser und von Wärme entlang dieser Ströme führt. Die Beschleunigung ist teilweise auf den Klimawandel zurückzuführen, der die ozeanographischen und atmosphärischen Bedingungen in der Antarktis verändert.

Eine Hauptursache für die Beschleunigung dieser Ringströme im Antarktischen Ozean ist die Erwärmung des Ozeans und der Atmosphäre. Durch den Klimawandel erwärmt sich das Wasser in den oberflächennahen Schichten des Ozeans, was nun zu der Verringerung der Dichte und einer verstärkten Schichtung führt. Dies wiederum führt zu einem verstärkten Druckgefälle entlang der Ringströme, was zu einer Beschleunigung führt.

Ein weiterer Faktor, der zur Beschleunigung der Ringströme beiträgt, ist Veränderung der Winde über dem Südlichen Ozean. Die antarktischen Westwinde, welche nun entlang der südlichen Hemisphäre wehen, haben in den letzten Jahrzehnten sehr stark zugenommen, was zu einer verstärkten Ekman-Transport führt. Dieser Transport von Wasser in Richtung Äquator verstärkt die Ringströme zusätzlich und trägt zu Beschleunigung bei.

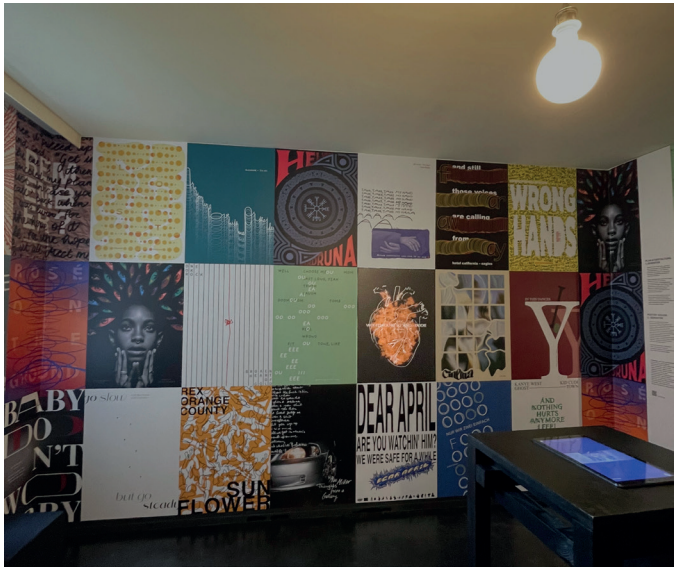
Die Beschleunigung der Ringströme im Antarktischen Ozean hat weitreichende Auswirkungen auf das globale Klimasystem und auf das marine Ökosystem. Durch die verstärkte Zirkulation werden große Mengen an Wärme und Kohlendioxid in die Tiefsee transportiert, was Auswirkungen auf die globale Wärme- und Kohlenstoffbilanz hat. Zusätzlich beeinflusst die Beschleunigung der Ringströme die Verteilung von Nährstoffen und die Lebensräume von Meereslebewesen in der Antarktis und darüber hinaus.

HEMISPHÄRE
Eine Hemisphäre ist eine Hälfte der Erde, die durch einen Breiten- oder Längengrad geteilt wird. Die Erde ist in vier Hemisphären unterteilt: in die nördliche Hemisphäre, die südliche Hemisphäre, die östliche Hemisphäre und die westliche Hemisphäre. Jede Hemisphäre hat seine eigenen klimatischen, geografischen und kulturellen Merkmale, die sie einzigartig machen.



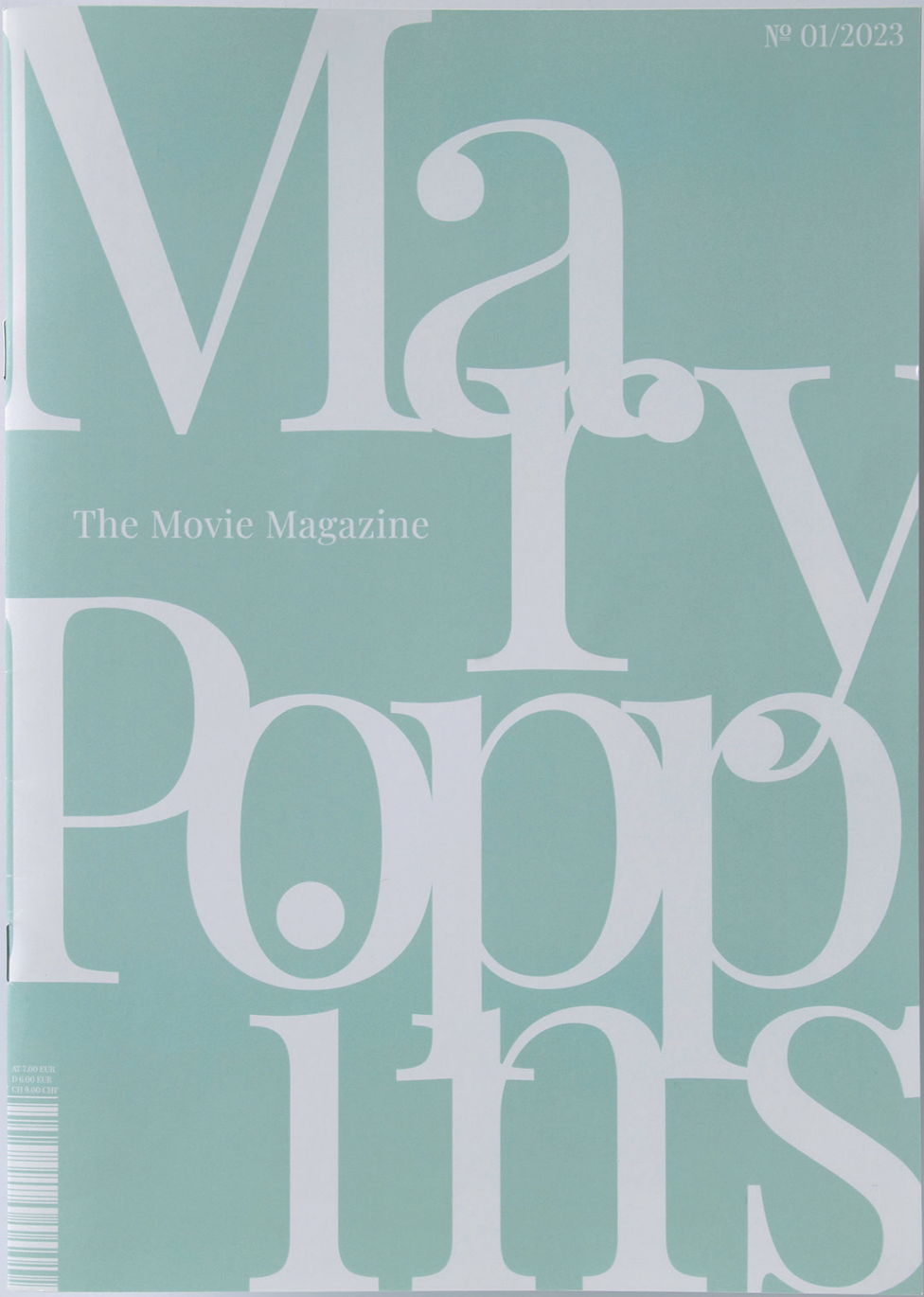
Plakatgestaltung

Eine Plakat zu einem von mir ausgesuchtem Lied. Die Illustration im Hintergrund ist durch Tusche Experimente entstanden und wurde digital nachbearbeitet. Das Plakat war analog, sowohl digital als animiertes Plakat Teil der Ausstellung der Vienna Design Week in 2023.



Editorialdesign

Ein Magazin zum Klassiker „Mary Poppins“. Das Magazin besteht aus Texten, Interviews und Infografiken. Die Texte und Interviews beschäftigen sich inhaltlich mit den Schauspieler:innen des Films und den damaligen vorhandenen Methoden für Filmeffekte. Die erstellten Infografiken setzen sich mit den musikalischen Szenen im Film auseinander, zeigen die Verhältnisse der Charaktere auf und analysieren unter anderem das Auftreten der Hauptprotagonistin.




Interview
Karen Dotrice
Karen Dotrice is the Actress of Jane Banks in the 1964 movie.
Uncle Walt, as I called him, was determined that although I was an eight-year-old working on a film, I should still have a magical time. He flew my mother and two sisters to the US to be with me during the nine months of filming. Whenever we had a free weekend, he'd lend us his plane-called Mickey Mouse-and we would go down to his ranch in Santa Barbara. I was a nervous flyer so he had the plane done out like a sweetshop. When the seatbelt sign went off, we could sell candy to our mum.
FIRST DAYS
I was startled, on the first day, when we were taken to the prop department and a plastercast was made of my bum. It turned out to be for the scene where we slide up and down the banister. The cast was made into a seat that fitted under my clothes. When a button was pressed, off we went like we were on a Stannah stairlift.
COWORKERS
My dad was working in London and we only saw him once during our time away. So it happened that Dick Van Dyke became a father figure to me. He was like a big baby- he would muck about on the sidelines and then, as soon as the camera started rolling, put on a straight face. But I'd be piddling myself with laughter and could not get myself together, meaning there were many retakes.
It was an emotional time for Julie Andrews as she was in the middle of a divorce, but she managed to really send things up with Dick, especially the scenes with the cartoon animals, Because the special effects were filled in later, we had these large, sweaty prop guys in braces dancing about with cut-out horses and penguins to show us what was going on. They both tried hard not to cuss in front of us children.
FUN FACTS
There were so many retakes of the scene with the song "Supercalifragilisticexpialidocious" that we got sick of the toffee apples we were supposed to be eating. So the prop guys would let us order any flavour we wanted for the next day's shoot. We got through raspberry, chocolate, even some cinnamon, and then after two weeks just gave up.
I had learned every song before leaving England. My teacher was about 108 and taught me to warble them like in an operetta, so when I first performed in the studio everyone was pissing themselves. Julie took me aside and reiaght me and when it was time to record them with an orchestra she gave up her day off to support me
"I still remember the first time I saw her smoking on set in full garb. I was shocked, Mary Poppins having a fag!"
Song statistic
55.07 %
44.93 %
no word
20


Interview
Julie Andrews
Julie Andrews is the Actress of Mary Poppins in the 1964 movie.
Let's sprint through those achievements now. You started your career, as a lot of performers do, onstage.
I started many, many years before Broadway. I was one of those child brats that had a freak singing voice and was performing in vaudeville in England for many years. Then that phenomenal chance to come to Broadway happened, and then eventually, that phenomenal chance to come to Hollywood.
Mary Poppins came out the same year as My Fair Lady. And that was your first onscreen role—and your first Oscar nomination. And you won.
I'd never made a movie before! Poppins was the real thing. Disney came to see me when I was in Camelot on Broadway and asked if I'd like to come to Los Angeles and Hollywood and see the sketches that he'd done for a film he was making. I said, 'Oh, Mr. Disney, I'm having a baby! I'm so sorry. I'm pregnant!' He said, 'Well, that's okay—we'll wait.' And so eventually, months later—because of course there was a ton of pre-production to be done—I and my husband all came to Holl
very decent and
you know, but my husband at the time was a real gentleman called Tony Walton. He was a designer. When Disney came to see me in Camelot, he said to Tony, 'What do you do, young man?' And he said, 'Well, I'm a designer. I've been doing some small things in Britain, not very.' And Disney said, 'Bring your portfolio when you come with your wife to Hollywood—if you come.' So he did and instantly got the design job on Mary Poppins. I mean, Disney just took a gamble, loved what Tony did. And he too was Oscar-nominated after the film came out. His career was set after that. So, I mean, that is an amazing story, isn't it?
Sometimes actors say when they're in the midst of making something, especially something that has a lot of visual effects, they don't fully understand what they're doing until they see it later. Was that what making Mary Poppins was like?
Right! Never having made a
life, I remember
Dick Van D
Dick Van Dyke plays the role of Ber
The acter who plays Bert revealed rec
that he actually had to pay Disney in ord
persuade them to let him play a second ro
the film.
Since the release of Mary Poppins Retu
on December 19, Dick and Lin-Manuel Miran
of Hamilton fame, decided to sit down and have
chat for Mary Poppins Returns: Behind the Magi
A Special Edition of 20/20. And let's just say that
it was during this segment that the 92-year-old
actor decided to share quite the tidbit about how
he got Disney to allow him to play two roles in
the 1964 film.


Practically perfect in every way.