best of

111 Stories from the WeltenMuseum

the weltenmuseum in hanover


artworlds
humanworlds
natureworlds

das auge sieht, was es sucht.

slevogt→ 1868–1932

the eye sees
what it is looking for.

best of 111 stories from the weltenmuseum

GEFÖRDERT DURCH

Niedersächsisches Ministerium
für Wissenschaft und Kultur

EINE INSTITUTION DES LANDES

Niedersachsen

best of

111 stories from the weltenmuseum

Edited by Katja Lembke

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Foreword

"In the 17th and 18th century, museums and libraries were quite idiosyncratic institutions, because they were expressions of the prevalent taste of their age. The idea of accumulating everything, of establishing a sort of general archive, the will to enclose in one place all times, all epochs, all forms, all tastes, the idea of constituting a place of all times that is itself outside of time and inaccessible to its ravages, the project of organizing in this way a sort of perpetual and indefinite accumulation of time in an immobile place, this whole idea belongs to our modernity. The museum and the library are the actual heterotopias of our culture."
M. Foucault, Les Hétérotopies – translated from the French by Jay Miskowiec (web.mit.edu/allanmc/www/foucault1.pdf, p. 7).

Multidisciplinary institutions are back in fashion! The Landesmuseum Hannover, the State Museum of Lower Saxony, with its different worlds dedicated to nature, human development and art (NatureWorlds, HumanWorlds and ArtWorlds) fits this trend perfectly, because it combines under one roof the apparently incompatible, thus inviting visitors to discovery and contemplation. After more than 15 years, a new guide to the museum is now being published; in contrast with its predecessors, if focusses less on the museum's history and its various departments but on the topics and objects on display. In this instance, though, "objects" refers not merely to the inanimate: a major attraction in our NatureWorlds are the fishes in the aquariums and the land animals in the terrariums. Alongside superb works of art from eight centuries, other highlights include the historic dioramas illustrating the history of humankind. This broad spectrum offers the opportunity for interdisciplinary research as well as for the inclusive communication of knowledge – more than 100,000 visitors each year are living proof of that.
Many colleagues at our museum have contributed to this book to ensure the appropriate presentation of its heterotopias. Contributors to the section on NatureWorlds are Annette Richter and Christiane Schilling, to the section on HumanWorlds Andrea Spautz (evolution), Babette Ludowici and Stephan Veil (archaeology) as well as Alexis von Poser (ethnology), and finally to the section on ArtWorlds Reiner Cunz (coin collection), Antje-Fee Köllermann (Old Masters) and Thomas Andratschke (New Masters). We thank Ursula Bohnhorst and Kerstin Schmidt for the photographs. The transformation of this diversity into unity is the work of the publishers Sandstein Verlag and their staff. Christine Jäger-Ulbricht's revision ensured the presentation of heterogeneous objects and different departments in easily readable texts. The beautiful layout of this catalogue was designed by Simone Antonia Deutsch. We thank Herr Stellmacher for his confidence in and support of this project.

Prof. Dr. Katja Lembke
Director of the Landesmuseum Hannover

What is a WeltenMuseum?

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Multi-disciplinary institutions such as the Landesmuseum Hannover, the State Museum of Lower Saxony, are rare. Although there are some museums showing different exhibitions under one roof, it is highly unusual to provide an overarching link between art and nature, even within an international context. In addition, the museum has for many years been home to a vivarium – prompting many a visitor to ask derisively about the possible connection between fish and great art.

Put differently, multi-disciplinary set-ups are often negatively described as general stores without a clear direction and thus inferior to specialist museums. However, the resulting call for a separation of the individual sections stands in contradictions to Humboldt's notion of a world museum.

In contrast with the collections in Berlin or Dresden, the Hanover "Museum für Kunst und Wissenschaft" (Museum of Art and Science) had no royal connection: The "Naturhistorische Gesellschaft Hannover" (Hanoverian Society for Natural History), the "Historische Verein für Niedersachsen" (Historical Association of Lower Saxony) and the "Verein für die öffentliche Kunstsammlung" (Association for Public Art Collection) had decided in 1852 to combine their collections. In 1856, the new museum opened its doors in Sophienstrasse 2, now the "Künstlerhaus" (House of Artists), before moving in 1902 to its current position at the Maschpark, then known as the "Provinzialmuseum" (Provincial Museum). A multi-disciplinary museum from the start, the new building now permitted a division into three departments: a history department with the collections on archaeology, the history of Hanover, a coin collection and ethnological exhibits, a natural history department and an art department.

Even at the time of its establishment, its name "Museum für Kunst und Wissenschaft" (Museum of Art and Science) put it far ahead of older royal cabinets of curiosities and wonders; to our ears, this title sounds most progressive and programmatic. Wilhelm Leibniz, the great proponent of the Enlightenment, already saw museums as "theatres of nature and art", as spaces where art and science would meet. These days, the art scholar Horst Bredekamp not only recognises in this a historic dimension, but goes as far as viewing "art and science in a productive laboratory situation" as a "motto for the upcoming century".

Museums thus not only embody and preserve the world, but they also stand outside of space and time. The internal and the external condition each other: there is a constant input from the outside, while the museums on the inside are a reflection of the world outside. What better place to rise to this challenge than in a museum with five collections, with the State Gallery, the Coin Cabinet, with natural history complete with vivarium, with archaeology and ethnology? Where could the WeltenMuseum as a reflection of the world present itself more comprehensively than in an institution which is more than just a museum of art and natural

sciences as are so many others, but which as one of the central museums of Lower Saxony is tasked with contributing towards the identity of the inhabitants of this federal state?
The new concept, gradually implemented from 2013, takes guidance from the museum's history with its three departments and from the architecture of its building as a reflection of the world. The ground floor is now home to the NatureWorlds as a link between the previously separated sections of vivarium and natural history. The first floor is given over to the HumanWorlds, the unrivalled combination of the archaeological and ethnological departments, of the Old and the New World. Above both are the ArtWorlds with paintings and sculptures from the Middle Ages to the 20th century.
This approach, despite being rather abstract, is well received by our visitors. The State Museum is one of the most popular destinations for family outings within Hanover and its surroundings, and many culture enthusiasts have discovered it afresh thanks to the new presentation of its collections. The museum's concept also focusses on people with a migration background, because cultural contacts and migration play a decisive role in the HumanWorlds and its central question as to the actual innovative powers behind human progress. Otherness is thus not seen as strange or even frightening, but understood as an enrichment also for our society. This is inclusion at its best. Children, parents or "best agers", irrespective of their background, social status or education – every visitor finds something special within the Hanover State Museum with which he or she can identify.
For that reason, the result of this new concept is not diversity but a new unity, linking the old and the new, art and nature. According to Michel Foucault, it is the deliberate combination of the incompatible. And thus truly unique.

The NatureWorlds

The new NatureWorlds on the ground floor have created a vital link between a vivarium and natural history, between living and past nature, that is currently unique within North Germany. The exhibits not only concern Lower Saxony, but are internationally located. The exhibition concerns itself with popular holiday destinations such as the Canary Islands or the Caribbean as well as with "Steinhuder Meer" (Lake Steinhude) – and throws light on all.

This results in new perspectives on the living environment of the inhabitants of Lower Saxony, time and again revealing astonishing connections between seemingly different places and topics. A look at the history of the earth shows that the climatic conditions in the now tropical Caribbean once prevailed here in an older, but very similar manifestation during the Late Jurassic period. This results in a great advantage in the conveyance of knowledge: geological aspects are linked directly to those of current habitats and both combined with the wealth of life in the aquariums and terrariums. The main focus is thus on an intensive interlinking of all aspects of natural history, in the same way that they actually occur in the appearance of the environment on our earth.

It starts with the "WasserWelten" (Water Worlds), home to more than 200 different species of aquatic animals from very different habitats: cold or warm water, salt or fresh water. Amidst the aquariums, additional animals from our seas and oceans are presented in a "cabinet of skulls". From water to land: an elegantly designed transition area compares the extant life in the aquariums with that of various fossilised marine organisms and also prepares for the next part of the exhibition.

The "LandWelten" (Land Worlds) are occupied by dinosaurs, reptiles and amphibians. Visitors "travel" along various coastlines from the familiar North Sea via the Mediterranean and the Canary Islands to the Caribbean and the coast of South America. This makes it possible to explain and illustrate complex scientific concepts such as the high biodiversity of insects, the specific development of new species on islands, but also the creation of volcanoes, using

popular holiday destinations as stations. In addition, a key focus is on "South America – the Amazon River", with numerous terrariums, home to living inhabitants of the tropical jungle, complemented with explanations and objects on aspects of important expeditions such as Alexander von Humboldt's exploration of the equinoctial regions.
For the first time ever, the exhibition also includes a large number of original stone slabs with spectacular dinosaur prints from the Obernkirchen quarries. They confirm that 140 million years ago, the giants truly roamed the trails of Lower Saxony.
Interwoven with this is the exciting topic of "evolution", because the development from dinosaur to bird is one of the prime examples of evolutionary theory. With the aid of the museum's unrivalled bird collection, the story of the life and death of three extinct species of birds is shown, all eradicated by humans: the Great Auk, the Passenger Pigeon and the Carolina Parakeet.
In a large aviary, 80 more birds from hummingbird to Darwin's rhea show the entire range of bird species. The exhibition also includes two large terrariums. One of them is home to a Plateosaurus skeleton as well as several live and active bearded dragons. The second terrarium provides space for green iguanas. The range of exhibits is complemented with unique finds of crocodiles and tortoises as well as numerous fossilised plants and skeletons, e. g. of iguanas and giant salamanders.

The HumanWorlds

The HumanWorlds present the success story of *homo sapiens sapiens*, based on the principle of migration, trade and the exchange of ideas. Progress is not advanced by demarcation and exclusion, but by openness and intercultural exchange. The exhibition draws a line from the beginnings of human history to modern cultures outside of Europe. At its heart are the collections on archaeology and ethnology, complemented by natural history exhibits on evolution together with exhibits from the State Gallery illustrating the transition from the Old to the New World.
This unique exhibition calls upon all the advantages of an interdisciplinary institution, providing visitors with an entertaining and diversified insight into the history of humankind. Visitors start their tour of the HumanWorlds by travelling through the evolutionary history of human

development and becoming acquainted with their "line of ancestors": from prehistoric humans, already able to walk upright, and artisans able to produce stone tools to early humans whose anatomy is very similar to that of modern humans, who had learned to master fire and who had left Africa as the cradle of humankind. Precious historical dioramas depict our ancestors in their respective environments.

The next part of the exhibition tells the story of early humans in the region of Lower Saxony; there is a lot to learn about them, even though it goes without saying that there are no written records of that period. The exhibits themselves tell this story, from cabinet to cabinet like leaves in a book: how humans migrated here from distant lands, how dramatic climatic changes affected the appearance of the land, how technical innovations influenced economy, society and culture and their effect on the environment, how a warrior caste developed, how wealth was amassed and power wielded, and how even 3000 years ago a society developed with similarities to an advanced civilisation.

The direct and often martial contact between Romans and Germanic tribes in the region of the modern Lower Saxony resulted in fundamental changes within the resident population. Germanic warriors served with the Roman legions, returning to their homeland after their period of service with foreign goods and novel ideas. The cultural contact led to a blossoming of trade and advances in craftsmanship and agriculture. An elite began to form whose pride of rank is evident for example in the rich funerary goods of the Roman imperial period. Moorland finds of textiles give us an insight into everyday garments, but also permit us to reconstruct the otherwise elusive splendour of lavishly manufactured clothes. Bog mummies such as the "Red Franz" help us to understand the hair and beard styles that were fashionable in the Germania of the Roman imperial period.

One large installation within this section of the exhibition draws attention to an interesting phenomenon: an imitation burial mound rises in the centre of the room. Such barrows have existed in Lower Saxony from the Neolithic and the Bronze Age. They are surrounded by interments of the Germanic population ranging over several centuries. Their choice of burial sites was guided by these even then "ancient" landmarks. Burials with numerous weapons or

lavish jewellery and clothing are evidence of Germanic elites who also existed amongst the historic "Saxons" of the early 5th century – and of their awareness of their own prestige. One of these rich warrior graves yielded a round silver pendant of roughly coin size, engraved with the oldest written record originating in Lower Saxony. The runes can be translated as "dedicated to the spear".

From the second part of the 8th century, the Franks exerted increasing pressure on their Saxon neighbours: Charlemagne aimed to bring the Saxon territories under his control, both politically and militarily. Charlemagne's war against the Saxons was not only a conquering expedition, but also a religious conflict. To break the stubborn resistance to his efforts, he employed tactics of long-term attrition: enforced resettlements, Christianisation, mass executions and hostage taking resulted in the ultimate success of the Frankish emperor after more than three decades. The stabilisation of Frankish rule was associated with the development and expansion of a particular form of infrastructure: imperial palaces and monasteries entrenched ecclesiastical and secular power within the landscape.

Having arrived in the High Middle Ages, visitors get introduced to a third influential group in society: the clergy and the secular gentry were joined by the burghers of the then booming towns. They defended their claims against secular rulers and ecclesiastical control and laid important foundations for the development of our modern form of society. One of the hallmarks of medieval towns was the concentration of highly skilled artisans who developed organisational forms that continue to have an effect to this day. All items such as leather clothing, bone carvings, pottery dishes and glassware were of a standard that remains impressive even now. Arts & Crafts blossomed, also within the religious context. Two examples of this are a baptismal font with a relief fries and a panel painting showing the Holy Family in a medieval household. This creates an immediate link to the ArtWorlds. The discovery of the New World in the 15th century also changed peoples' everyday lives. The most impressive indication of this are the numerous fragments of early modern clay pipes discovered in urban excavations, because the New World is highly addictive.

This leads to a change in the visitors' perspective: while up to this point the focus had been on the timeline of the region of Lower Saxony from the earliest traces of culture to the Late Middle Ages, it now broadens to include the world outside of Europe which in this time of sea journeys and discoveries then came to the attention of Europeans. Two life-size paintings illustrate this change in perspective: the first depicts the Spanish king Carlos II, and the other across the room shows Don Luys of Peru, the noble descendant of the third Inca of Cuzco, the capital of the ancient Inca empire. The Peru that the conquistadores found and plundered was on a par with the Europe of that time. It boasted a complex system of state and trade and an artistically highly developed material culture. At the same time, the portrait of Don Luys also illustrates the Peruvian view of the Europeans, because it employs the latter's forms of representation.

A change in perspective is offered by objects relating to Captain James Cook's second circumnavigation of the globe between 1772 and 1775. These are particularly valuable, because they are amongst the oldest examples of material culture from the South Pacific. Furthermore, they are frequently seen as examples of an "as yet unchanged culture" prior to contact with Europeans.

The third change in perspective then leads to the main narrative of this part of the exhibition. It is centred on the character of Epeli Hau'ofas, a Fijian writer and ethnologist who advocates an alternative view of the continent of Oceania. In his view, the focus should not be on small

islands within a large ocean, but the ocean be understood as a unit – as a continent made up of distant trade and travel routes, connecting rather than separating the island states. Oceania thus becomes the Earth's largest continent, covering almost a third of its surface. An alternative globalisation is depicted here, one emanating not from Europe but from the Pacific. Originating from South China, about 5000 years ago, a population known as Austronesians began to spread initially to Taiwan, then via the Philippines and Papua-New Guinea across the Pacific to Hawai'i and Easter Island and into the other direction across the Indian Ocean to Madagascar and the coast of East Africa. This "globalisation" took place with outrigger canoes over a period of several thousand years. Multi-perspective approaches break the one-sided, Europe-centred reading of these exhibits. Exemplary representative of this are African depictions of Europeans and other foreigners, known as colon statuettes, showing how the colonised viewed their colonisers. The exhibition starts with the evolution of humankind that took place mainly in Africa, and it end in Africa once again, but this time as a culturally exciting place of our time. In this way, correlations can be established across millions of years between natural history and ethnology.
Where do we come from, where are we now, where do we go? That are the central questions guiding this interdisciplinary exhibition. It allows visitors to experience the vast variety of human worlds, from their genesis and the cultural development in Lower Saxony to the discovery, conquest and transformation of the world.

The ArtWorlds

The second floor is home to the State Gallery with important works of art from the Middle Ages to the early 20th century. It offers yet another change of perspective in relation to the HumanWorlds, because the focus here is not on everyday life, but on the outstanding and the exclusive in the creation of art. The museum's Coin Collection enjoys a special status. From coins as the most common media carriers used in everyday life to extremely valuable and unusual medals, this collection permits an insight into the treasury of the Hanoverian kings. In terms of geography, the collection focusses on Lower Saxony, Great Britain and Ireland as well as the British colonies, resulting from the personal union between the Electorate and later Kingdom of Hanover and the British crown between 1714 and 1837.
The tour of the ArtWorlds starts with a focus on Lower Saxony – with its important altars from the International Gothic period around 1400. These include the Franciscan Altarpiece from Göttingen and the famous "Goldene Tafel" (Golden Tablet), originally on display in St Michael's in Lüneburg.
Artists such as Lukas Cranach and Tilman Riemenschneider demonstrate to visitors the great art of the German Renaissance, followed by the great Italian masters Sandro Botticelli and Jacopo Pontormo. Baroque art flourished in the Netherlands in particular, represented here with works by Peter Paul Rubens, Rembrandt van Rijn and Jacob van Ruisdael. Works by Caspar David Friedrich, Carl Spitzweg, Arnold Böcklin, Hans Thoma, Wilhelm Leibl, Adrian Ludwig Richter and others stand for the German art of the 19th century. And finally, the collection of German impressionists and early expressionists is unrivalled anywhere in the world. The State Gallery holds important groups of works by Max Liebermann, Max Slevogt, Lovis Corinth and Paula Modersohn-Becker. French impressionists, too, are represented with important works, including those by Claude Monet and Alfred Sisley. This comprehensive impressionist collection already points towards Classical Modernism.

The collection of more than regional importance is able to address a range of different aspects. The outstanding artistic value of the medieval altars gives rise to the question as to the start of the "Age of Art", or even how to define "art". Who were the mainly nameless creators of these masterpieces, what were their lives like? The art-historical analysis is thus also accompanied by a greater integration of their lifeworlds, particular the church interiors, from where these works originated.

Furthermore, links to other museums in Hanover can be shown: to the August Kestner Museum which has a focus on design as well as arts & crafts, frequently closely related to the "art" of the same period on show in Landesmuseum. Or to the Sprengel Museum, home to the art of the 20th and 21st century, thus the direct continuation of our museum's collection. Finally, coins and medals are important documents in the history of our region, thus constituting a bridge to the Historical Museum Hanover. In this way, the "WeltenMuseum" is a self-contained complex, but one that cooperates and interlinks closely with the city's other cultural institutions.

26 Stories from the

nature worlds

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Finding Nemo

Coral reef basin
Royal blue tang (*Paracanthus hepatus*), yellow tang (*Zebrasoma flavescens*), Desjardin's sailfin tang (*Zebrasomadesjardinii*), clown triggerfish (*Balistoides conspicillum*), Picasso triggerfish (*Rhinecanthus aculeatus*), Queen coris (*Coris formosa*), redtoothed triggerfish (*Odonur niger*), anemonefish (*Amphiprion*, small picture)
Biotope: Indo-Pacific

Fish in tropical coral reefs come in a whole host of opulent colours, ranging from yellow or red checks to blue and black or bright orange. It is a case of anything goes. Clown trigger fish are noticeable for their white spots, yellow tang glow (as the name suggests) in bright yellow, and Desjardin's sailfin tang are covered in lots of light and dark stripes.
To us, these are unusual sights because the fish we are familiar with from the North Sea and the Baltic are usually silvery and in colours that camouflage them. Is a perpetual Mardi Gras going on in the South Seas? No, the blaze of colour in the tropical reef has a practical purpose. The vast coral colonies, whose many niches and grottos serve as a habitat for the fish, resemble a high rise with hundreds of apartments. But instead of doorbells with names next to them or house numbers, it is the striking colour combinations, unique to each species of fish, that make each fish stand apart. This is how husbands and wives or lovers spot each other, or children locate their parents. Any creature interested in a new dwelling easily recognises where there is a vacancy and turf wars of the aquatic kind are avoided. After all, fish do not want any trouble with the neighbours either.

In great shape for a swim

Amazon basin
Silver arowana (*Osteoglossum bicirrhosum*), freshwater stingray (*Potamotrygon leopoldi*), tiger oscar (*Astronotus ocellatus*), silver dollar (*Metynnis hypsauchen*), silver prochilodus (*Semaprochilodus taeniurus*).
Biotope: Amazon

The Amazon River drains the Amazon basin, which covers almost the entire northern half of South America. It is an enormous freshwater area, surrounded by tropical rainforest. Some calculations surmise that about one fifth of the freshwater on Earth flows through the rivers of the Amazon basin. As a result, biodiversity is colossal with about 2,000 different types of fish alone, four times as many as in the whole of Europe.
Similar to any ocean and lake, this water system also has several storeys, just like a house. There is the river bed, an "open-ocean zone" in the middle and the surface of the water. Just like human beings, fish are also choosy when it is a case of living on the top or bottom storeys. Some of them like "rooftop terraces", others prefer to be at "ground level". However, in this case, their preferences are due to evolution and not choice. Many thousands of years adapting to the environment determines the creatures' form. A fish that lives on the surface of the water, such as the silver arowana, has a straight back and is not round like pelagic fish such as the silver dollar. Species of fish living in the open-ocean zone have evenly shaped bellies and backs to stabilise their bodies while swimming. Catfish and rays live right down on the riverbed. Their bottoms are flatter, or, in the case of rays, completely flat – and can lie quite well camouflaged on the riverbed and burrow themselves into it for good measure. The biotope quite literally shapes the way they look.

Flat and spotty

A tank full of flatfish
The tub gurnard (*Chelidonichthys lucernus)*, small-spotted catshark (*Scyliorhinus caniucula*), plaice (*Pleuronectes platessa*), turbot (*Scophthalmus maximus*), Atlantic cod (*Gadus morhua*)
Biotope: North Sea and Baltic

It is not only fish gourmets who will have heard of turbot, flounder or plaice. Biologists are also interested in flatfish due to the special nature of their anatomy.
Their unusual body shapes make them look as if they have been squashed flat. However, when they swim on the bottom of the tank, it is not the top of the creatures you see – because they do not lie on their stomachs but on their sides! The turbots' physiques are just like any other small fish, but after four to six weeks, their eyes move to the left half of their bodies and to the right where plaice is concerned. The creatures develop asymmetrically with a spotty side where the eyes are and a plainer side towards the seabed. And by the way, just like chameleons, the shape and colour of the creatures' spots can change to match the seabed beneath them. And their flat bodies are perfect for life on the seabed.
The body shape and spots help camouflage them. But why do flatfish have to conceal themselves? Camouflage is the perfect disguise and useful in the animal kingdom for two reasons. On the one hand, when you are out hunting, nobody can see you and you get closer to your prey, increasing the chance of success. On the other hand, you are not detected as prey yourself and the enemy usually just passes by while it is still hungry.
Both aspects apply to flatfish because they are hunters. Little crabs, mussels or bristle worms are their chief source of food. But they can also be prey themselves – larger fish enjoy a nice piece of plaice.

Steller's sea cow skull
(*Hydrodamalis gigas*)
18th cent.
approx. 70 × 35 × 40 cm
Place found: Bering Island

The sea cow that came in from the cold

In 1741, the shipwreck of a vessel belonging to a Russian expedition on the Commander Islands off the Kamchatka Peninsula led to an exciting discovery. A gigantic sea cow once lived in the cold subarctic sea water and, at almost eight metres in length, it was much larger than the two genera familiar from warm waters, the dugong and manatee. Physician and zoologist, Georg Wilhelm Steller, was amazed at how easy it was to catch the gigantic sea cow and used his involuntary sojourn on the island to carry out detailed anatomical studies. He provided a description, which was published some years after his death by a colleague in 1751.

By 1768, seal hunters had wiped out the vast sea cow. Which makes the exhibited skull of Steller's sea cow, named after the first person to describe the creature, so valuable because it is one of the last on Earth.

Its large downturned "nasal section" is particularly striking. This was where a very broad, fleshy-muscular snout, the beginnings of a trunk, was positioned.

This reconstruction tallies with Steller's descriptions and the anatomy of sea cow species still alive today. But despite the name, none of them is related to cows in any way, or to seals or whales, which we might assume given their way of life. Elephants are sea cows' nearest relatives!

As strict vegetarians, the vast sea cows needed a huge amount of food.

Just like today's species, Steller's sea cow therefore grazed with its flexible snout in the enormous biomass of green algae and the long kelp and chewed these with keratinous plates instead of teeth.

Copper cyclosilicate (*Dioptas*)
approx. 18.5 × 13 × 14.5 cm
Place found: Tsumeb mines, Namibia
Bahlsen collection

Gorgeous green

When identifying minerals, experts seldom go by the colour because this varies greatly for one and the same mineral. The colour of the mineral is determined by the environment in which it is formed. However, the fascinating cold-green glitter and lustre of the dioptase crystals is always equally pronounced and therefore characteristic.

Although this copper cyclosilicate is very beautiful and sometimes called copper-emerald, it is rarely turned into jewellery because with mineral hardness of 5, it is relatively soft compared with a diamond (with mineral hardness of 10) or the equally green true emerald (with mineral hardness of 7.5 to 8), with which it is understandably easily confused.

The dioptase is all the more important for collectors because it is what is known as an ore piece, in another words, a large piece with well-formed crystals and usually in typical adhesions with other minerals. In the case of the dioptase, these minerals are usually calcite. This piece is part of the collection that belonged to Klaus Bahlsen, who was very interested in minerals and whose collection was donated to the Landesmuseum by the Rut and Klaus Bahlsen Foundation.

However, it is not collecting them that raw materials geologists are primarily interested in when they find dioptase in the field. Dioptase is formed in the weathering belt or oxidised zone of copper ore deposits and therefore indicates the presence of the sought-after metal. Our piece comes from the world-famous Tsumeb copper mines in Namibia.

From a global standpoint, dioptase is a rare mineral. In addition, standard collections usually contain much smaller specimens – which is why our dioptase is a real gem thanks to its extraordinary size.

Recent scallop (*Chlamys pallium*),
fossil scallop (*Pecten asper*)
Upper Cretaceous,
approx. 70 million years old
Fossil: approx. 8 × 8 × 5 cm
Recent: approx. 8.5 × 9 × 3.5 cm
Place found: England (Warminster)

Splendid shell

The scallop was a popular object for natural history experts, pilgrims, heraldists, gourmets, speculators and cinephiles alike. It is a symbol of the Camino de Santiago, a delicacy and a logo for a big oil corporation and its beginnings can be traced back to the trade in molluscs and snails. It is considered one of Earth's molluscs par excellence.
The world's oceans are home to many different species of scallop in living and fossilised form. They are identifiable by their one or two valves on the shell's hinge. Untypically for a mollusc, this is held together by one single big muscle, which gourmets know all about. Scallops live very differently: some bury themselves in the sand and others can even swim.
In terms of size and appearance, this group is very varied. The shells are often brightly coloured in red, yellow or a soft pink. This colourfulness is not a unique feature of the species around today; even in this group of molluscs, which is more than 360 million years old, traces of colour were found in the petrified shells. The original pigments have not been preserved, but mineralised traces of its daughter products have. The world of now-extinct molluscs and snails in palaeotropical waters must have been a very colourful one 360 million years ago.

Not a flower but a marine animal

Sea lilies are not categorised as plants, not even fossilised ones. They are animals closely related to other echinoderms! The best way of describing what they look like is to imagine a flexible starfish with lots of tentacles whose back is anchored to the seabed by a stalk. Sea lilies' tentacles point upwards and are used to retrieve particles of food from the seawater and place them in their mouths in the middle of their "calyx".

In the Middle Ages, the small, chalky discs that form the stalk were thought to be tiny petrified coins and called "Boniface pennies" in many places. The Landesmuseum's vast collection compiled by collector Otto Klages has numerous sea lilies of this type. By a strange coincidence, Klages used particularly well-preserved and complete sea lily fossils as a form of currency. He liked to trade the sea lilies he had collected from the Elm hills for impressive pieces owned by other fossil collectors worldwide.

In the past, an enormous number of fossilised sea lilies were found on the Elm, a ridge of hills near Königslutter. However, as the extraction of shell-bearing limestone, which brought the sea lilies to the surface in the first place, no longer takes place there, it has been largely amateur palaeontologists who have been collecting the fossils over the past few decades. Consequently, sea lilies are no longer found in the Elm hills. It would take freshly crushed rock or a long phase of weathering to produce new finds.

A limestone block with fossilised sea lilies (*Encrinus liliiformis*)
Shell limestone, Middle Triassic,
240 million years old
Limestone block: 85 × 55 × 11 cm
Place found: Erkerode
on the Elm hills
near Königslutter

Fossil of an ichthyosaur
(*Ichthyosaurus communis*)
Lower Jurassic, Lias,
190 million years old
Length: approx. 255 cm
Place found: Doniford Bay,
United Kingdom

Ichthyosaur in the living room

The primeval creature with its snout pointing upwards must have looked menacing in photographer Ernst Schwitters' living room. Did the son of the famous Dadaist Kurt Schwitters realise that it had been hung up the wrong way?
The fossilised skeleton probably protruded from the surrounding sediment when it was discovered, which is why the less weathered bottom was prepared. So, the skull, which today so strikingly points towards the person looking at it, was slightly lower than the rest of the body when positioned properly. Preparators jokingly describe this slanting position of its head as somewhat "kamikaze-like", as if the ichthyosaur had rammed itself obliquely into the mud. In fact, the very heavy skull of the ichthyosaur's carcass only sank deeper into the mud of the seabed at the time than the rest of the body because of its extreme weight.
Over 190 million years ago, the ichthyosaur's body might have been deposited not far from an erstwhile coast – as is evidenced by an insignificant-looking branch from a terrestrial plant at the top of the fossil plate, whose well-preserved leaf pinnation indicates that it had not come far. However, the many metallically colourful shimmering ammonites (in what is known as pyrite preservation, after the mineral fool's gold) are clear indications that the habitat of the primeval animal was the open sea. Even if this slab should really be placed in the display cabinet with the bottom facing upwards, the three-dimensional preserved bones and, above all, the skull, which appears to extend upwards, are trademarks of this magnificent ichthyosaur fossil.

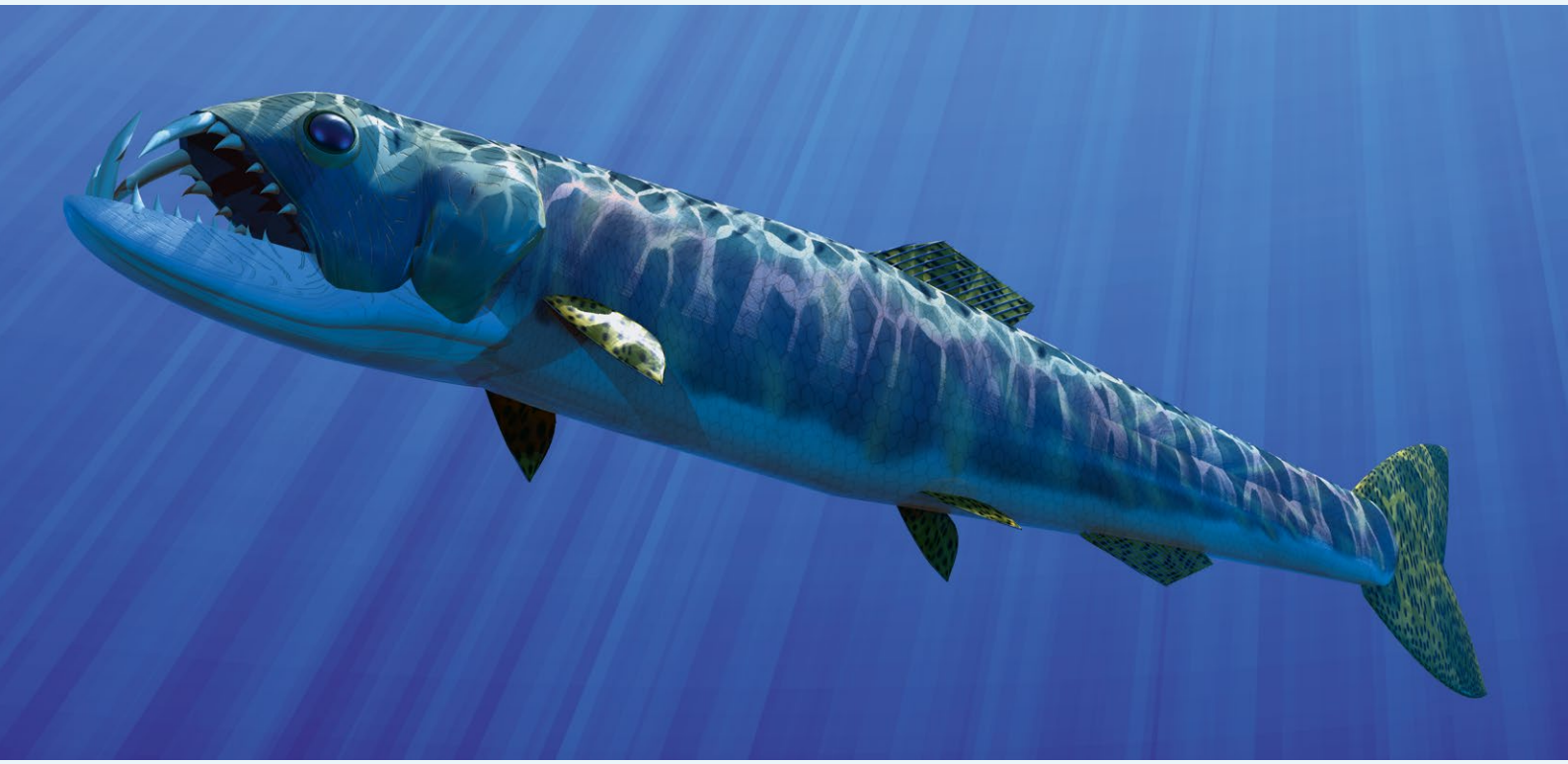
Urchins with a heart

Heart urchin
(*Micraster schroederi*)
Upper Cretaceous,
Lower Campanium,
75 million years old
approx. 6 × 6 × 4 cm
Place found: Teutonia mine,
Misburg, near Hanover

Heart urchins live in the seabed sediment quite happily. In contrast to their round cousins with their hedgehog-like, protruding chalky spines that graze on algae on the sea bed, the heart urchins like to bury themselves slowly into and through the muddy sediment. Similar to lugworms, they eat the sediment and digest the parts useful to them while burrowing. As heart urchins have no enemies in the mud and because it would interfere with burrowing, their spines are merely a sort of chalky "shorthaired coat", which is rarely preserved in fossilised heart urchins.

No other fossil is as characteristic of northern Germany as the heart urchin. Vast and well-preserved quantities of them can be found in the marl pits to the east of Hanover. Numerous fossil collectors from all over Germany, the Netherlands, Scandinavia, Italy and other European countries flock to the Höver and Misburg marl pits every year to find these sea urchins and lots of other important fossils. Only in a few places are the strata, formed during the Upper Cretaceous, so rich in fossils and, in addition, as a result of continuous marl mining, so ideal for making cement, as geologists have noted.

In biological terms, the fossils of the *Micraster* genus are close relatives of *Echinocardium cordatum*, the little heart urchin now living in large numbers in the North Sea.



The sabre-toothed herring of Hanover

Ray-finned fish (*Enchodus*)
Upper Cretaceous, Campanium,
70 million years old
95 × 40 × 2 cm
Place found: Hanover-Anderten,
HPCF II pit

Anyone looking at the long, sharp teeth of the sabre-toothed herring will understand the reason for the common nickname of this fossilised fish.
The *Enchodus* was up to 1.50 metres in length, lived 80 million years ago and was also found in Hanover's chalk sea. During this Mesozoic period and at the same time as the dinosaurs on land, modern fish – known as *Neopterygii* – in the oceans started their triumphant march, which is still continuing today. The flat, rigid skulls of their predecessors were transformed into a system of light, bony sticks and individual elements anchored here and there, some of which can be moved against each other, giving the skull a wide range of motion. As a result, many of today's fish, like carp and perch, can pout. However, because of this delicate and multi-part structure, it is only usually possible to find skulls belonging to their fossil ancestors that have disintegrated in lots of parts.
The same applies to our specimen, which was discovered during cement mining in the east of Hanover. Despite the shattered skull bones, the big head and the pointed teeth are easy to see. And although *Enchodus'* appearance is often compared with viperfish or frogfish, it looks more like a modern barracuda.
Our sabre-toothed herring was a dangerous predatory fish, but still managed to land in the stomachs of larger fish or giant marine dinosaurs, as fossilised stomach contents prove.

A guest comes to stay

This large white bird called a gannet has been breeding regularly on Germany's small island of Heligoland with its red cliffs since 1991. The island offers plenty of juicy fish and a strong breeze, making it an ideal environment for this bird, which weighs three to four kilos. Because the bird's flight musculature is comparatively weak for its weight, it needs a lot of wind beneath its wings to take flight.

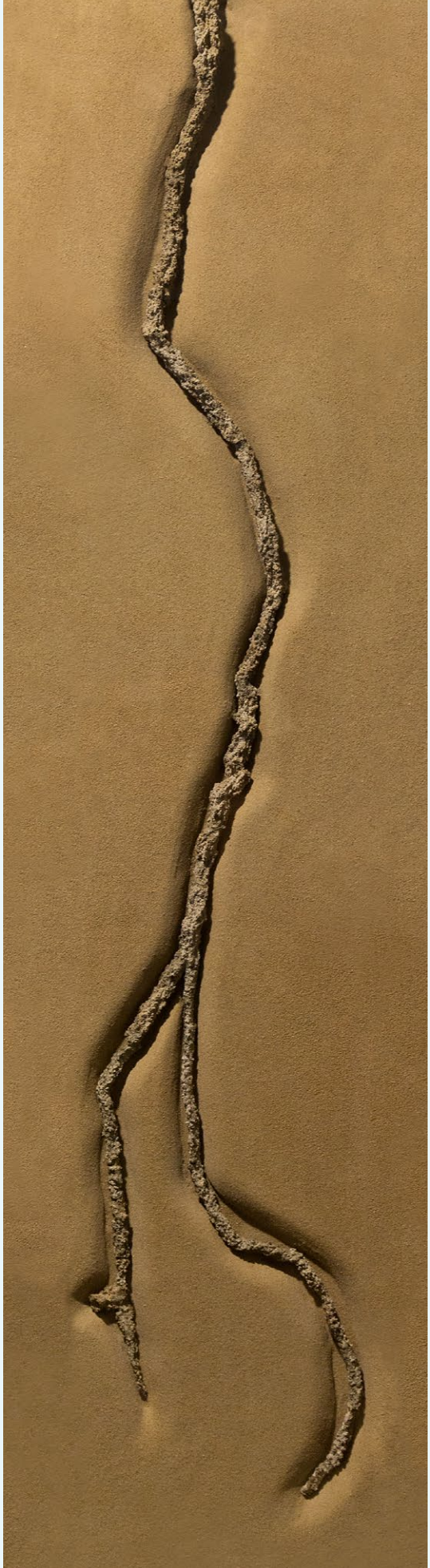
Once in the air, the gannet is a superb glider. It really picks up speed when it swoops to catch its food: at over 100 kilometres per hour, it plunges into the water and, thanks to the momentum and a few flaps of its wings, reaches depths of up to 15 metres. It occasionally looks for sand eels in shallow water, but it mostly seeks haddock, mackerel or herring.

Gannets raise their young from April to October. Each pair has one single chick that grows up in a crib made of seaweed, sea grass and often bizarre objects that its parents find. The young birds then fly to southern climes, to the coasts of West Africa or the Mediterranean. While they cover considerable distances, particularly during their first migration, their parents prefer shorter hauls and some of them remain in the colony, even in winter.

Why are these birds called gannets? The name comes from the Old English word "ganot", meaning "strong" or "masculine". The animals have been breeding on Bass Rock in Scotland on the cliffs since the 12th century and total over 40,000 pairs per year!

There are not as many on Heligoland's "Lange Anna" – the red rock formation on which the gannets breed. But there are over 1,200 of them today compared with just under 80 in 1991. That is quite a dramatic increase!

Gannet (*Morus bassanus*)
Specimen
Head-torso length:
80–110 cm
Biotope:
seashores



A petrified bolt of lightning (*Fulgurite*)
Pleistocene sands from the last ice ages, the exact time the bolt of lightning fell is unknown
210 × 40 × 10 cm
Place found: Lüneburg Heath (Drawehn?)

A blast furnace in the Heath's sand

Bolts of lightning cannot really petrify of course, but this fascinatingly well-preserved fulgurite in Hanover's Landesmuseum does at least trace how the lightning fell.
Fulgurites are basically made of a kind of glass. Nowadays, to produce glassware, quartz sand is mixed with lime and soda and heated at high temperatures of up to 1,500 °C to produce an elastic, tough and malleable mass. However, the substance is not completely liquid, which is partly due to quartz's very high melting point of over 1,700 °C.
The loose sandy soils on the Lüneburg Heath consist mainly of grains of quartz and just a very few other minerals. If a natural bolt of lightning, with original atmospheric temperatures of sometimes over 20,000 °C, strikes here, the grains of quartz and minerals are fused (sintered) with one another like glass. This occurs around the bolt of lightning so that a characteristic, albeit irregular, "tube" is formed whose cavity allows reliable identification of fragments of these fulgurites in the field.
The material produced by the natural bolt of lightning on quartz sand is a pure quartz glass – in other words, without soda and lime – of the type used today when manufacturing high-temperature crucibles for labs. Precious metals like platinum can be melted in these types of crucibles, which are made of the same material as fulgurites.

Supplanted by the wrong mink

European mink
(*Mustela lutreola*)
American mink
(*Neovison vison*)
Specimens,
American mink head-torso
length: 30–45 cm
European mink head-torso
length: 28–40 cm
Biotope: forest mire, marshes,
the banks of rivers and lakes

What a thrill at Lake Steinhude – mink are back! Thanks to the hard work of an association called EuroNerz from Osnabrück, these small creatures are gradually returning to Europe and can be found at Lake Steinhude and in the Saarland. Various zoos in Germany and abroad are also breeding them. Only a short time ago, the animals were only encountered in a very few places in Europe, the home of the mink. Mink was thought to be almost extinct.
Could this be due to all the mink coats that were in fashion for so long? Yes, but only indirectly because mink coats are made from the fur of the American mink. The American mink (see top photo) is the American cousin of European mink (see bottom photo). These were and are also kept in farms for their fur in Europe. But some minks escaped from being factory-farmed. As American mink is slightly bigger than an European mink but both species share the same diet, the North American relative had an advantage over its European cousin in the quest for prey. In addition, its biotope, the small, woody banks of rivers and lakes, were increasingly destroyed by man. The last European mink spotted in Germany was in the valley of the Aller river in Lower Saxony, in 1925. Almost a century later, they returned in 2010. There is a very successful reintroduction project at Lake Steinhude and the first European mink kits have been born in the wild. What a sensation!

Fan palm in a fish bowl

The palm tree once grew on the beach of an azure lagoon, probably in the midst of other tropical plants while colourful fish swam through the water. Everything must have looked like a coast in the Indo-Pacific.

However, this wonderful fossil of a fan palm was encountered in northern Italy on Monte Bolca, together with an unbelievable variety of petrified species of coral fish of the type occurring in the Indian Ocean today. Traces of colour in the fossils indicate that these fish were apparently just as colourful as their modern-day relatives. Analyses of the limestone also confirm that a secluded bay must have been close to Verona back then.

Monte Bolca has been known for its fossils since the 17th century. The place where the specimen was found owes its Italian nickname, "Pescaria" or fish bowl, to its abundance of fossilised fish. The complete plants and coloured fish discovered here were particularly sought after for museums in the 19th century.

Our palm, which initially looks somewhat insignificant, is 45 million years old, but fully preserved in its enormous, hard limestone block. Silica deposits provide stability for its delicate, fanned-out leaves, which is why these are so perfectly preserved.

Palms are some of the early flowering plants – they originated back in the Cretaceous about 80 million years ago. Since they are so old as a group, they developed and were much more diverse than many other plant groups.

Fan palm
(*Latanites chiavonica*)
Middle Eocene, Lutetium,
approx. 45 million years old
Height: approx. 280 cm
Place found: Monte Bolca near
Verona, Italy

Lavandula canariensis MILL.

Familie: Lamiaceae (Lippenblütler)
Dt. Name: -
leg. (Natur): Krause (2010), La Palma
leg. (Kultur): B.O. Schlumpberger (19.05.2014), Hannover (Berggarten, 2010-G-15)

Sweet lavender

Herbarium sheet with lavender (*Lavandula canariensis Mill.*)
Plant height: up to 150 cm
Biotope: coastal regions of the Canary Islands

Imagine lilac-coloured, enchantingly fragrant fields as far as the eye can see. If lavender comes to mind, we automatically think of Provence in France. But this type of lavender grows on the Canary Islands. Because of their remote location in the middle of the Atlantic Ocean, the Canary Islands are home to over 500 species of flora and fauna that are not encountered anywhere else – including four species of lavender. This colourful plant with its delicate flavour is called "hierba de risco" there, which means "grass on the steep rock". And it is true, *Lavendula* in the Canary Islands prefers rugged conditions and grows in the often extremely arid and rocky coastal regions of the islands. Its leaf shape, which is not typical of lavender, shows that it has adapted to this dry and windy climate. The leaves are not shaped like a lance but a feather instead. On the other hand, very hairy stems and leaves are typical of the group of 30 to 40 species of lavender that occur throughout Europe and the Near East. People have been creating herbaria to document, more accurately identify and, above all, be able to compare plants, for centuries. The dried and pressed plants are mounted on paper and stored in them. Some famous herbaria contain several millions of documents. Our lavender was pressed in 2014 for the newly designed exhibition in the Landesmuseum.

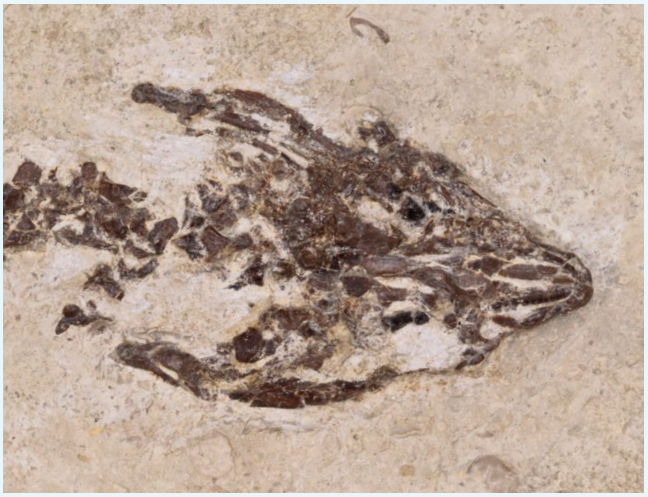
Not just on the Nile

Crocodiles have been around for over 220 million years, or since dinosaurs roamed the Earth! Today's "real" crocodiles occur throughout the world, especially in Africa and Asia. Nevertheless, there are some species in the New World, too, where they are found from Central America to South America alongside the caimans and alligators, which are typical for this region. One of these is also the Cuban crocodile.

Crocodiles are listed as highly endangered reptiles in Appendix 1 of the Washington Convention on International Trade in Endangered Species of Wild Fauna and Flora, making trading them impossible or subject to strict controls. But they are considered to be dangerous and therefore often killed locally or brought to zoos. Most species of crocodile living in the wild today probably do not reach their maximum size anymore. Reports from the 19th century describe encounters with Cuban crocodiles up to five metres long. Our Cuban crocodile is just under three metres long, but still considered to be fully grown.

Typical for real crocodiles is – in contrast to caimans and alligators – a large, canine-like lower jaw tooth, which projects above the upper jaw from below. Crocodiles' teeth are generally characteristic features and usually come in the form of robust cones with a wide base, front and rear cutting edges and a system of fine longitudinal grooves to help stability, just like a corrugated iron sheet. This biomechanical principle is ancient and can also be seen in the extinct giant sea crocodiles that once swam in Hanover's Upper Jurassic Sea, as the *Machimosaurus* tooth fossil proves.

Cuban crocodile
(*Crocodylus rhombifer*)
Specimen, length: 265 cm
Tooth of an extinct machimosaurus crocodile (*Machimosaurus sp.*)
Upper Jurassic, 155 million years old
Length of fossil: approx. 7 cm



Fossilised tuatara
(*Kallimodon pulchellus*)
Upper Jurassic, Kimmeridgian,
155 million years old,
Length: 31.9 cm
Place found: Ahlem near Hanover

Elderly lizard

It was probably a beach 155 million years ago, located near today's Ahlem close to Hanover, where an approximately 30-cm-long, somewhat elderly prehistoric lizard was making its way through the tropically warm sea water between the reefs in search of tiny fish to eat. It was its last ever hunt for prey before it perished and its body sank completely into the soft lagoon bed and hardened into limestone.

In the 19th century, an Ahlem quarry extracted this limestone. An agriculture assessor called Carl E. F. Struckmann, who was interested in palaeontology, was looking for fossils there and discovered the petrified skeleton of the little lizard. He was quite right in assuming that it was not a modern lizard but the fossil of a tuatara.

Tuatara do still exist today, but there are only two species left on islands off New Zealand. These "living fossils" are the last descendants of their almost 155-million-year-old relatives and of our lizard from the Hanover area. They also have unique spines and lots of prehistoric characteristics, such as a parietal eye, or third eye, which is photoreceptive.

Tuatara can live until they are a ripe-old age. They do not become sexually mature until they are over 20 and are guaranteed to live until at least the age of 80 but probably 100. How old would our little lizard from Ahlem have been when it died?

Masters of disguise

Patterns on butterflies (*Nymphalidae*)
Numberwing (*Callicore astarte*)
Owl butterfly (*Caligo sp.*)
Specimens, *Callicore:* 5 × 3.5 cm,
Caligo: 12 × 10 cm
Biotope: Central and South America

With a wingspan of 13 cm, the owl butterfly is a giant among butterflies. But its size is no deterrent to hungry birds. To ward off predators, it has a clever trick in store that biologists called mimicry: it pretends to be dangerous. It is easy to spot an enormous eye on its back. This imitation is considered the best in the butterfly world, even the bright iris is copied by a white circle. Predators chancing upon the tasty-looking butterfly in the canopy of leaves will certainly shy away if it looks like an unidentifiable giant animal with big eyes when its wings are folded up.

The numberwing (also known as the eighty-eight) has a smart pattern on the bottom. It cannot boast big eyes but does have a brightly coloured eighty-eight on its underside. And this bold pattern clearly prevents it from being gobbled up.

Both butterflies are members of the same family, *Nymphalidae*. There are over 6,000 types in this large group of butterflies. In Germany, the peacock butterfly, the small tortoiseshell or the red admiral belong to this group. Typical of *Nymphalidae* is that one of their pairs of legs is much shorter. The butterflies sit on their two pairs of hind legs while the front pair are only used for cleaning themselves. Whether they come with or without an eye on their wings, South America's tropical butterflies are very attractive.

Oil bird
(*Steatornis caripensis*)
Specimen
Head-torso length:
40–49 cm
Biotope:
caves in Venezuela

Humboldt's cave birds

While still in the nest, these young birds gain quite a lot of fat around their hips and legs. But the reason for their "problems" with their figures lie, of course, in their diet. Nocturnal birds usually hunt other animals. Nightjars look for insects and owls pursue other vertebrates like mice. The oil bird is nocturnal but a vegetarian. Its diet consists of fatty oil palm fruit, which makes the young put on so much weight, as previously mentioned. Which is why, in the past, they were originally hunted by Native Americans and later by missionaries because this fat could be turned into crystal-clear, tasty oil, which, above all kept for a long time even in tropical temperatures.

These cave dwellers were discovered by no-one less than Alexander von Humboldt who, in 1799, also described the striking cries they made. These birds need to be able to navigate and communicate with one another in complete darkness, but in contrast to bats, they do so at low frequencies instead of extremely high ones. Therefore, their cries are also audible to humans and also made an impression on Humboldt during his major South American expedition in 1799: "It is hard to imagine the terrible noise that thousands of birds make inside the cave in the dark", he wrote.

Bush dwellers

Agouti (*Dasyprocta* sp.)
Specimen
Head-torso length: 42–62 cm
Biotope: tropical rainforests
of Central and South America

Agouti is a rodent species of the genus *Dasyprocta*, which is the term scientists use to describe animals with long legs and small hips, allowing them to quickly disappear into the bush – whether they are fleeing from an enemy or out hunting. Also in this category are some wildcats, small deer like the muntjac, elegant African antelopes and agouti, which is a rodent. A rodent? Yes, agoutis are classified as rodents, even if they look more like small deer with a small head, high back, brown-gold fur and even the claws on their hind legs resemble hooves.

The word rodent comes from the Latin expression for "to gnaw", which is the agoutis' favourite pastime. They are mad about nuts and fruit and use their chisel-like front teeth to bite into juicy food and even crack the hard shells of Brazil nuts. However, in the rainforest, some of their food is seasonal. Even in such a perpetually warm climate, trees and bushes tend to only produce fruit at certain times. Therefore, keeping a few supplies in store is a shrewd move. Agoutis' claws on their front legs allow them to dig really well and conceal the seeds left over from a meal. But they do not find everything they have hidden – so similarly to jays and squirrels here in Europe, agoutis in Central and South America perform the important task of spreading seeds. Plants are happy, because the young shoots of the big trees in particular would never have a chance to grow close to the all-dominating mother plant. And the agouti also benefits because many a secret store still harbours delicious Brazil nuts months later.

Pretty plumage

In order to score points with females, the quetzal really goes to town. The emerald-green feathers on its tail streamer are a breathtaking metre long. During mating season, the male quetzals grow new ones with a beautiful, metallic, shiny look and the trick clearly works. The feathers were also coveted by humans as jewellery, but for other prestigious purposes, too. The Maya and Aztecs carefully plucked the sought-after feathers from living animals to add them to the feather crowns of high-ranking dignitaries. Only very few were allowed to wear these feathers since the quetzal was worshipped as a god in some cultures. People who killed the animal risked being put to death themselves.

But the quetzal also symbolises the struggle of the ancient cultures of Central America – the Maya, Aztecs and K'iche' – against the Spanish conquistadors. Legend has it that the red colour of the breast plumage of male quetzals comes from the blood of the freedom fighters or from the last king of the K'iche', Tecun Uman. Therefore, the bird embodies not just freedom between heaven and earth, but also the fight for freedom.

Today, the beautiful bird is often found in Central America on flags and pennants and graces Guatemala's national coat of arms. It can also be encountered in wallets or purses because in Guatemala the currency is not the dollar or peso but the quetzal.

Quetzal
(*Pharomachrus mocinno*)
Specimen
Head-torso length:
35–38 cm
Biotope: tropical forests
of South America

Carolina parakeet
(*Conuropsis carolinensis*)
Specimen
Head-torso length:
30–33 cm
Biotope: Gallery forests

Death in the rye

Everything is quiet and suddenly there is a screeching and cawing in the air and hundreds of colourful parrots fly over a house. This was not an occurrence that necessarily took place in South America either because until the 1920s, North America was home to a really colourful species of parrot called the Carolina parakeet. Several million of these animals with their green bodies and yellow-orange heads once flew between New York and Florida. They preferred to live in the forests around river plains, a safe environment with plenty to offer in terms of diet to this seed-eating creature. But as man started to encroach increasingly on the parakeet's terrain, the forests were cleared and more and more land was used for agriculture, which sounded the death knell for this smart bird. Because, on the one hand, its original habitat had been destroyed and on the other hand, although it suddenly found fantastic sources of food in the orchards and fields, it became the enemy of the farmers. It was hunted down as a pest and numbers quickly started to dwindle. Some of them were given to zoos but their shrieking, loud cries made Carolina parakeets very unpopular with most bird breeders. On 21 February 1918, the last living Carolina parakeet, which was called "Incas", died in Cincinnati Zoo.

Ancestor of birds

Troodontid tracks with a troodontid model
Early Cretaceous, Berriasian,
140 million years old
Length of rock: 187 cm
Model length: approx. 215 cm

Are they dinosaurs with feathers? The reconstructions of troodontids do not just resemble small, flightless birds, they were also closely related to the famous prehistoric bird *Archaeopteryx*. In the story of the evolution from dinosaurs to birds, the dinobirds, as they are also called, are roughly in the middle.

For a long time, China was regarded as the birthplace of birds because skeletons of these sorts of terrestrial, bird-like carnivorous dinosaurs were found there. But since the fossilised tracks of a troodontid were discovered in a quarry near Obernkirchen in 2008, it is clear that these types of dinosaurs also lived in the area that is Lower Saxony today.

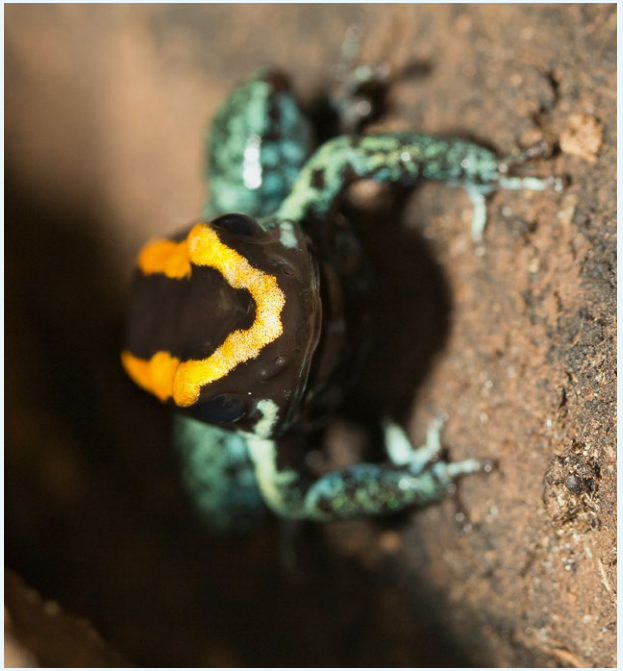
Now it might appear unlikely that the local rock strata would provide much information about troodontids because a sea was located here during virtually the whole dinosaur era, meaning that marine fossils are the major types found. But about 140 million years ago, the sea withdrew for a short period of time and large areas of land with extensive forests existed on the edge of huge lake and river landscapes. Lots of dinosaurs lived there – vast herbivores, large and medium-sized carnivores and, of course, smaller dinosaurs. They all left tracks, many of which later petrified in the sludgy sand while the animals were wandering through the lagoons and river deltas.

In addition to the three-toe fossil footprints of "normal" carnivorous dinosaurs, two-toe footprints were found. These can only belong to the troodontids, because they kept the inner three toes curved upward when running – which is how they received their other name "sickle claw dinosaurs". Tracks like these have not been found anywhere else in the world. Compared with finds from China, which seemed only to have species the size of a chicken, models can be made of our dinobirds and, despite their plumage, they are large dinosaurs and not birds!

Croaks, poison and breeding

Poison dart frogs (*Dendrobatidae*)
The blue poison dart frog
(Dendrobates azureus),
Dyeing dart frog
(Dendrobates tinctorius),
Phantasmal poison frog
(Epipedobates tricolor),
Golfodulcean poison frog
(Phyllobates vittatus)
Head-torso length: 2–4.5 cm
Biotope: rainforests of
Central and South America

Do not worry, even if they are sometimes called "poison dart frogs", these ones in our terrarium will not harm you.
It is true that they are related to three pretty dangerous creatures, including the "golden poison frog" whose toxin is also fatal to humans. But the animals need a specific diet to make this deadly cocktail. Today, a species of mite is suspected of providing the required chemicals and if these are not fed to captive frogs the animals are no longer poisonous.
Even though they are not the most poisonous inhabitants in the vivarium, the poison dart frogs are the smallest, loudest and most reproductive. They are famous for their elaborate mating preparations. First of all, they seek a safe place to lay their eggs, usually on the underside of leaves, often a bromeliad. But when they hatch, the tadpoles cannot survive there because they have gills and need water. So, mum or dad drags the kids to a pool, which could be a leaf shaft or flower filled with rainwater. Once the tadpoles have turned into little frogs there, their parents take them piggyback and put them on the ground. Now they have got lungs, they can move freely in the South American jungle.
They do not need to hide either, because it is common knowledge in the animal kingdom that some of the poison dart frogs are unpalatable. The sociable frogs can join in calling to their contemporaries without a care in the world and that is also quite an impressive sound in our museum!



Positive-negative track
(a flat imprint of a carnivorous dinosaur and a deep imprint of a herbivorous dinosaur)
Early Cretaceous, Berriasian,
140 million years old
each approx. 150 × 80 × 12 cm
Place found: Münchehagen

The stone book

The two sandstone layers from a quarry in Münchehagen just west of Hanover lie open like two pages from a book of the history of the Earth and show two different dinosaur footprints. One page reveals two deep footprints on the stratum surface, the other the bulge in the original subsequent stratum over which the dinosaurs once ran. Therefore, this top stratum must be slightly younger and we are looking at its underside. It is usually easier to preserve these sorts of bulges, which we call positives, on the approx. 140-million-year-old strata, than the actual footprints, which we call the negatives. Most of the first descriptions of footprints between the 19th century and the 1920s are therefore based on positive ones.
If you look more closely, this specimen shows that the lower footprint stratum with its original recesses had also disintegrated into lots of small pieces, which were reassembled after it was found. This is due to its higher clay content. When the dinosaurs crossed the original delta riverbed, it was very muddy; later it was coarser sand that dominated.
In this case, a small carnivorous dinosaur and a large, very heavy herbivore crossed the formerly soft lagoon bed in different directions; first the smaller and lighter predator, which logically left a much flatter footprint, in which even the claw impressions can be seen by the tips of the toes. Later, a massive herbivore came along and left a correspondingly deep footprint.

Meteorite disc with an etched surface
Outer face of a meteorite 1836
approx. 13 × 7.5 × 0.5 cm
approx. 10 × 9.5 × 1.5 cm

A small piece of heaven

"Stones fallen from the sky" were already kept in prehistoric graves and temples as sacred objects, but it took until 1794 when the actual, cosmic origin of meteorites was recognised by physicist Ernst Florens Chladni.
Vast quantities of rock fell from the sky in south-west Africa in 1836. The piece with a dark exterior and the metallic and shiny, strangely patterned disc came from the larger chunks of the famous Gibeon meteorite fall. Although it is very thin, the disc weighs over 200 grams due to its high iron content. A meteorite weighing 200 kilos was even discovered in Gibeon and there are other pieces of up to seven tonnes in weight. Only pieces weighing up to 50 kilos have been discovered stemming from pure stone meteorites. Meteorites weighing less than 10 kilos usually burn up completely when they enter the Earth's atmosphere.
Whether they consist of stone, iron or a mixture of the two, all meteorites are remnants of smaller celestial bodies. They probably originate from the asteroid belt between Mars and Jupiter.
If freshly cut surfaces of iron meteorites are treated with nitric acid, peculiar patterns emerge, clearly recognisable boundary lines of lots of triangles nesting into one another. Called "Widmannstätten patterns" after the person who discovered them, these crystals are made of kamacite, a special manifestation of elementary iron in these celestial bodies. These patterns almost look like messages from another world.


DIE GEISTESWELT DER
NEANDERTALER

44 Stories from the

human worlds

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From Africa to the world

Early man in the Olduvai Gorge
East Africa
1960–1970
Diorama by Fritz Laube
130 × 135 × 130 cm

Imagine a day in Africa about 2.4 million years ago when our ancestors had to cope in truly inhospitable surroundings with dazzling bright light, scorching heat, dry grassland and hardly any trees. They were able to get by thanks to a skill that set them apart from the other creatures living in the valley: they used stones and branches as tools. Our ancient ancestors of this period were the earliest toolmakers and called *homo habilis* (or handy man).
Landscape painter Fritz Laube created a very atmospheric portrait of this setting in his own unmistakable style. He depicted the small human figures with extreme attention to detail and scientific precision. At the same time, the seamless transition from a realistic landscape to a painted, semi-circular background creates an almost perfect illusion of spatial depth and reality. Laube created the diorama between 1960 and 1970; it was extensively restored for presentation in the Landesmuseum's HumanWorlds. In the background, you can see the volcanic mountains of the East African Rift System, which extends through East Africa for almost 6,000 kilometres. Today, the valley shown in the diorama is known as the Olduvai Gorge in Tanzania. It has UNESCO World Heritage Site status as a famous archaeological site for human artefacts and Cradle of Mankind.

Elephant hunters on the Aller River

Wooden spear
Middle Palaeolithic,
approx. 125,000 years ago
Length: 238.5 cm
Place found: Lehringen
(Verden a. d. Aller district)
On loan from Domherrenhaus
Verden/Aller

One summer during the last warm period 125,000 years ago, hunters fashioned spears, destined for killing animals, from the small branches of yew trees. All twigs were carefully removed, and the spears' pointed tips were formed by fire hardening and then polishing them. People back then knew how to kill elephants, which were three times as big as themselves. Once hit by a spear, the elephant probably collapsed in a lake and impaled itself on the deadly weapon. The hunters made knives out of lumps of flint they brought with them, used these to cut out strips of meat and took their spoils back to the camp on the shore. The spear remained in the elephant and hyenas ate the rest of the carcass. The animal's skin and flesh quickly decomposed. If the spear had not been located under the surface of the water, it would probably have been lost.
1948: while mining lime marl, which is popular as a fertiliser, large bones came to light. Enthusiastic local researchers recovered them and when they found a wooden spear between the ribs, it was obvious that they had made the discovery of the century. Right up until today, it is the only proof worldwide that Neanderthals were able to attack and kill pachyderms and not just make use of the carrion.
1988: the skeleton of a European forest elephant was again found with flint knives but no spear embedded in it this time in a lignite mine near Gröbern. Now we know for certain that elephant hunting near North German Verden was no exception.

Corestone from red Heligoland flint
Lower Palaeolithic, approx. 13,000 to 14,500 years ago
6.6 × 2.7 × 2.5 cm
Place found: Damme (Diepholz district)

Ice Age hunters' networks

Our story probably goes something like this: the white mountain slowly became indistinct from the horizon of the coastal plain and the hunter family moved towards the midday sun carrying a tent, provisions, weapons and equipment. They were also perhaps carrying the haematite crystal from the ancestral mountain with them. Once they had met their relatives in the summer hunting grounds in the highlands after wandering for two or three days, they probably spent several days and nights celebrating and telling each other their stories. Then they would have also passed the haematite, supposedly containing the spirit of their ancestors, from hand to hand, cutting off one knife blade after the other, as was the custom. They believed that their ancestors could therefore live in any hunting grounds and protect their relatives. Some men later moved on with women from other groups.

The striking red flintstone in this scenario really does exist. It was found on camping grounds belonging to Stone Age hunters at Lake Dümmer, the second largest lake in Lower Saxony. It is the remainder of a carefully prepared corestone, from which several dozen sharp knife blades had already been struck off, recognisable by the 'conchoidal fractures' (with surfaces like the insides of clamshells). In contrast to the grey flintstone at Lake Dümmer, which was used for the other tools found there, the red one is only found on the island of Heligoland, about 200 kilometres further away. During the Ice Age, this was a white limestone cliff visible from afar, which could be reached without getting wet. Because a lot of water was bound in the glaciers during the last Ice Age, the sea level was over 100 metres lower than today. Consequently, the red corestone must have been transported over vast distances. Perhaps the hunters brought it with them but it could also have been handed on from group to group. Camping grounds that were home to several groups show that the scattered groups of hunters were in regular contact.

The mother of the moose

Moose cow made of amber
Upper Palaeolithic,
approx. 14,000 years ago
approx. 6 × 9 × 1.6 cm
Place found: Weitsche
(Lüchow-Dannenberg district)

If you thought amber was only found on the Baltic, you would be wrong. During the Ice Age about 250,000 years ago, glaciers transported it way inland.
But what kind of strange animal is this? It looks a bit like a lobster without any front legs. By adding a little more to it, you get a moose cow.
But how did it get here? Perhaps the story went something like this: several families of moose and beaver hunters arrived at the hunting and fishing grounds along the wide river in late summer. They erected tents from the previous year and collected stones that shone as brightly as the sun and could even burn. Back then, people believed that spirits lived in these stones. Figurines were cut from them and the spirit awakened. The stones were also used to decorate clothes and bags. People set off for their winter quarters armed with supplies of fish, meat and bird skins. Only the "mother of the moose" remained as custodian of the hunting grounds at the fire pit.
Over the next 1,000 years, floods repeatedly surged into the floodplains and layers of clay spread over the abandoned camping grounds, protecting them. In the 1950s, 13,000 years later, the river was canalised and flooding was a thing of the past. A farmer led the plough behind his horse and brought peat and loam to the surface by the clod. The ploughshare hit the "mother of the moose" hard and shattered it.
In 1987, an amateur archaeologist discovered the stone tools from the Stone Age camping grounds and in 1994, during systematic documentation of the site, the amber fragment of an animal figurine appeared. Years of sifting through 700 square metres of arable land were rewarded in 2004. A moose cow made of amber was reassembled from almost 50 stone splinters. These remains from the camping grounds are 14,000 years old. As a result, the age of similar but isolated finds of amber animals from Poland and Denmark can be dated for the first time.
Until recently, it was not possible to determine the age of this realistic art, made somewhere between the Ice Age and today's warm period, but the animal figurines now plug this gap. But what stories can the "mother of the moose" tell us we wonder?

A woman's body or a symbol?

These mysterious deep lines caused a sensation. Because even such a simple image is one of the absolute rarities of the early interglacial in Central Europe and we know almost nothing about the imagery of forest hunters about 11,000 years ago. Almost as soon as the flat stone slab had been excavated in 2012 from camping grounds belonging to early forest hunters, there was speculation that it was Lower Saxony's oldest woman.

There are certain similarities with female figures from this period and the typical symmetry is indisputable. But were the diamond-shaped deep grooves and the dot really supposed as a leg, hip, vulva and navel to indicate a woman's body? Not everyone looking at it, whether experts or amateurs, saw a woman in it. Ice Age art does offer mid-relief or engraved images of women from the front, just showing their hips and stomach. These are usually buxom to make them identifiable as women but more than one thousand years older than the find from Bierden.

But what about our slab? It is easy to see that the stone was used later on for grinding and other work before it finally broke due to the heat from a fire pit. More detailed studies showed that the lines were not created naturally but carved. The quartzite rock was so hard that only straight and no curved lines were possible, which could explain the lack of a typical female silhouette.

Nevertheless, at least one slightly older image of a woman is known of which the diamond-like symbol could have been based on. Which is why the interpretation that it is a symbol of a woman is the most probable one at present.

Stone slab with engraving
Early Mesolithic, quartzite,
approx. 9000 BC
7.5 × 4.6 × 1.5 cm
Place found: Bierden
(Rotenburg/Wümme district)

Harbingers of a new era

Adze
Lade Mesolithic,
approx. 6,2000 BC
Actinolite-hornblende shale
Length: 21.1 cm
Place found: Schletau
(Lüchow-Dannenberg district)

A layer of lithic flakes and flint arrow inserts, charcoal particles and charred hazelnut shells, in other words typical relics left by forest hunters who had set up camp in the dunes near the Elbe lowlands over 8,000 years ago, were unearthed on the embankment of a sand pit, barely a metre below the forest floor. A strange, long rock protruded from the crumbling sand in the middle of the rock face. When he found it, the amateur archaeologist could not believe his eyes, mapped it and then pulled it out carefully. Unbelievably, it was the ground blade of an adze, a cutting tool similar to an axe. Stone Age farmers, who migrated from the south a little while later, brought these attractive stone tools with them when they reached southern Lower Saxony 7,500 years ago. Unlike local axes made of flint, this strange-looking adze has been ground into a standardised, strictly symmetrical form. Given its rough, weathered surface, it is hard to imagine the beauty of the once polished greenish stone with its dark streaks. This special type of slate can be found in Bohemia and the Balkans, but it is unknown in the North German Lowlands.

But how did the forest hunters come into possession of the adze half a millennium before the arrival of the first farmers? Even at that time, groups of hunters to the north of the Alps and agricultural groups in south-east Europe probably bartered goods with each other. These Stone Age farmers' adzes had wooden handles and were not just used for working with wood, they were also much-feared weapons. The odd, polished stones must have been very attractive to the forest hunters and valued for their prestige. This is also indicated by the unusual circumstances in which a second adze blade, found in the north and dated to a similarly early period, was found. The blade was discovered in a grave near Merseburg and had seemingly been given to a shaman along with further magic tools to take with her to the afterlife some 8,000 years ago.

Prehistoric pigs-cum-bears?

Is this a bat? Or a pig? Neither the ears nor the mouth are formed accurately enough to suggest which type of animal it is. And what we believe to be longer front legs and shorter hindlegs are actually just pieces with which the animal's body was diagonally attached as a handle or decoration to the belly of a clay pot.

The potter probably did not intend to base the pot on a real animal at all but create an imaginary, hybrid creature instead. The human-like depictions of this early rural culture do not show real human bodies either.

The mysterious animal made of fired clay was excavated from the waste pit of an early agricultural settlement. These types of figurines are found very seldom, virtually never in one piece and often broken at the thickest point. Which is why it is assumed that they were broken on purpose, rendered unusable or even "killed", perhaps for spiritual reasons. They certainly were not toys either because, apart from the fact that they were broken intentionally, they are never found in children's graves as burial offerings.

Before firing, abstract patterns of lines were engraved on the still soft animal bodies, similar to the bands with which the potters also decorated their clay pots. What these symbols mean is not clear but they are in the unmistakable style of Linear Pottery culture. People practising this culture lived in the south of today's Lower Saxony 7,500 years ago. They bred domestic animals and cultivated grain and vegetables.

The north, on the other hand, was home to people who hunted and fished. Their way of life could not have been more opposite and influenced the way animals were illustrated. The hunters, fishermen and gatherers made small realistic animal sculptures from amber and used them as amulets. In Scandinavia, they left behind realistic rock paintings of moose, bears and other animals.

The different way the animals were portrayed highlights the way people in two totally dissimilar economic systems thought.

Animal figurine
Late Neolithic,
approx. 5000 BC
Fired clay
approx. 13.1 × 2.9 cm,
Height of the front legs: 9.3 cm max.,
Hindlegs: 4.9 cm max.
Place found: a settlement in Hardegsen-Hevensen (Northeim district)
On permanent loan from the town of Hardegsen

Clay instead of metal

Cup with a handle
Middle Neolithic, approx. 3,200 BC
Fired clay
15.8 × 10.7 × 7.1 cm
Place found: Oldendorf
(Lüneburg district)

While the peasant clan placed this elegant clay cup in the graves of their dead, the rulers of a Bronze Age culture in distant Anatolia received burial offerings of similar vessels chased from precious gold, silver and bronze. Specialised metal craftsmen made the vessels, which were used for libation rituals, out of gold, silver and bronze.
These sorts of metal cups and bowls were never found in the culture of Stone Age farmers, which is hardly surprising. Because these types of prestigious objects were extremely rare and, if not melted down beforehand, were usually buried as offerings. Although finds of these offerings are difficult to prove archaeologically, they must have been known of. Because the flat bowl with handle seems to imitate this type of metal vessel. The exceptionally thin walls of the elegant cup have been made by hand and decorated with triangles that have been punched in. It is particularly noticeable that the raised handle seems to be riveted to the edge of the bowl. In fact, a rivet head with holes in it is shown on the handle insert, similarly to a metal vessel. Even the metal strips on both sides of the handle are reproduced. The sharp profile of the cup and the fingertip-like indentation of the round bottom, a so-called omphalos, reinforce the impression of a chased metal vessel.
Some 5,500 years ago, the houses of the dead, stone burial chambers under huge hills, formed quite a ritual landscape. Clay vessels were some of the usual items placed in the graves of the deceased or left behind after banquets. Our clay cup was also with several other vessels in a burial chamber like those. But our object looks like a foreign body among the other vessels. It is the only find that gives us an indirect indication that the metal vessels of the early metal-working cultures were also encountered in the north of the continent.


10:69
K. Hann. Münden

Copper axe
Late Neolithic,
approx. 2,500 BC
Copper
Length: 22.4 cm
Place found: Bühren
(Göttingen district)

Not a weapon

The surface of the mysterious material shimmered like reddish gold – what a gem!
The copper axe had probably been passed on from community to community as a valuable prestigious object, which explains how it reached Lower Saxony. Originally, it most likely stemmed from south-east Europe, where metalworking communities had developed on the Black Sea and the Balkans about 7,000 years ago. Copper had already been mined underground in these innovative hubs. The mysterious material arrived in central Europe as a rare commodity to barter. In this region, people were still living in the peasant communities of the Stone Age but were in touch with the early urban centres in the south-east of the continent. The influences that emanated from there changed the Stone Age communities.
Since only a finger-thin wooden handle fitted into the shaft hole, our axe was useless as a tool or weapon. In fact, it was used as a sign of power by a leadership elite and indirectly indicates that the peasant society did have a hierarchy. Admittedly, these types of axes were copied hundreds of times in stone and given to men as weapons or as battle axes for their graves – they expressed the social status of the person who had been laid to rest as a warrior. But copper axes were precious and reserved for an elite. For every hundred stone battle axes there is less than one copper axe. To date, they have never been found in graves but always on their own. They seem to have played a role in special religious ceremonies and were placed as sacrificial offerings in the ground.
Today, it takes some imagination to visualize the object with a corroded and green patinated surface, discovered by chance in a pile of rubble in 1970, as a symbol of power, similar to the sword in the Middle Ages.

Sunbeams from the moor

The thin gold disc has a fineness of almost 100 %! It does not just shine like the sun it also looks like it. Rings of the sun's flames and rays alternate and are chiselled artistically into the soft gold foil. The foil must have been affixed onto a flexible base because any decorations made would have easily pierced it. Perhaps it was used by a priest as jewellery, or maybe it shone as a star on a solar chariot. The gold disc from Moordorf is regarded as a particularly vivid symbol of sun worship during the Bronze Age. After use, it may have been placed in the ground as a burial offering, as the traces attached to it suggest: the weight of the layers of earth pressed it flat and grains of sand were imprinted on the gold foil.

A moor farmer called Vitus Dirks brought it to the surface when he was digging a ditch in around 1910. His son found it in the excavated soil – but it did not dawn on the poorly educated villagers that it could be made of gold. So, the gold disc was kept with other curiosities in their front parlour. In leaner times during the war years that followed, a scrap metal dealer bought it "for three Reichsmark" and sold it on to a second-hand dealer in Aurich, until it was eventually bought by the Landesmuseum in Hanover for 450 Reichsmark in 1926.

Vitus Dirks did not realise what treasure he had found until a newspaper called him. The village vicar helped him tell the tale of how he found the disc, which turned him into something of a legend in dirt-poor Moordorf.

However, the extraordinary purity of the gold is still a mystery because this is virtually unknown to occur naturally. Therefore, some people believe that this gold was not produced until around 1910. However, experiments show that such pure gold could also have been purified with Bronze Age methods. Above all, however, the traces on the disc can only be explained if it was made, used and buried in the ground during the Bronze Age.

Moordorf gold disc
Early to late Bronze Age,
approx. 1800 – 1500 BC
24 carat gold
Diameter without loops:
approx. 14.5 cm,
Thickness: < 200 micrometres,
Place found: Moordorf
(Aurich district)

Gods or a ceremony depicted?

When the stone slab with the strange figures arrived at the Landesmuseum in Hanover in 1908, it was clear that somebody had reworked it since fresh chips and white stone dust were found. But what dates from the Bronze Age and what has been added recently? For example, the legs of the figure on the left are the original ones and preserved under a brownish coating. The remains of the coating in the other areas show that it originally covered all the silhouettes. Whoever reworked the slab must have had their reasons for keeping to the Bronze Age contours of the heads and bodies.

About 3,500 years ago, a slab was split from a boulder of gneiss and carefully hewn into a curved symmetrical stele for the rock painting. The three figures on it stand out clearly from the stone which was deliberately coloured black. The one on the left is facing us with bent legs and arms raised as if in worship. The one in the middle is looking to the right and perhaps holding an axe high above his or her head. The third one, dressed in a robe, looks as if he or she is using both arms to grab something slightly further to the right. The three were interpreted as personified gods, but the worshiping pose suggests otherwise. Gods do not engage in worship. In fact, perhaps it is a burial where sacrifices are being made?

The place it was found suggests that this interpretation is correct. The slab was discovered at the end of a burial chamber weighing several tons, which had come to light when a vast burial mound was excavated. The burial offerings of weapons and jewellery, the mound and the burial chamber itself all indicate that the man entombed there was a high-ranking warrior on a par with another member of the ruling elite interred in a burial chamber with even more paintings in southern Sweden.

Today, the original Anderlingen burial chamber is erected on the lawn on the right outside the Landesmuseum. The slab with its unique silhouettes is kept in the museum and no other Scandinavian-style rock painting has been encountered this far south before.

Rock painting from the Anderlingen burial chamber
Bronze Age, approx. 1,500 BC
Gneiss
115 × 75 × 50 cm
Place found: near Anderlingen (Rotenburg/Wümme district)

From Knossos and Mycenae to Lower Saxony

Cast bronze cup
Bronze Age, approx. 1,450 BC
Bronze
Height: 5.7 cm,
Diameter: 12.4–12.6 cm
Place found: Dohnsen
(Celle district)

In 1955, ten-year-old Dieter Meister chanced upon this cup near the place he lived. On a visit to a museum with his school, he took the object out of his pocket and asked if it was anything interesting.
An archaeologist spotted its priceless cultural and historical value – but rumours also immediately started circulating that former members of the Wehrmacht had allegedly expropriated the cup or British soldiers had obtained possession of it while they were stationed in Greece. Because its shape and the way it is made and decorated is identical to metal objects from the Aegean region. The rumours proved to be unfounded, especially as the condition of the metal surface is similar to bronze finds from Lower Saxony.
But how did the cup get here? It resembles gold vessels from the Mycenaean shaft graves discovered by Heinrich Schliemann, but, in particular, a bronze cup from the island of Thera, which was under Cretan influence. The demand for drinking vessels from Cretan workshops – cups, mugs and pots made of gold, silver and bronze – was vast among the rulers of these ancient palace cultures. The valuable vessels will have been equally coveted by the ruling classes of neighbouring communities and so they probably turned up in the north now and then as diplomatic gifts.
Although there are some indirect indications of contacts between the Bronze Age societies of central Europe and the palace cultures of Crete and Mycenae 3,500 years ago, original objects from these cultures have rarely been discovered north of the Alps. The bronze cup from Lüneburg Heath with the beautiful stylised leaf branch design below the rim is the most significant of these finds. Perhaps it was once a gift to the gods here, as were so many native bronze objects from this period, which were sacrificed to the gods in moors, rivers, lakes and on land.

Golden Bronze Age

Nowadays in Germany, rescue excavations are usually the only type of archaeological digs carried out and take place before new houses or streets are built. In 2010, the Lower Saxony State Monument Office faced a special challenge with the construction of the north European natural gas pipeline, whose route practically cut through the entire state. At around 200 kilometres in length, this excavation was the largest project ever of its kind in Lower Saxony. Around 150 settlement and burial sites from 10,000 years were discovered, but a sensation awaited the archaeologists to the very west of the Diepholz region, where they found a hoard of gold. There were no other traces of the Bronze Age in the area, so it is a mystery why this treasure was buried here. Was it merely somewhere where a merchant left his inventory or had the treasure been consecrated to a deity?

At 117 objects, the find is one of the largest hoards of gold in central Europe. It was originally wrapped in linen, which was held together by bronze pins, but the fabric did not survive the ravages of time. In addition to a garment clasp and a massive bracelet, the linen bag primarily contained coil bracelets of different sizes and designs. Many of them are interlinked with each other in chains.

The treasure's material value was obviously of prime importance. The clasp does have several artistic decorations, including round sections with rays, which can be interpreted as sun symbols. But once the pin had been removed, it no longer worked. The bracelet is a semi-finished product, and of the coil bangles that make up the largest part of the find, some seem never to have been used.

About 90 % of the treasure is gold, which is remarkable and makes it particularly valuable. Perhaps the objects were primarily important because they could be bartered with, which would make them an early form of coins.

Buried treasure in Gessel
Middle Bronze Age,
1,350 – 1,300 BC
Total weight: 1.7 kg
Place found: Syke
(Gessel district)

A classy woman

Cast bronze bowls
Late Bronze Age,
approx. 750 BC
Bronze
Height: 18.7 cm,
Diameter: 31.6 cm
Place found: Winzlar
(Hanover region)

At first the finds looked modest with mere fragments of clay vessels and some metal items encountered during construction work. It was only during archaeological research that an extremely rare embellished pin made of pure gold and the most valuable burial offering were discovered: a wafer-thin cast bronze bowl filled with the ashes of people who had been cremated. It was a sensation. Because among the thousands of similar cremations that occurred throughout Europe in this period, bronze needles and clay urns are common in burial sites, but these sorts of valuable objects are a rarity.

The semi-circular bronze vessel with its cylindrical neck and wide cylindrical sieve edge are particularly exciting. These sorts of vessels were made in the forges near the dwellings of the ruling classes. The bowl was first formed from wax and covered with clay, then, after melting out the wax, cast in liquid bronze and the meandering and undulating ornaments were then punched into the surface. A unique feature of this object is the blue vitreous enamel which was melted in between all the many holes on the pierced edge. The local bronze smiths were clearly versed in the technique of making vitreous enamel.

The bronze bowl is an example of excellent craftsmanship and an outstanding piece of art. Just like chalices and patens during Holy Communion, it was probably used in religious rituals. But which person in Winzlar was so important that such a valuable metallic object was placed in his or her grave? The original assumption was that the ashes came from a man, but this was corrected at a later date. In fact, they are probably the remains of a roughly 60-year-old woman. And because such exquisite burial offerings were only given to people in the upper echelons of society, it must have been a very powerful woman, possibly a priestess.

In the Bronze Age, grave monuments and burial offerings indicated the standing of people for the first time. The warrior from the stone chamber of Anderlingen or the huge burial mound of "King Hinz" of Seddin in Mecklenburg are well known. Winzlar's powerful woman could have been their equal.

Cloak
Roman Empire,
1st – 4th cent.
Modern wool replica
252 × 160/176 cm
Place found: Hunteburg

A warm investment

Textile fabrics from the Roman Empire are much treasured in terms of cultural history. Very few have survived over the centuries. Some of them include coats, overalls and trousers made of wool, which were found in north German moors. They were some of the clothes uncovered on moor mummies. The moor did an excellent job of preserving the wool.
The coats are large rectangular cloths made of heavy wool fabrics, which were folded into a kind of cape. They came with elaborate coloured patterns and sometimes fringes or cords. Roman pictures give clues as to how the garments were worn. The cloths for the coats were folded once so that the top section was about half a metre above the hem of the lower part. The now double cloth was placed around the shoulders, possibly with a second, narrower fold forming a collar. The warm cape was fixed with a sturdy garment pin called a fibula, which pierced all layers of the cloth, below the right shoulder. A particularly striking specimen was the so-called "coat B" from Hunteburg. It had covered the body of a man deposited in the moor. The rich colours of the textiles made of green and blue dyed wool faded in the moor, but a replica indicates its former beauty. The cloak has a lot of darned patches, which corroborate the theory about how it was folded and worn. The fabric has a tablet-woven border on all sides, which is interwoven with the actual cloth. The techniques for making these sorts of garments were highly advanced, but it was a long way from obtaining the wool to finishing the garment. Back then, being in a position to wear good quality garments meant a lot of work, and items of clothes were people's most valuable possessions.

Comb
Roman Empire,
1st cent.
Ivory
Width: approx. 4 cm
Place found: Grethem
(Heidekreis district)

Old and valuable

The scene we see on the comb shows us a young lady with an elaborate hairstyle, leaning gracefully on her chair, the carefully draped robe revealing more of her beautiful body than concealing it. Is it a woman performing her morning ablutions? Could this be Venus, the goddess of love, to whom Cupid, who is approaching from the left, will present what he is holding in his hand?

The scene is depicted on the handle of a comb, only fragments of which have survived. However, this clearly shows that the craftsmanship and artistic design of the relief carving are top quality. The ivory object was probably made during the reign of Emperor Augustus in a renowned Italian workshop. The people commissioning and purchasing this sort of object were members of the most distinguished circles of Roman society, including the imperial family. Back then, ivory was already an extremely valuable material and at the time of the Roman Republic it was even part of the state reserves.

In 2006, two vessels used as urns were recovered at Grethem, one of which contained not only the ashes of an adult woman but also some larger remains of objects – including the comb fragment. The urns are also imports from the Roman Empire but much younger than the comb. The metal vessels, known as "Hemmoor buckets", come from workshops of the 2nd and 3rd centuries and originally served as tableware. These sorts of Roman metal vessels had already been found on the same site in the past. In the 1850s, two were added to the collection and belong to the museum's oldest.

The addition of the comb shows that superb objects made by Roman craftsmen found their way to the north, where they were sought after as antiques.

A woman's place is in the home?

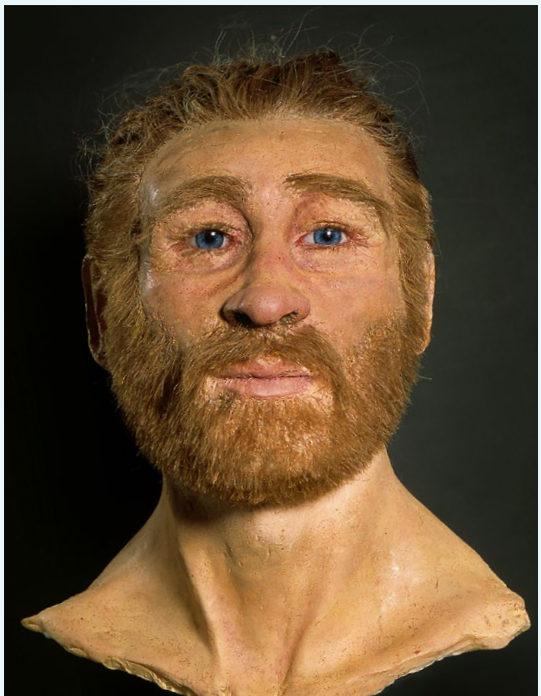
Brooch depicting saints
9th/10th cent.
Modern replica
Non-ferrous metal with enamel,
Diameter: 2.5 cm
Place found: Lüneburg

What sort of woman might have worn this brooch? These types of colourful, enamelled brooches with pictures of saints were used to hold coats or robes together and placed in Christian women's graves alongside small decorative crosses. Research has shown that these brooches depicting saints were made from the middle of the 9th to the early 10th century. They were probably made in the central areas of Francia on the Rhine, the Moselle or the Main.

In north Germany, most of the brooches are found in areas where people were converted to Christianity by Franconian missionaries. At the end of the 8th century, the spirituality of the people living in this area underwent fundamental change. During his infamous Saxon Wars, Franconian king Charlemagne forced the people not only to recognise his rule, but also to become Christians. As a result, they had to abandon their own centuries-old religious traditions and practices, which are said to have included the making of human sacrifices, all sorts of clairvoyance, magic and sorcery. It is not clear whether people really did indulge in these practices, but a decree issued by Charlemagne claimed as much and banned them from continuing under pain of death. The decree also forbade traditional customs and rituals associated with looking after the dead, especially the cremation of the deceased.

The purpose of these draconian measures was primarily to destroy the social fabric of the people whom Charlemagne had brought to heel. But even if the Christian faith had been foisted upon them, it opened up completely new perspectives for women, beyond the duty of marriage and motherhood. At least members of the upper class were allowed space for contemplation and could gain access to education and power by living as nuns, which was an act of emancipation.

Testimonies of popular piety, such as the brooches depicting saints, are handed down primarily from women coming from this world.



Moor mummy
3rd/4th cent.
Modern reconstructions
Body height: 180 cm
Place found: near Neu Versen
(Emsland district)

“Roter Franz”

The moor mummy called “Roter Franz” was 25 to 30 years old when he died. Perhaps he was a warrior and fought on horseback. His hip and thigh bones indicate he was a keen rider throughout his life; a healed fracture of the right collarbone may have been caused by a fall from the horse or an injury sustained in battle. At 180 cm, he was tall; it was only in the moor that his body shrank to its present size. As the mummy bears no traces of disease, he did not die of natural causes, in fact, forensic analysis revealed that the man had had his throat cut!
The mummified corpse was discovered on Bourtang Moor near the village of Neu Versen in 1900. Today, it is a unique historical source for anthropologists and archaeologists and many details were brought to light while it was being studied. For instance, carbon dating showed that the man must have died between 252 AD and 296 AD or 316 AD and 388 AD. And a facial reconstruction even gives us an idea of what he might have looked like.
However, some questions have remained unanswered. The mummy was discovered without any clothing, but did it really reach the moor in this condition? It is possible that the man had worn linen clothing and the fibres had chemically completely disintegrated in the moor. Why was the body not cremated as was customary in Lower Saxony in the 3rd and 4th centuries? Was he murdered or killed for ritualistic or religious reasons and therefore submersed in the moor? One thing is for sure, Franz’s hair was red because the mummy had been lying in the moor.

Buried treasure in Lengerich
4th cent.
Gold and silver
Place found: Lengerich

Easy come, easy go

The treasure was hidden in three parts under a large stone slab. In addition to coins and gold jewellery, it also included rank insignia belonging to an officer in the Roman army – a crossbow brooch made of pure gold and two solid gold bangles, which were awarded in recognition of special services rendered. Who buried these symbolic objects near what is Lengerich today?
In the first four centuries AD, young men from the Germanic world flocked to the Roman army to seek their fortunes as mercenaries. Regardless of their origin or ethnicity, practically anyone could reach the highest ranks of this army and, with the fame and wealth that beckoned, this was a tempting prospect. In addition to exotic wares, veterans often brought home Roman lifestyles.
This sort of mercenary could have hidden the treasure after returning to Emsland from a successful and profitable military career in the Roman army in the 4th century.
This precious metal treasure was discovered in 1847 and is the largest known cache from the Roman Empire to be found in north-west Germany to date. Unfortunately, most of it, including a priceless necklace, was melted down in the 19th century. All that is left of it today are a coin, three rings, a coil bracelet and four decorative buttons, the purpose of which we are not sure of. Close by were more than 1,200 silver Roman coins and two silver and bronze bowls. Only 18 coins have been preserved and the two bowls have vanished.
The name of the treasure's owner and his deeds will remain unknown forever – but one thing is for certain: he did not manage to recover his fortune during his lifetime.


Liebenau

Dedicated to the spear

The amulet was found on the weapon belt of a man who was buried near Liebenau (Weser) in the 5th century. Handling weapons was part of his everyday life and mastering them in combat or while hunting required strength, skill and rigorous training. One of the oldest written records in Lower Saxony stems from this world of warriors: a round silver pendant with the runic inscription RAUZWI, a loose translation of which would be "dedicated to the spaer". At that time, societies in northern Europe had no formal system of writing. For thousands of years, they had preserved and passed on their memories, traditions, myths and legal standards orally. However, at the turn of the 3rd century, the use of characters similar to letters had begun. They were etched on and therefore merely consist of lines. These runes were used for purposes that were profane but also religious and associated with magic. They provide information about the owners or manufacturers of objects, but also had a magical function: runes cast spells, laid curses or were used for dedications. The question of the origin of the letters in a cultural environment that did not have an alphabet and the reasons for their use have been the subject of research for a long time, and the origin of the runic alphabet has not yet been satisfactorily clarified. There is much to suggest that it was developed in the western Baltic region on the basis of the Latin alphabet at the beginning of a new era and perhaps even invented by one or more intellectuals as a means of communication.

Silver disc
5th cent.
Silver
Diameter: 2.5 cm
Place found:
Liebenau/Weser

Burial offerings
5th cent.
Gold, silver, amber, glass, iron, non-ferrous metal, ceramic
Place found: Issendorf (Stade district)

Buried in the ground

In Lower Saxony, it had been customary to cremate the dead since the Bronze Age. In the 5th and 6th centuries, some family groups on the lower reaches of the Elbe River began to bury their dead without cremating them beforehand. It is not clear whether this type of burial was due to religious reasons or whether families were merely following the example of other regions. For archaeologists, this change in tradition is a stroke of luck that provides lots of insights into people's lives. The graves of the dead buried in this way often contain parts of their clothing and burial offerings that would have been burned and destroyed forever if they had been cremated. For example, a grave containing a body from the beginning of the 5th century from a cemetery near Issendorf, shows how richly adorned a woman's traditional costume might have been at that time. Three magnificent brooches made of gold-plated silver were found on the clothing of the woman buried. Two round robe clasps kept a sleeveless dress together, the large two-armed brooch did up a coat or cape. The valuable pieces of jewellery bear testimony to the exceptional craftsmanship of the goldsmiths back then.
In addition to a fine silver choker and a necklace with glass beads and bugle beads made of silver, the woman also wore a splendid necklace, weighing about 300 grams, and made of 80 large amber beads. She also had three keys on a belt, a large, functional iron key and two small decorative keys, which could be interpreted as pagan or Christian amulets and were kept in a small leather bag. A knife and four ceramic vessels were also included in the grave. It is not clear what role the woman played in her farming community, but she must have belonged to a prosperous and influential family.

Striking gold

Rope chains made of gold threads are some of the most complicated items made by early goldsmiths. Fashioning them is enormously complex and requires a lot of skill. The oldest ones made in this way are found among the remains of the Scythians from the middle of the first pre-Christian millennium. In Europe, they first appear in the last centuries BC and seem to have been forgotten about after the 5th century. They were revived again in Scandinavia in the 10th century but then tended to be made of silver.

Today, it is still difficult to date and determine the origin of the Isenbüttel gold rope chain with any precision. There is much to suggest that it was made in the 7th century and is therefore from the very period in which such items of jewellery are very rare in Europe. In terms of style, this distinctive object is very like the Scandinavian rope chains from the Viking era, but the embellishments also hint at south-eastern European pieces from the Migration Period.

The exceptionally high-quality rope chain is 42 cm long and crafted from gold threads just 0.5 mm thick. The ends of the chain are enclosed in gold sheaths in the shape of animal heads, which are elaborately decorated with pearl cords and red semi-precious stones set using a cloisonné technique.

The Isenbüttel gold rope chain was found during the clearing of woodland in 1922. It is unclear how it came to be buried originally. Its finder initially gave it to his children to play with, and later offered it to the landowner in exchange for "a juicy fat pig". It then passed through the hands of antique dealers and collectors until it was purchased by Hanover's Landesmuseum in 1962.

The value of the materials used and the superior quality of this goldsmith's work are without parallel in northern Germany. The former owners of this valuable item of jewellery probably came from the upper class during the Merovingian period.

Gold rope chain from Isenbüttel
7th cent.
Gold, semi-precious stones
Length: 42 cm
Place found: Isenbüttel
(Gifhorn district)

Bracteates
5th/6th cent.
Gold
Diameter: 30 mm max.
Place found: Nebenstedt
(Lüchow-Dannenberg district)

Gold of the gods

Embossed discs made of sheet metal are called bracteates and the Medieval sort are usually coins. However, the embossed jewellery discs from the 5th to the 6th century made of sheet gold were worn as amulets, as their loops or holes indicate.
We cannot interpret the scenes depicted on them with any certainty today. But to people who wore them in times gone by, they must have had some sort of easily decipherable meaning and probably also conveyed social and religious identity. These images suggest animals and gods, or scenes and figures from Germanic mythology anyway. Runes are also encountered on many bracteates.
These were made by skilled master craftsmen on behalf of the Germanic elite and came a long way from their southern Scandinavian origins, reaching Norway, the Danube region, England and even Russia. The inhabitants of the Germanic world were clearly in constant contact with one another and were not only divided into numerous tribes and groupings, but also organised into larger national structures.
In southern Scandinavia, bracteates also served as offerings to the gods and were buried for this purpose in small and large mounds in the ground. Some researchers suspect that they were also temple treasures. In other areas of central and northern Europe, nearly always only individual items can be found as burial offerings. However, in Lower Saxony both phenomena can be observed. A single bracteate was discovered as a burial offering in a cemetery near Issendorf; but small collections of bracteates from around 500 AD were unearthed near Nebenstedt, Sievern and Landegge – an indication that similar religious practices to those in southern Scandinavia might have existed here at that time.


INGELRII


INGELRII

Sword
11th cent.
Iron
Length: 84 cm
Place found:
Teufelsmoor near Worpswede

In the name of the sword

The inscription INGELRII on the blade is easy to read. This is not the name of the warrior who once took this splendid sword into battle, although iron swords did play a key role in the early Germanic societies of central and northern Europe – both as a feared weapon and as a status symbol of the free man.

Mythology is full of stories about the legendary qualities of swords and some even have their own past history and bear names such as the Gram sword, which Siegfried used to slay the dragon. But the inscription on our sword has nothing to do with a name like that either. INGELRII is the name of a workshop. Around 800, exceptionally high-quality weapons were produced by the Franconians in the Meuse region and on the Lower Rhine. The weapons were also very popular with the enemies of those producing them – and so many a man fought against Charlemagne with an imported Franconian sword in the Saxon Wars. During this time, some armourers added an inscription to the blades they produced. The brands of the Carolingian era signified quality and had been copied over many generations up to the 11th century. Only few of these swords dating already to High Medieval Ages still exist as they were seldom placed in their owners' graves in the largely Christianised areas of central and northern Europe. Consequently, it was virtually impossible for them to emerge as archaeological finds centuries later.

Hanover's Landesmuseum acquired one of these extremely rare specimens in 1933. It was somehow found in the Teufelsmoor between Worpswede and Adolfsdorf in around 1900 and looks just like a typical sword from the 11th century. One side of the blade bears the INGELRII workshop inscription and the other side has another, which is impossible to read and was probably merely of a symbolic nature.

A change of perspective

The open robe reveals the beautiful embroidery on the slit sleeves. The hems of the breeches are decorated with lace. We encounter Don Luys, the governor of the province of Paucartambo, dressed like a Spanish official of noble origin. Only those high up in the colonial hierarchy wore a garment like this. The medal of "Mary the Immaculate Conception" on his chest also suggests he was educated by the Catholic Jesuits.

However, the man is barefoot! That is not consistent with a prestigious baroque painting at all. And only the highest Inca princes wore this sort of headdress with feathers, pearls and red wool fringes. According to the cartouche on the bottom right of the picture, Don Luys stems from the third Inca Lloque Yupanqui and therefore from the highest ruling caste of the pre-Hispanic period. He was therefore both an Inca prince and a high-ranking member of colonial society, part of the indigenous elite and the Conquista.

The painting was probably part of the collection of Dona Martina Chiguan Topa, a descendant of Don Luys. In the late 18th century, it escaped an edict by the church to destroy pictures that suggested any link to the Incas. As one of the few remaining examples of its kind, it was added to the collection belonging to Hanover textile merchant Wilhelm Gretzer at the end of the 19th century and came to the then Provinzialmuseum in Hanover in 1927.

Cuzco Painting School
Portrait of (Don) Luys
Guamantitu Yupanqui Chiguan Topa
Peru, 18th cent.
Oil on canvas
195 × 130 cm
Gretzer collection

Picture puzzle

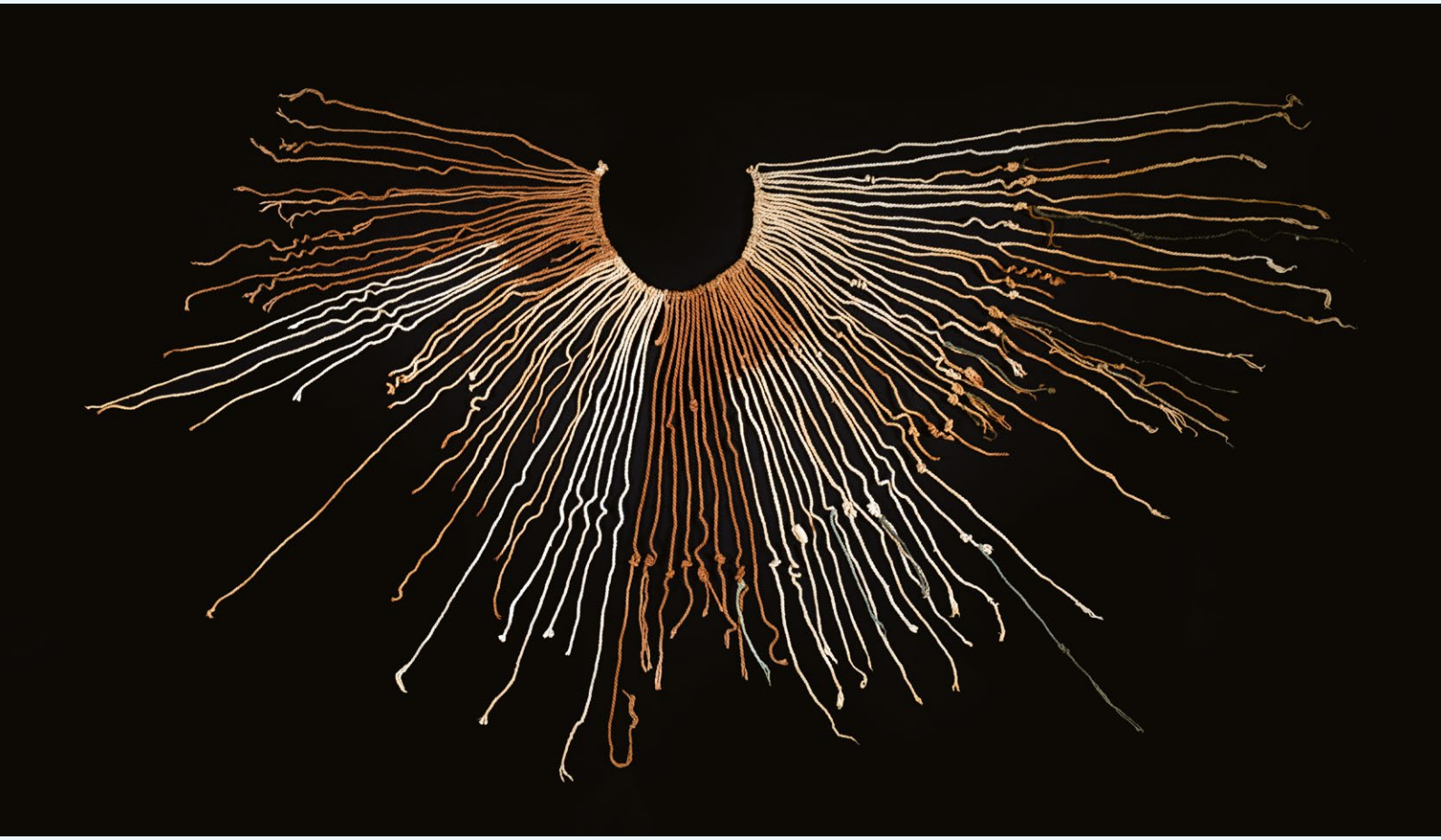
Fragment of painted fabric
Peru, Pachacamac
Chimu style
1100–1300
152 × 49 cm
Gretzer collection

This could actually have been a kind of visual language. We can identify patterns and people, boats and canopies, fish and birds and probably mythical creatures, too. Everything is strictly arranged according to a precise plan. But what do the images mean? Are they scenes from people's everyday lives – perhaps fishermen at work? Are they mythological themes? A religious interpretation is also conceivable, such as the journey of the deceased into another world. It is all guesswork – there is a whole host of different interpretations.

What we do know is that textiles were of particular importance in ancient Peru. For example, they were placed in the graves of people of high rank who had died. Fabric production was widespread in various ancient Peruvian cultures and many different techniques were developed. It was not just textiles in the form of burial cloths or clothing on mummies that were found in graves but also tools for textile production such as spindles, weaving swords or parts of looms.

But why has our fabric been cut in such an irregular pattern? Unfortunately, at the end of the 19th century, large textiles from Peru were often cut up in order to provide samples for various museums and private collections. The same happened to this fabric, which was found in the ruins of the Peruvian city of Pachacamac and is part of Wilhelm Gretzer's collection. Gretzer cut it up and sent the once larger piece to Berlin. He kept the smaller one, which is how it later found its way to Hanover. Unfortunately, most of the pieces of fabric sent to Berlin were destroyed during the Second World War. Consequently, the fact that the fabric had been cut up proved to be a stroke of luck, because the now larger section in Hanover survived the war undamaged.

Interconnected digital databases of the collections of ancient Peruvian objects scattered throughout the world will help to reunite these sorts of fabric fragments in the future.



Stringing meaning together

Was this the transcript of an astronomical event or a court case? Are we dealing with statistics on building materials or with a report on the course of a battle won? We cannot be sure and no one can break the code today.
Knotted Quipu string bundles helped the Incas to compile statistics and were portable ways of storing knowledge: they were used just for counting purposes or to save information about important events. It was not merely the number and position of the knots that were important, but also the colour in each case and probably also the rotational direction of each thread used.
Since historical images do exist of messengers delivering rolled up Quipu strings, the tied messages had to be decipherable both by the sender and the recipient. Therefore, it must have been a system just like writing. And it clearly helped the complex administrative apparatus to be so successful in the Inca empire although a written language was lacking.
Today, it is no longer possible to make out what the remaining pieces of string mean. And this is despite the fact that there were still similar components in European writing 500 years ago: at the beginning of colonisation, the Quipu system existed alongside Spanish records for several years. But fanatical Spanish missionaries in the 16th century regarded the formerly very extensive Quipu archives to be the work of the devil and destroyed them. Consequently, academics are still trying to crack the Quipu code.

Quipu string
Peru, Inca period
15th – 16th cent.
Length of the pieces of string:
46 cm max.
Gretzer collection

Souvenirs from Cook's voyages

Hook with a rat guard (*taunga*)
Tonga, Polynesia
Before 1780
Height: 61 cm,
Diameter: 26 cm
Cook collection

Today, captain James Cook (1728–1779), is the epitome of the seafarer and explorer. But he was much more than an adventurer. As a cartographer, he filled many of the white patches on the map and shaped the image of the Pacific and its inhabitants in Europe. On his three famous voyages to the South Seas, scientists and artists were taken along, collections assembled and impressions of countries and people were captured in pictures and finally disseminated through printed travel journals. The objects collected by Cook and his fellow travellers are often regarded as the earliest examples of material culture from their region of origin, as Cook was either one of the first or even the very first European to arrive and collect objects there.

But as important as Cook was as a pioneer in exploring the Pacific, our image of him is not only a positive one. His voyages were the start of European and American influence in these regions, which resulted in the enslavement of people and the spread of previously unknown diseases.

This rat guard, which prevents rats from reaching the food attached to the hook under the plate, comes from the collections compiled of Cook's voyages. It belonged to the collection at the Academic Museum in Göttingen. In 1853, by royal edict, the Göttingen people relinquished items from their enormous Cook collection and gave them to the newly founded Provinzialmuseum in Hanover. In most cases, they tried to send the less impressive second copy from the collection. But a mishap occurred with this item: the replica made to be put on show was inadvertently retained and the original sent to Hanover, where it now takes centre stage in the selection of items from Cook's voyages.

Globalising by rafting

Model of a raft
Taiwan
Before 1868
47 × 14.5 × 31 cm
Ebele collection

The first major wave of globalisation perhaps took place with the help of rafts. The Austronesian-speaking peoples, who first emigrated from South China to Taiwan about 7,000 to 8,000 years ago, used rafts similar to this model. As likely as not, people set out on these sorts of long rafts made of bamboo or tree trunks! They soon developed a variety of boat shapes including large outrigger canoes and double hull boats, which were seaworthy, although they were not held together by any nails or rivets. As well as having excellent navigational skills and an obvious desire to explore, the Austronesian-speaking sailors used the boat technology to reach the most distant islands of the Pacific off the coast of South America as well as the island of Madagascar, which is located off the African continent.
The use of bast fibre to produce fabrics demonstrates that people had things in common in this vastly populated area. They also held similar religious beliefs. However, it is primarily the language that proves they had the same roots: from Madagascar to Easter Island and from New Zealand to Hawaii, people still speak languages belonging to the Austronesian language group.

That will be 25 shells, please!

A small piece of shell money is enough to buy a bread roll or a banana at the market and a few strands of it will get you a pig.
There are many different kinds of money, and our version consisting of notes and coins is just one of endless possibilities for storing value in a portable and accepted form.
In the past, some means of payment were only used in a small area, whereas others were accepted across large regions. Even today, not all of them have been superseded by the notes, coins and "plastic money" we are familiar with.
On the island of New Britain in the Bismarck Archipelago, for instance, you can still pay for your shopping with shell money to this very day. Specialists make the strands so precisely that the exact same number of shells is always threaded onto a certain length of strand. Smaller sections can therefore still be used as a means of payment locally.
Big rings of shell money are objects of prestige. On special occasions, their owners cut them up and share the strings of money among the guests so as to cement or enhance their social status. As a result, bundling large sums ultimately only serves to sustain general solvency and ensures that every member of the social network comes into money on a regular basis.

Large hoop of shell money (*loiloi*)
Melanesia, Bismarck Archipelago,
Duke of York Islands, 20th cent.
Height: 8.5 cm
Diameter: 100 cm
Schneider Collection


PRO
PELLE
CUTEM


HB
E M
1
2
N B

½ Made Beaver Token
No year [1854]
Canada, Hudson's Bay Company
Copper alloy (brass)
5.14 g
Diameter: 27 mm

Money is as money does

In North America, people were familiar with coins from Spain, France and Great Britain. But away from civilisation, they were still bartering and using commodity money. Beaver pelts served as a standard of value and unit of account, with the result that certain trade goods were priced in terms of beaver skins. In 1733, for example, a pair of trousers cost three beaver skins; in 1748, a scalping knife (!) could be yours for one beaver skin; and in 1863 the asking price for an axe was three beaver skins. So beaver pelts represented relatively high values with a lot of buying power – and that made it difficult when it came to trading for things of lower value and everyday necessities. Cutting up the valuable furs did not make any sense and was totally out of the question.

1854 saw the introduction of practical metal tokens for the pelts the trappers delivered. They were far more convenient and durable than the actual pelts and were also issued in values of ¼ and ⅛ of a beaver skin.

These tokens were a private currency rather than legal tender. Because there was a huge shortage of small-denomination coins in the vast British Empire during the 18th and 19th centuries, the authorities tolerated the issue of trade tokens like this by private institutions and companies. And even if this "money" seems strange to us: money is as money does. It testifies to how money has evolved through history, from bartering and commodity money all the way to metal money. A vestige of this first currency has survived to this very day: there is still a picture of a beaver on the back of some Canadian coins.

Made of world-spanning cloth

Barkcloth dance masks
(*a quruquruk*)
New Britain, Qaqet-Baining
1st half of the 20th cent.
356 × 42 cm and 380 × 33 cm

At the end of the celebration, the elaborately adorned dancers appear in their huge masks. The figures dancing on the square outside the village almost look like superhuman beings. Before their performances, the dancers are subject to strict taboos and have fasted for many days. They pull their stomachs in demonstratively as they dance to show how steadfast they were.

Among the Baining people, masked dances were part of various rites of passage. This particular type of mask, known as an *a quruquruk* is part of an initiation ritual that celebrates passage into adulthood.

The Baining are famous for these magnificent masks, which come in all sorts of different shapes. They can be several metres high and consist of a complex rattan frame covered with painted barkcloth. The cloth is made by pounding together several layers of inner bark from certain trees like the paper mulberry. It is thick and durable, but also very lightweight.

This method of producing cloth out of wood fibres is a widespread technique. Beating the bark on a surface decorated with carved patterns results in an imprinted "watermark". In many regions, barkcloth is considered precious and is printed or painted with elaborate designs.

In our part of the world, the cloth is usually referred to as *tapa*, but only because Captain Cook first came across this textile technique on Tahiti and brought it to Europe under the local name the islanders used for it. In Hawaii these fabrics are known as *kapa*, whereas the Samoans call them *siapo*. They are one of the few material similarities common to the large area of the Pacific and Indian Ocean inhabited by Austronesians. But only among the Baining people on the island of New Britain are they used to make such huge and impressive masks.


Bitte nicht betreten!

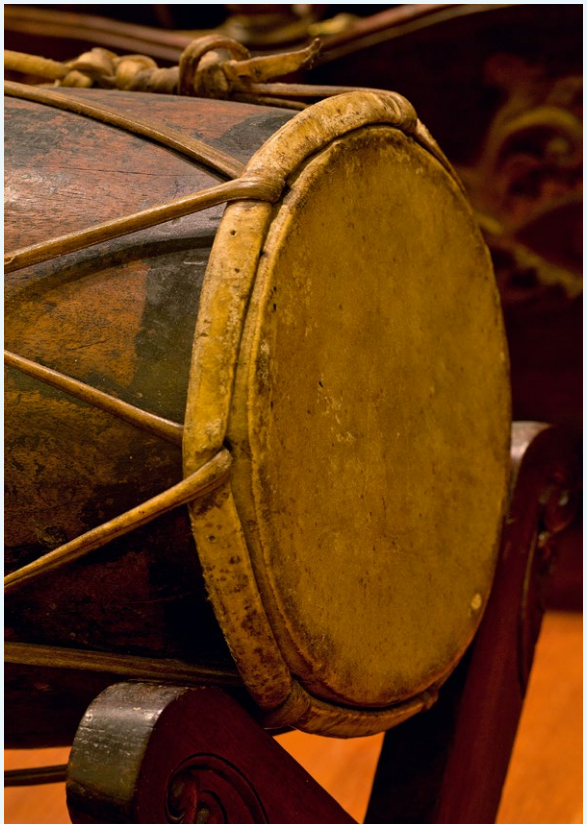
Gamelan orchestra
Yogyakarta, Java,
Indonesia
Around 1800
Purchased 1995

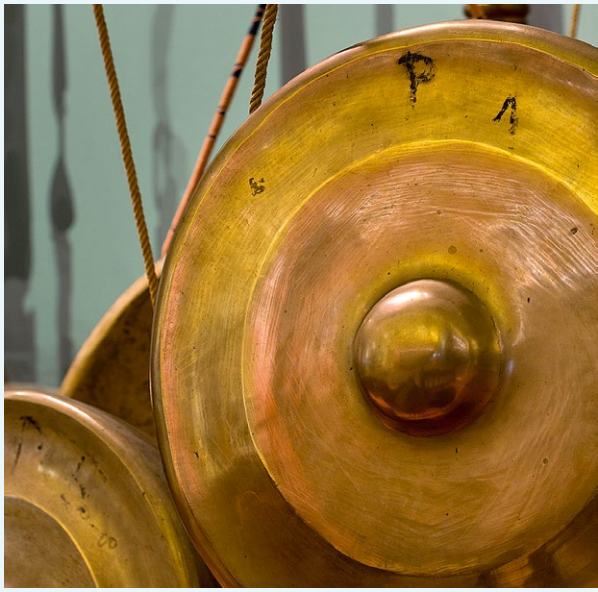
Living sound

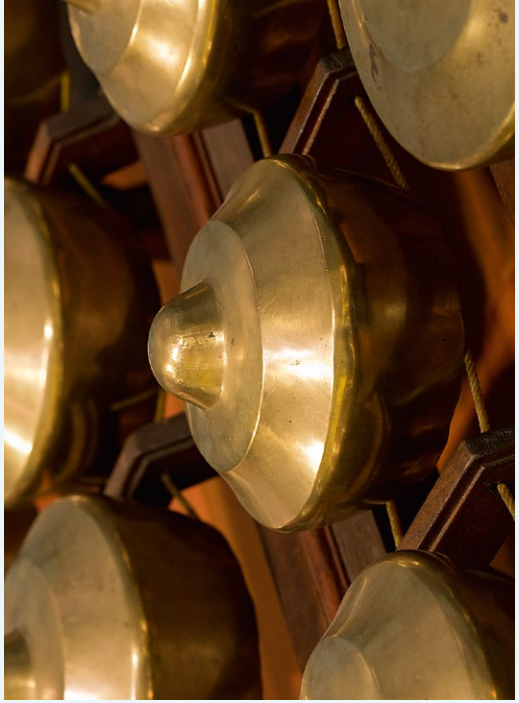
The beating of gongs and metal slabs strikes up an unfamiliar rhythm. The notes intermesh and overlap. It is the sound of gamelan. That is the name of both the music itself and the groups of instruments it is played on. They are mainly found on the Indonesian islands of Java and Bali, and the orchestras consist of gongs and xylophones in different combinations and sizes. The music is played for entertainment and to accompany dances and shadow puppet plays. Sometimes the orchestras are supplemented with drums, string and wind instruments as well.

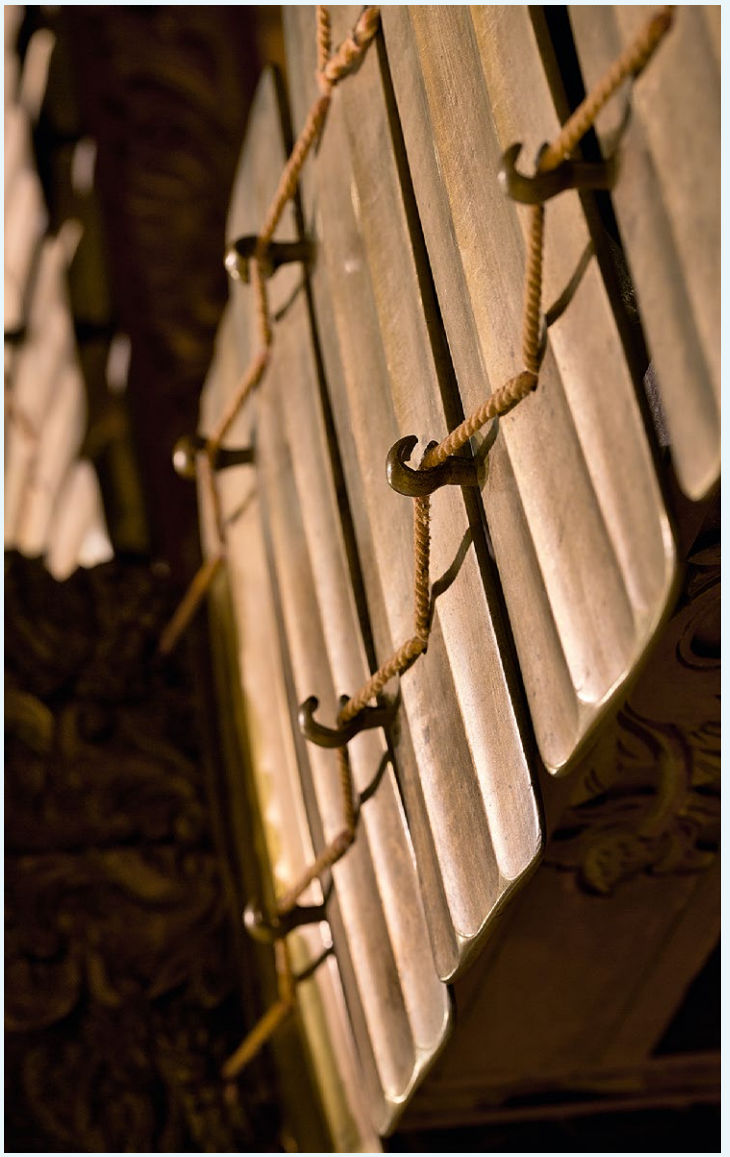
The instruments on show at the Landesmuseum Hanover date from around 1800 and were made by outstanding master craftsmen; they were commissioned by the fourth Sultan of Yogyakarta and used in his palace. All in all, the orchestra consists of 34 groups of instruments, most of which are on display. Every single gong was hammered out of a piece of metal by hand and meticulously tuned. The heaviest of the suspended gongs weighs almost 150 kilograms. The complete ensemble has survived intact, is in excellent condition and one of the oldest of its kind in Europe. And it is played on a regular basis!

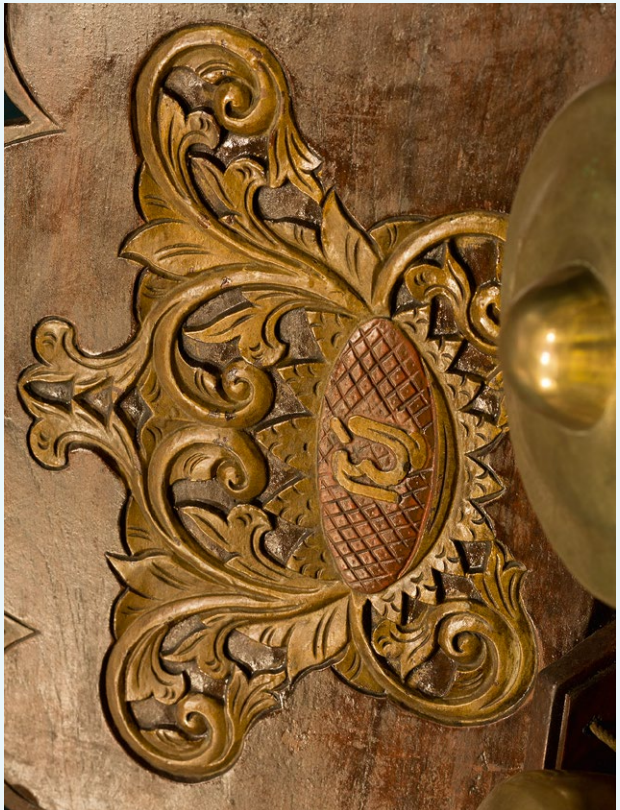
The first time Europeans got an impression of what gamelan music sounds like was in 1889, when a troupe from Java played at the Paris World's Fair. Back then, the music met with mixed reactions. Nowadays, however, when gamelan is played in Hanover and the museum air vibrates with its metallic sound, many visitors are spellbound.











What a performance!

Shadow puppet
Kresna
Java, Indonesia
20th cent.
Height: 70 cm
Purchased 1986

Week after week, people gather in eager anticipation of the next performance. Will Prince Bima be the victor today, or will it be the giant Rajamala who gets the upper hand? Can the cunning Prince Arjuna bring about a decision? Just as if they were watching a TV soap opera, the audience discusses how the story might progress and identifies with the heroes. But this particular thriller is not being produced in the studios of Babelsberg or Bollywood. It is being performed live with articulated, two-dimensional leather puppets behind an illuminated screen.

The art of shadow play has a long tradition on the Indonesian island of Java and reached its peak in cities like Yogyakarta and Surakarta. Because it originates from India, the repertoire is based on Indian stories like the Mahabharata Epic, which tells of the struggle between the five Pandava brothers and their cousins, the 99 Kauravas. The narrative also features another character who played a shifting role, particularly in Indonesia: Kresna, who acts as an intermediary between the conflicting parties. His black face indicates positive characteristics like wisdom and self-control, and he was extremely popular in precolonial times. In the 18th century, his unbiased attitude led him to be associated with the Dutch, who initially acted as mediators between the competing dynasties on Java when they first arrived. But as the colonists' presence had an increasingly negative impact, Kresna's standing diminished – to the point where stories featuring Kresna were not performed at all at times. Only in postcolonial times was he rehabilitated, and is now once again one of the most popular shadow play characters of all.

Model of a soul boat
Sembiring Batak,
Sumatra, Indonesia
Pre-1896
94 × 77 × 26 cm
Stalmann Collection

Slow boat to paradise

During the big festival of the dead known as *Pekualuh*, the Sembiring set the ashes of the departed adrift on the river in soul boats, which were decorated with carved likenesses of the dead and measured about two metres long. As soon as the boats were far enough away from the riverbank, the people standing on the shore tried to capsize them by throwing stones at them, thereby committing the ashes to the river and preventing anybody from taking possession of the human remains further downstream. The souls of the dead were believed to flow with the ashes to a far-off land of souls, where a paradise-like afterworld awaited them. This belief in islands of the dead and the use of soul boats can be found in many places throughout the Austronesian religion – including among the Sembiring, who are thought to be the descendants of migrants from southern India and belong to a subgroup of the Batak people. The various groups of the Batak live in the north of the Indonesian island of Sumatra and very little was known about them for a long time. In the past, their religious ideas varied from one group to another.

The use of soul boats was specific to the Sembiring, who evidently considered them so representative of their culture that they made miniature replicas of the boats so that European collectors could take them home more easily. However, the Sembiring stopped practising this custom at the end of the 19th century, when they largely converted to Christianity.

Minimalist design from the South Seas

Forward or reverse gear? The whitewashed boat is designed in such a way that it can be paddled in both directions. It comes from Wuvulu, one of the Western Islands of the Bismarck Archipelago. The craftsmen on these islands were master woodworkers, and the evidence of their incredible skill includes boats that combine exceptional simplicity and elegance with outstanding workmanship. The islanders also mastered the art of building wooden houses so perfectly that they were mosquito-proof.

All that came to an end in the early 20th century, when German trading companies took over the islands and felled most of the trees. As part of the German New Guinea protectorate, the island was leased to the trading company of H. R. Wahlen in 1907. Even before that, German traders had introduced various diseases to the island, and collectors had acquired most of the objects made of local materials by swapping them for cheap replacements from Europe and Asia.

This specimen, which features particularly beautiful curved lines, was gifted to the museum by Bruno Mencke in 1900. It is not known how it came into his possession – but as the heir to a fortune running into millions, he probably acquired it via the trade in ethnographic artefacts. Mencke was an adventurer and instigated the First German South Seas Expedition in 1900/01, during which he died after conflicts with the indigenous islanders.

Outrigger canoe
Wuvulu, Western Islands
Pre-1900
74 × 552 × 95 cm
Mencke Collection

Maika'i Tubbs
A Life of Its Own
O'ahu, Hawaii
(completed in Hanover, 2015)
Vine sculpture, plastic
approx. 150 × 150 cm

The world is drowning in plastic

Beautiful and bizarre, the white-flowering vine creeps its way across the wall. It is based on the Hawaiian baby woodrose (*Argyreia nervosa*), a plant that was introduced by Europeans, has meanwhile overrun the native flora and now threatens to choke it. Set against a white background, the white plastic vine is just as inconspicuous as the green of its natural counterpart in its green surroundings. Shaped out of items from a mountain of waste that is growing higher by the day – plastic plates and plastic cutlery – it too is both beautiful and destructive. The increasing amount of plastic waste is a consequence of our modern age. In the major oceans, huge swirling patches of it are forming into islands, some of them twice the size of Germany. Every single day plastic trash is generated on the Hawaiian Islands, too, where some hotels serve food on plastic plates with plastic cutlery, all of which is simply thrown away. That cuts labour costs. Dishwashers are no longer required, and the American dream is consequently turning into a nightmare. The work of artist Maika'i Tubbs focuses on rubbish-related issues on his native island of O'ahu.

劉正昌藏
劉正昌藏

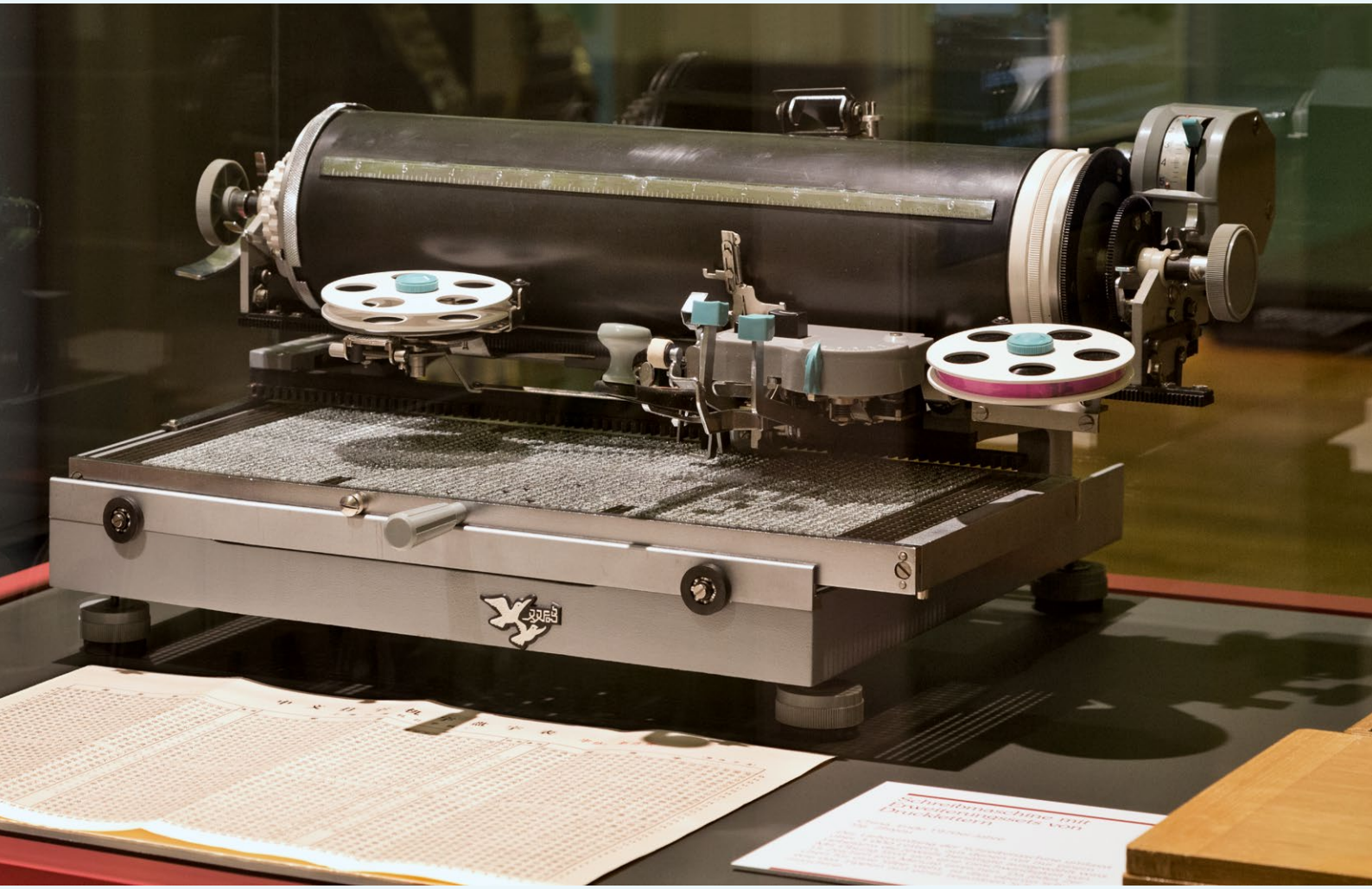
Treasures for creating treasures

Calligraphy tools, table, chair and side table with censer
Japan for the Chinese market
1st half of the 20th cent. and 21st cent.
Wilke Collection, purchased 2015, and Bahlsen Collection

Inkstone with base
China
Pre-1853
approx. 12.1 × 9.2 × 1.5 cm
King Ernst August Collection
Pictured with: inkstick
China
Pre-1914
4.2 × 1.8 × 0.9 cm
Oppermann Collection

Five inksticks
China
Pre-1914
Length of longest stick: 11.1 cm, diameter: 1.5 cm
Oppermann Collection

Ink, inkstone, brush and paper: these "four treasures" play an important role in the Chinese writing room or study. They are the tools needed to produce handwritten works of art – i. e. calligraphy. Each of these treasures is rooted in a long tradition of craftsmanship. Entire manufacturing dynasties resulted, and in some cases the names of good producers have been guaranteeing the finest quality for centuries.
In China, writing is not merely a form of communication – the "art of beautiful writing" has been considered important and held in high esteem for centuries. It was often created in a special study, a place of calm where one could devote oneself to literature or painting. The appearance and furnishings of the room correspond to the ideal of aesthetic pursuit.
But what is it that makes Chinese writing so special? Well, it evolved from abstracted drawings – or pictograms as they are commonly called. As a result, there is still a representational quality to them, and calligraphy and painting are considered equals.
In the case of calligraphy, however, it is even more essential for the artist to plan ahead carefully and then execute the plan powerfully and single-mindedly within a set framework. That is why a person's writing is believed to reveal a lot about their leadership qualities.



The “one-armed bandit” from the Far East

Typewriter
China
Late 1970s
68 × 45 × 36 cm
Zhiyou Collection

Eighty-five thousand! That is roughly how many characters there are in the Chinese script, which is one of the oldest in the world. This huge number results from the fact that it is a logographic script and not an alphabetic one. However, knowing approximately 3,000 to 4,000 characters is enough to cover daily needs like reading a newspaper. Even so, it goes without saying that developing a typewriter for such an enormous character set was a major technical challenge.

This typewriter is equipped with over 3,000 characters, from which the required type is selected by means of a single lever arm. With practice, it is possible to achieve a speed of 15 characters per minute. Since each of them stands for a meaningful syllable or even an entire word, that is actually almost as fast as typing a text in a European language on a conventional European typewriter.

You hardly ever find Chinese typewriters in museum collections – it would seem that for a long time, nobody thought they were worth collecting. But now that we have arrived in the digital age, these machines have vanished from print shops and newspaper offices and are now rare. Computers and smartphones are used differently: the equivalent sound of the required Chinese character is entered in Pinyin (a phonetic script in European letters) and converted into the corresponding Chinese character.

The martial arts personified

The 8th century saw the emergence of a military nobility in Japan whose power was consolidated by the rise of clan leaders and territorial rulers, or *shoguns*. Known as the samurai (or *bushi* in Japanese), this warrior elite had its own value system, the *bushido*, which encompassed both ethical standards and the principles of the martial arts. The samurai era ended in the 19th century, when the Imperial Japanese Army modernised both its weapons and its strategy. Our armour dates from that period.

A samurai only wore armour in battle; its sometimes magnificent features revealed the warrior's rank and the artistry of the goldsmiths and brass-smiths in his entourage. It was made of various materials: the helmet, breastplate and face mask – often depicting a terrifying grimace complete with artificial beard – were generally crafted from metal. The hip and thigh guards, arm protectors, shoulder plates and upper and lower leg guards were made of bamboo or multiple layers of leather, which an enemy sword would get stuck in, whereas it would glance off the helmet, mask and breastplate.

The samurai sword is a weapon, a power symbol and a work of art all rolled into one – and the epitome of Japanese weaponry. Besides the masterfully crafted blade, which was made by special swordsmiths, other elements such as the handle of the utility knife, the blade collar and the pommel, or end cap, also testify to the skill of its makers.

The sword guards are a very special group of objects. They point to material and technical innovations such as the evolution away from iron and towards various bronze and copper alloys, culminating in the inclusion of gold and enamel. In times of peace, the master smiths could give free rein to their artistic imagination. The designs range from abstract patterns all the way to opulent imagery depicting scenes from myths, sagas and everyday situations.

Samurai armour with sword
Japan, 19th cent.
160 × 70 × 40 cm
Wrede Collection (property of the City of Hanover)
provenance unknown

Grave posts (*aloalos*)
Mahafaly, Madagascar
2nd half of the 20th cent.
196 × 20 × 16 cm and
186 × 17 × 16 cm
Schomerus-Gernböck
Collection

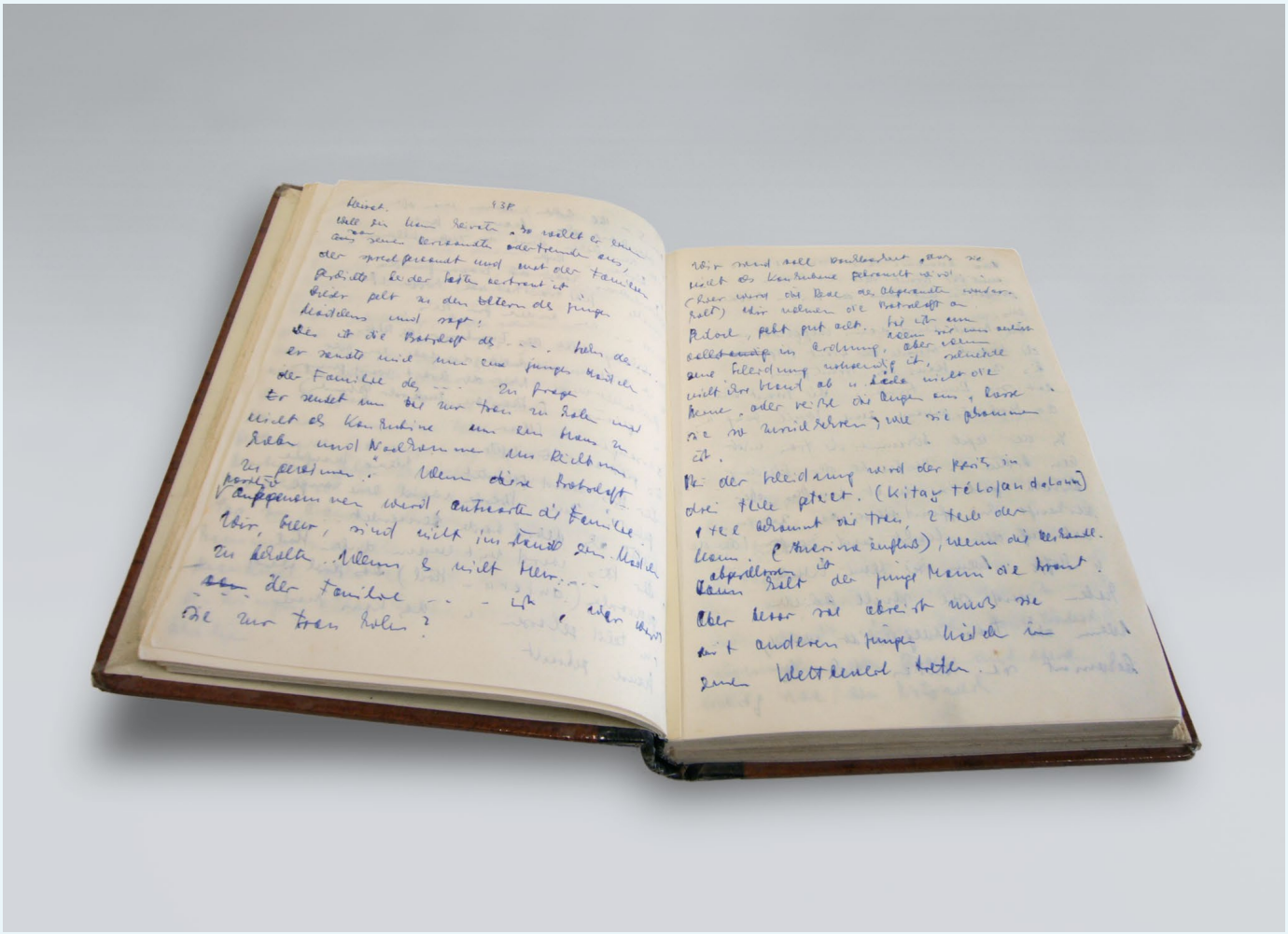
Wooden images for the living dead

The geometric patterns are topped with sitting birds and a standing cow. Although the carved wooden posts were erected on tombs, the woman depicted on one of them is not a portrait of the person who has died. Instead, the animals and people that are shown on these Mahafaly grave posts, sometimes along with everyday scenes, establish an allegorical link with the lives of the deceased. The ornaments can be interpreted as the sun, moon and stars, and the cow might be an indication that the dead person was a good cattle breeder.

The family tomb is a person's permanent residence – their life elsewhere on earth is only temporary. After death, they are reunited with the spirits of their forebears, who continue to reside near their tombs on their ancestral land, the spiritual centre of every family.

For many Malagasy, death means a transition into another form of life. The souls of the recently deceased play an important role as intermediaries between humans and the creator god, as well as helping the living members of a family communicate with their dead loved ones.

The size and shape of the tombs vary depending on the region and the family's wealth. Among the Mahafaly in the southwest of the island, they consist of rectangular arrangements of stacked stones. The skulls or horns of sacrificed zebu cattle are placed on top of them, and in addition the graves of important personalities are marked with large carved wooden posts such as these, which are known as *aloalos*.



An essential companion

Field journal
of Lotte Schomerus-Gernböck's
second research expedition
Used in Madagascar
1963 – 1964
15.8 × 21 × 2.2 cm

In the 20th century, a firmer scientific basis was established for the study of other peoples and cultures. To this day, long-term field research and the "participant observation" it involves remain an important method. While living with a group of people and sharing its members' everyday routines, the researcher studies their way of life and finds out a great deal more than by simply questioning them. To put it another way, the researcher gets to experience a different worldview first-hand.

It was this type of field research that resulted in the collection of ethnologist Lotte Schomerus-Gernböck. In the course of her many stays on Madagascar, the scientist had intense contact with various ethnic groups on the island, which lies off the coast of East Africa. Starting in 1961, she worked with its people for more than three decades and built up a close relationship with them – especially with the Mahafaly in the southwest of the island, where she is still remembered as *neneney* – "our mother". Schomerus-Gernböck even received the Republic of Madagascar's Order of Merit for her work.

The museum in Hanover received a large selection of items from her extensive and very systematic ethnographic collections. The objects depict many different aspects of Malagasy life. They are supplemented by audio recordings, photos, slides and films in which some of the pieces can be seen in their original context, and last but not least by field notes, journals and publications. That enables us to reconstruct the stories behind the objects, identify artists and get a sense of life in the places the ethnologist visited. And that makes her collection particularly valuable to the museum.

Colon figure
Cameroon? (Kuyu, Rep. Congo?)
Africa
Pre-1911?
Height: 70 cm, diameter: 15 cm
von Puttkamer Collection?
Purchased from Konietzko, 1930

Looking back

The painted wooden figure comes from Central Africa, but does it depict a native inhabitant? The white face could indicate that it is meant to be a European, while the clothing suggests it could also be an indigenous soldier from the colonial auxiliary force. Soon after their first contacts with people from far-off lands, Africans began creating figures of the strangers – not just of Europeans and Asians, but also of Africans dressed in the clothes or uniforms of the colonists. They quickly became part of local life, presided over certain ceremonies as guardians or were used in rituals performed by local healers. These figures therefore helped to incorporate the unfamiliar and the overarching colonial hierarchy into a local context.
The African view of the newcomers provides a different perspective on colonial history. It is a symbol of willingness to approach the unknown and engage with it.
According to the museum's accession register, the figure was purchased on the art market in 1930. However, letters from the dealer state that it was requisitioned from the royal court of Bamenda in Cameroon by the German "protection force" under Governor von Puttkamer during a punitive expedition in 1911. That cannot be right though, because Governor von Puttkamer had left Cameroon by 1907. Judging by the style, it probably originates from the area that is now the Republic of the Congo. So the figure still raises a lot of questions, and a lot of research into its object biography remains to be done.


UTAWALA-
WA
KIJERUMANI
AFRICA
MASHARIKI
BY. CHARINDA

Is this the right way?

A white man on a sedan chair is being carried by four native inhabitants. He is pointing the way with one hand, and using the pistol in the other to make sure his message is clear. The picture probably shows Carl Peters, who in the late 19th century used dubious treaties to seize large areas of land for German East Africa and subsequently ruled over them. His cruelty earned him the nickname "Hangman Peters" in the German Reichstag, and in Africa he was known as *mkono wa damu* – "the man with blood on his hands".

The painting was created using a special technique and style known as Tingatinga. Named after Edward Saidi Tingatinga, the Tanzanian art form was originally defined by its characteristic use of materials: initially, the paintings were always done on square hardboards in vibrant colours – mostly bicycle paints.

Charinda, who was born in southern Tanzania in 1947, adopted this form of painting in 1975, going on to become one of the first Tingatinga artists to use canvas as a substrate in 1989. His subjects are mostly taken from his immediate lifeworld; his work frequently features animals, often grouped together in a special way and radiating a serene, almost supernatural quality. But he also deals with contemporary and historical themes – as in this painting, which refers to the German colonial era and makes pointed reference to this inglorious chapter of German-African history.

Mohamed Wasia Charinda
Utawala wa Kijerumani
Afrika Mashariki
(German East Africa Administration)
Tanzania, Africa
Pre-2009
62 × 62 cm
Purchased 2009

art

41 Stories from the

Published in: Lemke, Katja (ed.), best of – 111 Stories from the Weltenmuseum, Hannover: Niedersächsisches Landesmuseum, 2020. DOI: 10.11588/arthistoricum.693

worlds

Suffering and triumph

Crucifix from Nettlingen
Lower Saxony
Around 1120 (?)
Hardwood
Height of cross: 280 cm,
Figure: 192 × 150 cm

Christianity was slow to allow three-dimensional sculptures inside churches. For a long time it has been feared that such sculptures would rekindle the idolatry of the antique world and encourage the cult worship of a physical image rather than the belief in the symbol it stood for. Nevertheless, from the turn of the 10th century on, during the time of the Ottonian dynasty, large and extremely powerful sculptures became increasingly common. In churches, sculptures of Christ on the cross and the enthroned Madonna became important features that played a significant role in prayer.

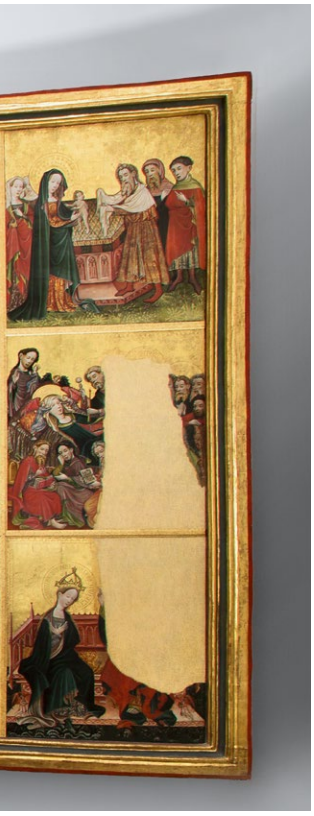
In the case of the large-scale crucifixes of the Romanesque period, the visualisation of both the Son of God triumphing over death and his human suffering plays a key role. The Nettlingen crucifix, which has lost virtually all its original colouring, shows the dead Christ with his head slumped to the side and his eyes closed. His muscular arms (which were renewed in the 13th century) are being pulled down by the weight of his body and his torso has sagged to the side: the reality of his broken body is vividly portrayed and yet subtly exalted. The crucifix comes from the former archdeaconate church St Marys in Nettlingen and was probably made around 1120 in Hildesheim, a leading centre of art at the time.

Crowned soul

The Death of the Virgin from Wennigsen Convent
Lower Saxony
Around 1300/1310
Oak
114 × 139.5 cm

Very few panel paintings from the early 14th century have survived to the present day. The altarpiece from the former Augustinian convent in Wennigsen is an exception, and of fundamental significance for the early history of German panel painting.
The apostles have come from all corners of the earth to gather at Mary's bedside. At the centre of the painting appears the blessing Christ, who has descended from heaven to take Mary's soul. He is depicted with a blue mandorla and surrounded by a golden aureole, holding Mary's soul in his arms – the crown on the little figure's head alludes to her future role as the Queen of Heaven. The artist behind the Wennigsen painting of the Virgin's death was guided by older Byzantine versions of the subject, from which he probably also adopted the figure of the bishop pictured at Christ's right, giving the last rites and holding an aspersorium. It is a stroke of luck that the original frame has survived as well. In the middle ages, elaborate frames often added important aspects to the actual image and were an integral part of the picture. In this case, the frame is decorated with a series of medallions of saints and prophets, while the border of stars points to the miraculous nature of the event.


frater



Brothers in spirit

Franciscan altarpiece from Göttingen
Lower Saxony
1424
Oak and spruce
305 × 787 cm (open)

On the main panel of the altarpiece from the Franciscan Church in Göttingen, we see two miniature Franciscan friars in the middle of the crowd at the foot of the cross. Luthelmus, the Guardian of the Franciscan monastery, is addressing the crucified Jesus with the words "Oh hope and salvation for those who believe in thee." His companion, Heinrich von Duderstadt, continues the invocation with the words on his scroll: "Have mercy on those of us who live here." The two men had evidently been of such great service in the making of the altar that they were permitted to immortalise themselves on it. And while their likenesses are certainly modest in scale, they occupy a central position in the picture.

The Franciscans – or "Barfüßer", as the friars of the order founded by Saint Francis of Assisi are called in German – devoted themselves to the ideal of poverty and were not permitted to own any personal possessions. However, their exemplary asceticism led to them receiving ample donations from the nobility and the increasingly important middle classes. The Göttingen altarpiece provides evidence of that, too: the inner pair of wings folds shut to reveal a row of apostles. In their books, you can read the Apostles' Creed that is spoken during mass and recited as a prayer to strengthen the faith of the dying. A coat of arms is assigned to each of the apostles at the lower edge of the picture. On the very left, at the feet of Saint Peter, the Prince of the Apostles, the Duke of Braunschweig-Lüneburg is given the place of honour, followed by other members of the nobility.

The patrons and "content directors" of medieval artworks often remain anonymous, but in the case of the Göttingen retable their identity is unusually obvious; they are thus expressing their desire for intercession and presenting themselves as a strong, politically potent community following the example of the 12 apostles. And by the way, Brother Luthelmus is mentioned a second time: when closed, the individual panels are separated by an inscription that reveals the work was put up on 24th May 1424, during his term as guardian.

Treasure chest or illustrated bible?

The Golden Panel of St Michaelis Church in Lüneburg
Lower Saxony
Around 1425
Oak
Individual wings: 231 × 184 cm

One of the Landesmuseum's most precious objects is a major work of early 15th century art: the Golden Altar from the Benedictine monastery church of St Michael in Lüneburg. The Landesmuseum in Hanover holds the wings of the once double-shuttered altarpiece. The outer sides depict monumental individual scenes of the crucifixion of Christ and the raising of the Brazen Serpent, which in this context can be interpreted as foretelling the death of Jesus on the cross. When the wings were opened out, they unfolded a sequence of images depicting scenes from the lives of Jesus and his mother Mary, painted in radiant colours against a gold background and spread over three registers. This view presented the individual stages in the story of salvation like the pages of an illustrated bible.

The altarpiece was only fully opened on special holy days. Then a collection of precious objects became visible inside the shrine, which was richly decorated with Gothic tracery: a gold-coated relief from the high middle ages, with the church treasure of the venerable Benedictine abbey elaborately arranged around it. At the end of the 16th century, the gilded reliquaries fell victim to a spectacular robbery; the ensemble was later broken up and the centre of the altarpiece disposed of. However, the magnificent wings with their richly gilded sculptures set in elaborate tracery survived. In addition to the Virgin Mary, they also depict the 12 apostles and a selection of saints who were of particular importance to the monastery. The archangel Michael, for instance, the patron saint of St Michael's in Lüneburg, is easily recognisable on the left wing, triumphing over evil in the form of a dragon.

CAVE MISER·NE MEO TE CONFIXVM TELO IN HOC TERRO COLLOCEM FERETRI LECTO: ANNO·1·5·0·7·

Albrecht Dürer
(1471 – 1528)
Death as a Horse Archer
Around 1502
Ink on parchment
38.8 × 31.3 cm

Beware, wretch!

Adjusted to the shape of a trefoil, the composition is clearly recognisable as a design for a pane of glass. A whole series of such stained-glass templates from Albrecht Dürer's Nuremberg studio have survived intact. In this case Death, clad only in rags, is shown riding on an exhausted, emaciated nag that has to drag itself along. The skeletal figure is fixated on its quarry, which will probably be brought down by a fatal arrow any moment now, and if not, there are plenty more arrows ready and waiting in the well-filled quiver. The Latin inscription around the outside gives the grim rider a voice: "Beware, wretch, lest I pierce thee with my arrow and bed you on this hideous litter", he calls to his unlucky prey.

A counterpart to Dürer's finely drawn design in dark ink has been preserved in the Germanisches Nationalmuseum in Nuremberg: it shows Nuremberg provost Dr Sixtus Tucher confronting his own grave. So, the words of warning were addressed to him – and he is the one that the rider is aiming his deadly arrow at as he raises his arm.

In an age where plague epidemics were rampant, people wanted to be prepared for death. The Nuremberg provost always had two stained glass pictures based on the drawings in front of him: they decorated the windows of his study, where they never ceased to remind him of the dangers of the plague and his own mortality. Albrecht Dürer's magnificent stained-glass design is just one of countless drawings and prints in care of the Kupferstichkabinett in the Landesmuseum Hanover.

Tilman Riemenschneider
(1460–1531)
Female Saint
Around 1510
Limewood
42 × 38 cm

The beautiful saint

For a long time, the Tilmann Riemenschneider masterpiece on show in the Landesmuseum Hanover was not given the attention it deserves. The unknown saint with the splendid headdress is carved from soft limewood, an excellent material for nuanced renderings of texture. And in this case, the different qualities of the various surfaces have been depicted with the utmost skill: the grave and dignified expression on the young woman's face is framed and brought to life by the fabrics of the opulent clothes that form a delicately textured relief around her neckline, as well as by her turban-like headdress, the gently fluttering end of her veil, a pearl-studded clasp and, last but not least, the finely textured waves of her hair.
Today we encounter the contemplative saint in the form of a bust, but she was probably created as a full-length standing figure until an early collector sawed off the lower part of the statue.
Until the 1930s, the unknown saint was considered one of the Würzburg woodcarver's most beautiful creations. But then scholarly interest in the work faded, and only in the last few decades has it been "rediscovered", as it were. Thanks to the generous support of a group of dedicated women from Würzburg and Hanover, it was possible to restore the work in 2003 – a wonderful example of civic engagement that has breathed new life into Riemenschneider's unknown saint.


QVI CERNIS TANTVM NON, VIVA Mr LANTHONIS ORA,.
HOLBINVS RARA DEXTERITATE DEDIT.

Hans Holbein the Younger
(1497/98–1543)
Philipp Melanchthon
Around 1535
Hardwood
Diameter: 9 cm

Miniature reformer

The small circular image works like a box: the top comes off to reveal the portrait of reformer and humanist Philipp Melanchthon painted on the bottom of the lower section. The lid is richly decorated with Renaissance ornaments and bears an erudite inscription that identifies the subject of the painting, addresses the beholder directly and praises the artist who created the work: "You who view the features of Melanchthon almost as if they were alive: Holbein created them with the utmost skill."
The format of cased miniatures like this is clearly reminiscent of antique coin portraits – a tradition that was rediscovered in the Renaissance. They were popular gifts among art connoisseurs and supporters of the Reformation, and Hans Holbein's studio produced a whole series of such likenesses. Sumptuously executed and lovely to hold, they are every bit the equal of portrait medallions from the same period, while the fact that they have been executed as paintings makes them a great deal more realistic. The portrait of Melanchthon, who was a professor of Greek in Wittenberg and a close comrade of Martin Luther, was originally in the possession of the Elector of Hanover and was probably created during Holbein's time in England. Holbein never met the great reformer in person, and based his likeness on portraits by Albrecht Dürer and Lucas Cranach.

The holy penitent

Jacopo Pontormo
(1494–1557)
Saint Jerome Penitent
Around 1528/29
Oil on poplar
105 × 80 cm

In the 19th century, a whole series of significant private collections were brought together in Hanover, including that of August Kestner, a lawyer and ambassador to the Pope in Rome. Jacopo Pontormo's painting "Saint Jerome Penitent" also originates from his estate and is the only painting by this outstanding Florentine Mannerist painter in a German museum.
Pontormo shows the penitent hermit in a radically new interpretation: not as an aged Church Father but with the tensely twisted body of an athletic youth. Full of humility, Jerome has discarded his red cardinal's cloak and hat; kneeling on the ground and bending his upper body, he is doing penance in front of the upright cross that has been inconspicuously placed at the left edge of the painting. He is being watched by a lion which, according to legend, he tamed by removing a thorn from its paw. The powerful portrayal of the athletic body, which takes up almost the entire picture, is an expression of the penitent saint's virtuous fortitude.
Pontormo never finished the painting, and so today it reveals how the artist kept revising and rethinking his subject throughout the painting process. The body of the saint was originally intended to be given additional layers of paint, and Pontormo probably had planned to put the finishing touches to the hastily executed landscape setting in the final step.

Chiselled features

Agnolo Bronzino
(1503–1572)
Portrait of a Young Man
Around 1545
Oil on poplar
59 × 44 cm (oval)

In the 1540s Agnolo Bronzino, a pupil and friend of Jacopo Pontormo, was the most favoured portrait painter at the court of the Medici in Florence. There is a dignified aloofness and cool elegance to his portraits, and the artist's brilliant technique and select use of colour continue to captivate the beholder to this very day.

Due to the oval shape of the painting, the Hanoverian young man here in our exhibition is presented in much the same way as ancient rulers were depicted in the form of sculpted busts. Set against the dark background, his athletic body stands out almost as if it were three-dimensional, and the light that illuminates him from the left shapes certain areas of his skin as if they really were made of marble. Bronzino thus skilfully invites comparison with the related genre of sculpture, while nevertheless leaving us in no doubt that this is a painted picture. But as stern and cool as the painting might appear, there are occasional flashes of great sensuality as well: the glowing pink cloth reveals the immaculately painted body rather than covering it, and the half-concealed nipple gives the picture a decidedly erotic touch.

There is no way of knowing for certain whether the young man in the portrait was an existing person or whether this is an entirely idealised likeness.

Venus entrapped

Bartholomäus Spranger
(1564–1611)
Bacchus and Venus
Oil on canvas
172 × 114 cm
On permanent loan
from the Federal
Republic of Germany

With his left leg forward, the visibly aroused Bacchus presses close to the beautiful Venus. He embraces her, touching her breast, his right hand holding the raised arm of the flawless goddess of love while she gazes at the overflowing wine bowl in her hand as if in a daze. Spranger's sophisticated composition creates a delicate balance: the god of wine is seducing the goddess of love; that – according to the scene's highly condensed message – may be thrilling and beautiful, but it also entails dangers that are visualised in the form of an erudite symbol: a cheetah can be seen on the left, and behind it Cupid, portrayed as a boy, is feeding juicy grapes to an antelope – the beast's favourite prey. The wine will make the timid animal, which symbolises Venus, trusting and inattentive – an easy victim for the cheetah, in itself a common symbol for the god of wine.

In the exclusive princely world of the late 16th century, art was aimed entirely at a circle of connoisseurs and initiates: stories from ancient history and classical mythology, as well as unusual allegorical scenes, were just as much appreciated as subtle wit and overt eroticism. As court painter to the Holy Roman Emperor Rudolf II, Bartholomäus Spranger held an important office in Prague and served a clientele that delighted in decoding the complex allusions in his pictures.

Son of God or son of Rubens?

Peter Paul Rubens
(1577–1649)
Madonna with Standing Child
Around 1615/20
Oil on oak
63.5 × 47 cm

A stark naked, flaxen-haired boy with rosy cheeks looks out at us from the painting. In the protective presence of his mother, he looks brave but still a little unsteady on his own two feet: there is a touching immediacy about the boy Jesus in Rubens' picture of the Madonna. Perhaps the painter was able to depict this very approachable and human aura so convincingly because he based it on earlier studies of his son Albert and his first wife Isabella Brandt. At the same time, however, the portrayal is full of symbolism and evocative allusions. Rubens draws on the long tradition of half-length Madonnas and seems to have been particularly fond of Titian's works. And just like those older pictures, his painting contains a foreshadowing of Jesus' passion: set against the dark background, the glowing white, intense red and subtly shimmering blue of Mary's robe take on a radiant quality. The figure of the Mother of God is modestly reticent; her dark hair, covered by a black mourning veil, merges with the colour of the gloomy backdrop. As if foretelling what is to come, her head and gaze are downturned in humility, and the touch between mother and child culminates in the exact place where Christ is pierced in the side on the cross. In the Catholic Netherlands, Peter Paul Rubens' paintings of the Madonna sold like hotcakes.

Mesmerising surfaces

Gerrit Dou
(1613–1675)
Portrait of an unknown African
Around 1630/35
Oil on oak
43.4 × 33.9 cm

Gerrit Dou's paintings were admired and enthusiastically collected from early on. A pupil of Rembrandt, he was one of the most successful painters of his day. His diligence was legendary – as were the prices fetched by his internationally sought-after works. One of his biographers reports that a spread-out cloth was always suspended above the easel in Dou's studio in Leiden to prevent grains of dust settling on the smooth, finely painted surface, and another writes that Dou always put his brushes safely away for the same reason. Looking at the painting in Hanover, which shows a young black man in oriental costume glancing over his shoulder, such accounts are not hard to believe: the subject's glowing skin stands out vividly from the dark background, and the light reflections are so meticulously placed that even the smallest disruption on the surface would be intrusive.

As in many of his other paintings, Dou was not so much concerned with creating a portrait of a nameable person as with portraying the typical, striking characteristics of certain figures. In the Netherlands, such studies of heads, or "tronies" as they were known at the time, were extremely popular. Like our painting, they depict men in exotic garb, soldiers in unusual costumes, the wrinkled faces of old people or particularly attractive examples of feminine beauty. It was not unusual for these studies to be reused in larger-scale history paintings.

Unstable sensation

Willem Kalf
(1619–1693)
Still Life
Around 1655
Oil on canvas
66 × 55.6 cm

In the Netherlands of the 17th century, still life – the artistic arrangement of inanimate objects – became a highly prized genre of painting. The precious items and exotic fruits in Willem Kalf's ornate still lifes flatter the wealthy household, and as masterfully painted works of art these paintings are proof of exquisite taste. At the same time, however, their deliberately unstable, only seemingly random composition is a reminder that all things on earth are transient. With consummate skill, Wilhelm Kalf succeeds in balancing all these different aspects in his work. His paintings depict and amplify the qualities of the different materials and are characterised by their distinctive use of light. The pip of a fruit lying casually on the table is just as much an optical sensation as the goblet glittering in the deep darkness of the room, the Persian carpet lying across the smooth marble table top, the pitted texture of the brightly glowing lemon peel or the smooth Chinese porcelain bowl from the time of the Ming dynasty emperor Wanli and the hard reflections it creates.
When Willem Kalf began painting his ornate still lifes in Amsterdam in the 1650s he was living in the house of Johan Le Thor, a prominent merchant and one of the directors of the West India Company. The well-connected Le Thor owned objects like those in Kalf's paintings, and his collection no doubt served Kalf as inspiration.

Abraham Bloemaert
(1564–1651)
Arcadian Scene
1627
Oil on canvas
59.7 × 74.3 cm

Nice hat!

Abraham Bloemaert was fond of giving his Dutch clientele a taste of the sunny world of idealised Mediterranean landscapes. In this case, he combines a landscape composed out of just a few, wonderfully fresh colours with shepherds – a popular subject at the time. The shepherd and shepherdess are sitting on a little knoll near the lower edge of the painting, and we are witness to an amorous advance under the dramatic light of the sun. On closer inspection, however, the two young people's carefree encounter turns out to be decidedly suggestive: lying on the ground, the smirking shepherd is pushing his flute under the skirt of the woman, who is sporting a straw bonnet decorated with flowers. His erotic ambitions are obvious. In the Netherlands of the 17th century, shepherd scenes with erotic undertones were extremely popular and were also a common subject for prints.
Abraham Bloemaert, who ran a successful studio in Utrecht, is considered the founding father of what came to be known as the Utrecht school. The painters of this movement unleashed a veritable storm of enthusiasm for paintings with strong light-dark contrasts in the style of Roman baroque – and not only in the Netherlands. More than 100 painters are said to have started their careers in Bloemaert's studio.

Bathing Gentlemen

Michiel Sweerts
(1624–1664)
Men Bathing in the Evening Light
Around 1655
Oil on canvas
63.7×87 cm

Just before nightfall, some men have gathered to bathe in the river. In the darkness we can recognise occasional swimmers, a figure sitting on the riverbank and two young men joking and wrestling. On the right, we can just about make out a shadowy group of new arrivals. There is little sense of the exuberance normally associated with a bathing scene in the dark, even mysterious picture.

Only the figures in the foreground are depicted in bright light, as if illuminated by floodlights: the three male nudes in classic poses quite literally turn Sweerts' study of antiquity and nude painting into the subject matter of his work.

Sweerts, who had lived in Rome for many years, achieved a unique combination of Dutch genre subjects and the classical imagery of Roman art. His magnificently coloured paintings are evidence of intense reflection on the relationship between nature and antiquity, painting and sculpture. And his biography is just as unconventional as his pictures: on his return from Rome, he initially founded an influential drawing academy in Brussels before setting off on a missionary journey to China as a lay brother. He was dismissed from the missionary society due to unacceptable behaviour and eventually died in Goa on the west coast of India.

A painting with a soundtrack

Jacob Ruisdael
(1628/29–1682)
Hilly Landscape with Waterfall
Around 1670
Oil on canvas
70.7 × 56.4 cm
On loan from the family
of Dr Amir Pakzad

Jacob Ruisdael imagined landscapes in which the beholder sees "water cascading from one rock to the next, until it finally murmurs away", as Arnold Houbraken put it in his 1718 biography of Dutch painters, perfectly capturing the atmospheric waterfall paintings that Ruisdael had caused such a sensation with in Amsterdam. In the middle third of the picture, the river that meanders out of the background and around a cliff forks, plunges down an imposing sheer drop and crashes into a foaming torrent right before our eyes. The stormy sky intensifies the natural spectacle depicted on the canvas, and the superbly composed painting is structured by occasional groups of trees, gnarled stumps with vibrant yellow foliage or uprooted tree trunks floating in the water. The vertical format further underscores the power of the cascading water. By contrast, the figures on the path at the foot of the cliff and on a bridge further in the background look tiny and inconsequential. Ruisdael might have included them in order to visualise humankind's insignificance in the face of nature. At the same time, they draw our gaze into the depths of his elaborately composed imaginary landscape. Jacob Ruisdael, who started working in Amsterdam in 1656, borrowed the waterfall motif from the paintings of Allaert van Everdingen. But whereas the latter drew on sketches of his own trip to Scandinavia for his paintings, it appears that Ruisdael never left the flat expanses of his home country.


4 1/2
GU·TE
PF:

Beer money

4½ "Gute Pfenning", 1691
Electorate of Braunschweig
und Lüneburg, Fürstentum
Wolfenbüttel
Rudolf August and Anton Ulrich,
co-rulers (r.: 1685–1704)
Copper-silver alloy
(billon), 0.905 g
Diameter: 18 mm

The coin is a nice silver colour, despite the fact that it was minted from a relatively low-grade copper-silver alloy with less than 50 % silver content. When it came to producing small-denomination coins, silver had one particular property that was a considerable advantage: in alloys, the "white" metal has such a high tinting strength that the coin looks silver despite its high copper content. The technical term for this alloy is "billon". This trick was actually quite common in the monetary systems of times gone by. But what is remarkable about this particular coin is its denomination, i. e. the face value of four and a half German Pfennig. Nothing like it exists outside Lower Saxony! It is unique in the history of coins and money, only occurs for a few decades and is directly linked with beer consumption during that period.
As long as towns and cities did not have an adequate supply of clean drinking water, beer was an important source of nutrition because, thanks to the brewing process and its alcohol content, the beverage contained hardly any disease-causing germs. It also supplied the working population with much-needed calories for the manual labour that most people earned their living from. In those days, however, beer had a much lower alcohol content than modern-day recipes.
In 1680, a beer tax increase in the Duchy of Braunschweig-Wolfenbüttel raised the price of a litre of beer from 4 to 4½ Pfennig. This caused problems in everyday life because there were no half-Pfennig coins. And that is how 1½ and 4½ Pfennig "beer coins" came to be minted in the principality of Wolfenbüttel and beyond. However, the coins were not practical for other payments, which is why they ultimately disappeared from purses and coffers 70 years later.


APPARUIT ET FUGAVIT HOSTES IMPERII.
G.S
EXOPTATA VICTORIA GEOR
GII II. MAG: BRITT: REG
CONTRA GALL: 27 IUN
1743 DETTINGÆ
OBTENTA.


INFLUXUS IN LEONEM NUMINIS, PARAT OBITUM LILIIS.
SIEHE ICH WILL UBER
EUCH EINIGES VOLCK
VON FERNEN BRINGEN EIN
MÆCHTIG VOLCK.
IEREM: C.5. 15

Medal commemorating the Battle of Dettingen on 27 June 1743
Electorate of Hanover/Kingdom of Great Britain and Ireland
George II (Georg II August; r.: 1727–1760)
Medallist: Christian Schirmer (1679–1751)
Minted in Königsberg (Prussia)
Silver, 58.675 g
Diameter: 56 mm

Can medals lie?

Medals are commemorative items rather than a means of payment: their elaborate reliefs serve as a reminder of notable individuals or of historic and current events. This one shows the Battle of Dettingen (near Aschaffenburg), in which George II of Great Britain and Ireland boldly rode at the head of his troops. The imaginative illustration tells the story of these dramatic events, doesn't it?

At the time, George was the British head of state as well as commander in chief of the army, but he also played a role on the continent as the Elector Georg Augustus of Hanover (or of Braunschweig-Lüneburg, to use his official title). The Electors of Hanover ruled the British Empire in personal union for 123 years, but the electorate and the Kingdom of Great Britain and Ireland were constitutionally separate.

At the Battle of Dettingen in 1743 the British, the Hanoverians and their allies defeated the French – a prime example of how the various states of a personal union were intertwined: they naturally belonged together and stuck together, especially when danger was imminent. However, George II did not actually take part in much of the battle: the king had fallen off his horse when it bolted. Even so, Dettingen went down in history as the last battle that a British king personally participated in.

This medal was not an official issue and was therefore not directly intended as a political propaganda tool for the court. In the baroque era, medals were extremely popular and there were many medallists who earned a living by making, publishing and distributing them. The medallist who designed this particular specimen no doubt realised that the glorification of a celebrated event would sell better than a king who had fallen off his horse.

Part-time lake in a prime Rome location

Giovanni Paolo Pannini
(1692–1765)
The Piazza Navona in Rome flooded
1756
Oil on canvas
95.5 × 136 cm

From an elevated perspective, Giovanni Paolo Pannini shows us what may well be the most beautiful baroque square in Rome: the Piazza Navona. On the hot weekends of August, the fountain drains were blocked off and the square was deliberately flooded in order to celebrate the "Festa del Lago" – the Festival of the Lake. Anybody who could afford it drove through the cool water in a coach, while the rest of the population watched the social event from the neighbouring palaces and the edges of the square. Pannini, who was much sought-after by his aristocratic clientele for his paintings of baroque festivities, has succeeded in capturing not just the topographical features of the square but the delightful mood of the celebrations as well. Painted with loose brush strokes, the gently rippled surface of the water is structured and animated by the striking shadows of the row of buildings on the left and the reflection of the famous Fountain of the Four Rivers by Gian Lorenzo Bernini. Under the clear blue sky, the right-hand side of the square stands out in all its nuances, gleaming in the low evening sun, while the merriness of the festively dressed crowd is palpable even in the shadowy corners at the far end of the square. Pannini often painted events like this several times over and then sold the pictures to different art lovers.

Francesco Guardi
(1712–1793)
Imaginary Landscape with Buildings on the Lagoon
Around 1790
Oil on canvas
59.5 × 72 cm
On loan from the
Fritz Behrens Foundation

Venice's backyard

In this painting, the Venetian painter Francesco Guardi creates a landscape by the sea where a modest settlement can be seen through the ruins. There are people working in the houses, a few smoking chimneys and, here and there, a cloth that has been hung out of a window to dry. Underscored by the size difference between the tiny staffage figures and the huge column on the left, the simplicity of everyday life is juxtaposed with the decaying splendour of antiquity. Perhaps it was this kind of discord that Guardi's Italian contemporaries had in mind when they accused his pictures of lacking dignity. He was more popular among travellers to Italy, which was becoming a fashionable destination at the time – especially for the English. The tourists recognised the picturesque charm of Guardi's paintings: they bought his works as souvenirs of their trip to Venice and appreciated both the atmospheric scenes he painted and his spontaneous, almost sketch-like way of applying paint. His almost impressionistic style clearly sets Guardi apart from his predecessors, as is convincingly demonstrated by his "Imaginary Landscape with Buildings on the Lagoon". The painting – which is in excellent condition – stands out for its shimmering brushstrokes and gleaming yet always slightly muted light; like many of Guardi's other works, it evokes a wistful, romanticised mood. Guardi was the youngest in a line of distinguished Venetian artists and took the capriccio genre – the painting of imaginary landscapes and architecture – to new heights.

The joys of fatherhood

Johann Heinrich Tischbein the Elder
(1722–1789)
The Artist and His Daughters
1774
Oil on canvas
69 × 57 cm
Gifted by Mrs Mercedes Bahlsen, née Tischbein, 1980

During the Enlightenment, the bourgeois family became an important theme in literature and the fine arts. That had an effect on self-portraits, too, and artists took to presenting themselves surrounded by their own family. This painting shows Johann Heinrich Tischbein the Elder, who is also referred to as "the Kassel Tischbein" to distinguish him from other artists from the Tischbein family who shared the same name. He and his two daughters are pictured in his grand house on Boettcherstrasse, in Kassel, in a sitting room that evidently doubled as a study. With one arm resting on the back of a chair, he is standing in front of a picture he just had scetched, holding a maulstick, a palette and some brushes.
Caroline, his eldest, is leafing through a portfolio of drawings, while the youngest daughter has put her needlework down to turn her attention to the family parrot. Surrounded by books, antique sculptures and his own paintings, Tischbein presents his household as educated, industrious and artistically inclined. The artist was a widower; both of his wives died early, but they make an appearance in the picture all the same: portraits of them by his own hand decorate the wall in the shadowy part of the room. Echoing the style of the day, his biographer Engelschall wrote: "Even at his easel, Tischbein savoured the joys of fatherhood."


HISPAN·ET·IND·REX·M·&R·F·VI·
NEW SOUTH WALES
1813


NEW SOUTH WALES
1813


FIFTEEN
PENCE


CAROLUS·IIII·DEI·GRATIA·
SHILLINGS
FIDEI
·1795·

Holes in coins to plug holes in the budget!

Counter-stamped Spanish piece of eight coin (peso, around 1800)
Kingdom of Great Britain,
for New South Wales (Australia)
George III (r.: 1760–1820)

5 shillings 1813
Silver, 21.22 g
Diameter: 39.5–40 mm

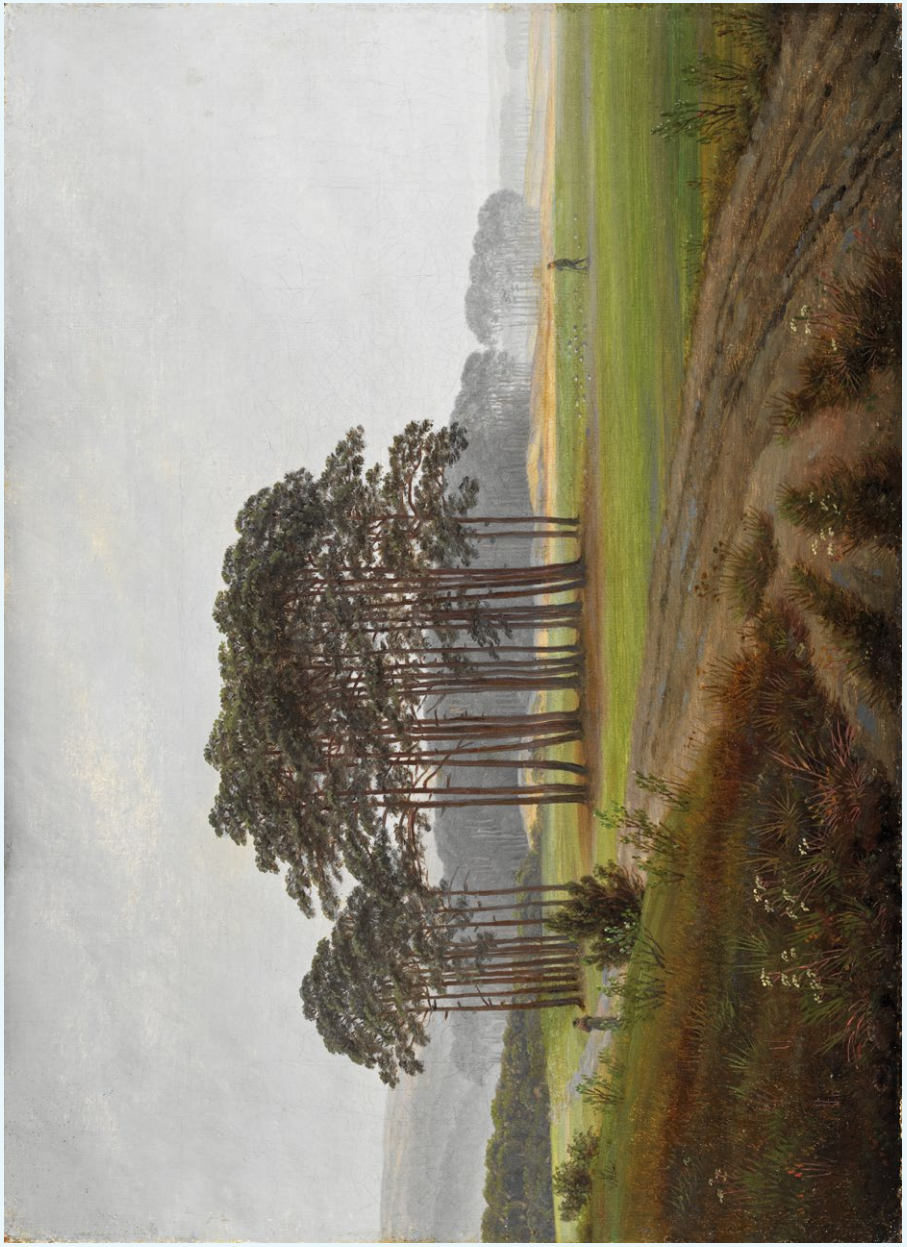
15 pence 1813
Silver, 5.66 g
Diameter: 19 mm

It was a Scotsman by the name of Lachlan Macquarie (1762–1824) who created Australia's very first coins: the "holey dollar" and the "dump". Today, they are one of the great rarities in the history of coins and currency. Australia was evolving from a penal colony into a modern state. And that meant it needed money! Macquarie was governor of New South Wales from 1810 until 1821 and, in 1813, solved a difficult problem in an unusual but "typical Scottish" way: because there was an acute shortage of coins in Australia, he had 40,000 older Spanish dollars turned into two coins each by stamping a small disc out of their middle. The coins with a hole in the middle were called "holey dollars". The Spanish pesos were originally worth 5 shillings each, the equivalent of 60 pence, and the new "holey dollars" were given the same nominal value. The punched-out and re-minted discs, on the other hand, were only worth a quarter of that amount, i.e. 15 pence (or 1 shilling and 3 pence). These little coins were known as "dumps". As a result, Macquarie managed to turn one Spanish silver coin into two British coins! At a single blow, he doubled the number of coins in circulation and, by using the "dumps" as a fractional denomination, even increased the money supply by 25 percent. Sometimes, when change was needed, large coins were cut into pieces. That is by no means unusual. Numismatists have a special term for it: "cut money".
And by the way, the colloquial names of the coins are also a play on words: who would not want a "holy" dollar as opposed to a "worthless" dump!
The unique but rather odd shape of the coins prevented Australia's first official currency from spreading elsewhere: although Spanish pesos were internationally sought-after trade coins, nobody outside of Australia wanted pesos with a big hole in the middle!

A day in the countryside

Caspar David Friedrich
(1774–1840)
Cycle of "The Four Times of Day"
Around 1820
Oil on canvas
Morning: 22 × 30.7 cm,
Noon: 21.5 × 30.4 cm,
Afternoon: 22 × 30.7 cm,
Evening: 22 × 31 cm

The Landesmuseum in Hanover is the only place where a complete cycle of the times of day by Caspar David Friedrich has survived. These four paintings are open to all sorts of different interpretations: they can be viewed through the lens of natural philosophy as well as from a religious or even a political point of view.
"Morning" may well be an allegory of active life, because in front of the lifting fog that hovers over the peaceful pond, we see a lone fisherman going about his daily work. "Noon", which depicts a wide track and a shepherd in the meadow, could actually be seen as representing the course of life and our relationship with nature. And there is no reason not to attribute "Afternoon" with the symbolism of mortality, as indicated not so much by the horse and cart in the middle ground as by the juxtaposition of ripening and harvested cornfields in the foreground. Last but not least, the theme of "Evening" would be the "religious take", because at the centre of the picture, in the middle of an open forest, there are two shadowy figures watching the sunset – two men who do not work in the natural landscape, but who are lost in contemplation of both nature and themselves. Friedrich often painted figures seen from behind, and they always allude to the beholder of the artwork because they visualise the act of looking at nature and reflecting on our relationship to it. Whether or not the four paintings show precisely identifiable terrain is less important for their interpretation – although if they do, there is a good chance the locations would be in the Harz, or the Giant Mountains on today's Polish-Czech border. However that may be, there are meticulous underdrawings beneath the paint, based on painstaking artistic autopsies of natural scenes that were sketched outdoors. Friedrich is the leading exponent of German Romanticism and ultimately, in keeping with the spirit of the movement, his view of the landscape and nature is religiously motivated – both in a Christian and a pantheistic sense, inasmuch as it is based on the idea that nature has both a soul and spirit. As a result, the "external" face of nature becomes a mirror and a point of reference for the "inner" world of humans.



Drama and tranquillity

This glimpse of untouched nature records a brief, fleeting moment that could end in an instant if the trees come crashing down or the animals start and run away.
On the left, an escarpment gleams golden yellow in the sunlight. Like a wound, the sandy insides of the earth are exposed, the drama of erosion accentuated by the dazzling spotlight. The trees are dangerously close to the edge of the precipice. They could topple into the ravine at any moment – like the two dead trunks by the watering hole in the foreground. Behind it, a group of red deer has gathered on a lush green meadow to graze peacefully. The animals have raised their heads attentively, evidently in reaction to something that has disturbed the peace and quiet of this natural idyll.
The painting owes it extremely suspenseful impact to its theatrical lighting, to the abrupt change from brightness to darkness, from light to shade. This effect is enhanced by a combination of complementary hues that contains all the primary colours, by the masterful fleetingness and pastosity of the brushwork, and last but not least by the extreme changes in the direction of the lines.
It is this dramatic impact that distinguishes Blechen's landscapes from those of his great idol Caspar David Friedrich. Blechen was also the first German painter who depicted industrial landscapes, too, and thus also the eradication or simply the disruption of untouched nature by human hand.
There is nothing calm about the forest gorge and red deer, and yet a sense of tranquillity dominates all the same – perhaps just for one more brief, final moment, it seems like paradise.

Karl Blechen
(1798–1840)
Forest Gorge with Red Deer
Pre-1828
Oil on canvas
98.7×81 cm
On loan from the Federal Republic of Germany

Shipwreck with chalk cliffs

A storm is raging over the rugged Danish coast; a blanket of dark clouds hangs above the churning sea. The steep, craggy rock faces of gleaming white chalk tower over the beach. The chalk cliffs of Møn are an extremely common motif in Danish art from the first half of the 19th century. Formed around 70 million years ago, the steep coastline in the east of the island rises to a height of up to 128 metres and is constantly threatened by major landslides as a result of erosion.

Sødring's spectacular picture is considered a prime example of the Copenhagen school, which paved the way for realistic plein air painting – the practice of painting out of doors rather than in a studio – and heralded a departure from idealism in terms of both style and content. That also entailed striving for scientific accuracy when painting geological formations and meteorological phenomena.

However, the painting is open to further interpretation as well: on the narrow beach, immediately below the mighty cliffs, we see an assorted group of onlookers watching a stranded ship at the right-hand edge of the picture. The shipwreck caused by natural forces can be interpreted politically, because in 1814 Denmark had lost its status as a great power and was reduced to a small state. From then on, the national identity fed on the idea of "the homeland", and the Danish landscape became a popular subject for paintings. In this interpretation, the rays of sunlight refracted by the cliffs would point to the awakening of a new national pride that popularised the beauties of Denmark's nature.

At a far more general level, the painting also exemplifies a phenomenon that was taking hold throughout Europe at the time: the touristic development of landmarks in combination with the artistic conquest of local landscapes that were considered specific to one's own country.

Frederik Sødring
(1809–1862)
Chalk Cliffs on the Island of Møn
1831
Oil on canvas
100 × 163 cm
Bequest from Margarete Köhne, 2006

New shores

Carl Hasenpflug
(1802–1858)
Walkenried Abbey
1850
Oil on wood
89 × 75 cm

Even an intrepid hiker would have a hard time making their way through the abbey grounds: they would have to negotiate obstacles and avoid the hazards that could be lurking under the thin covering of snow. There is not a soul in sight, just the erect tombstone of a knight whose salvation the abbey's monks once prayed for.

Hasenpflug shows the ruins from close up and gives them a monumental quality. We are looking at the inner side of the west facade over the remains of the side aisle, the gigantic size of which is evoked by the bases of the pillars. Located in the southern Harz, Walkenried is the third-oldest Cistercian abbey in Germany and was completed around 1300. In the 18th century, it served as a quarry for building materials and its survival was severely threatened at the time the painting was made. Hasenpflug was probably aware of that, and his picture can be interpreted as evidence of the Romantics' desire to reconstruct and document the past with scientific accuracy.

But the painting also says something about the artist's spiritual relationship to closeness and distance and to the cycle of decay and renewal. The sacred ensemble becomes the symbol of a lost era; a monument to human achievement is being reclaimed by nature, the rhythm of which determines the measure of human existence, too. Countless shoots are pushing their way through the winter snow, new life is growing in every recess, on every projection and out of every crack in the masonry.

The ruined castle shrouded by mist on a mountaintop in the background is a purely imaginary addition. It indicates the "wandering artist's" longing for faraway places, his sense of departure and urge to discover new places. Hasenpflug's painting visualises a romantic but universal human dilemma, because every time we reach a destination, what was once faraway becomes familiar and curiosity becomes knowledge. The next hike, the next stage in the adventurous journey of life will follow – or to paraphrase Goethe: "A new day beckons to new shores."

The cathedral and the girl

Louis Ammy Blanc
(1810–1885)
The Churchgoer
1834
Oil on canvas
112 × 77.7 cm

In view of how often her picture was copied, she must have been a star by today's standards. And her image was not just reproduced in the form of prints: copper and steel engravings and lithographs were made of it as well. It can also be found in the pattern books of tapestry and porcelain makers. And particularly on (collector's) cups!

So, who was this icon of the German Biedermeier era? There is little in her life story to explain her popularity: Gertrud Küntzel, the wife of cavalry captain Eduard Küntzel of the Düsseldorf Hussar Regiment, was the daughter of a Rhineland industrialist. By all accounts it was a happy marriage, but Gertrud died young after the birth of her first child.

Blanc, a pupil of Friedrich Wilhelm von Schadow and an exponent of the Düsseldorf school of painting, created at least three painted versions of this motif himself; the first of them, from which all reproductions are derived, is the picture in the ArtWorlds.

The power of the magnificent composition is undoubtedly enhanced by the fact that the girl is pictured in front of the colossal facade of Cologne Cathedral, which had been left incomplete since the Middle Ages. At the time the painting was made, its completion was being planned – and becoming the symbol of a German unification movement. As a result, there are echoes of both the Romantic fascination with ruins and national glorification in this subject matter. The impact of the perspective is unparalleled: the setting is raised off the ground, we find ourselves several storeys above the street. The upper levels of the cathedral towers underpin the composition and frame the girl; at the same time, her head rises above the architecture as if to complete and crown it.

The lavishness of the expensive traditional costume is every bit as impressive as the fantastic architectural scenery. She is depicted as a churchgoer – full of demureness and humility, even though she is not actually in church. Trusting in authority, god-fearing and blessed with a graceful, impeccable physical appearance, she embodies the Biedermeier ideal of femininity.

A laid-back baron

Ferdinand Georg Waldmüller
(1793–1865)
Portrait of Baron Moser
Around 1833–1835
Oil on cardboard
74 × 58.2 cm
Property of the City of Hanover

The artist presents the largely unknown aristocrat in a highly prestigious setting: even the fact that he is depicted as a full figure is a mark of esteem, further reinforced by the choice of the objects that surround him. His clothing is fashionably elegant, and the top hat befitting his social status is perched on the armrest of the bench in such a way that its exquisite red velvet lining is visible – and adds a splash of vibrant colour to the dark blue tailcoat. Moser is sitting, almost as if enthroned, on an antique-style marble bench in front of his own estate.

At the same time, he has adopted a rather unorthodox and highly informal pose. The baron's legs are slightly crossed, his right hand is lying nonchalantly on his thigh and his left arm is resting casually on the bench. His unbuttoned waistcoat is another indication of the very private relaxation we are witnessing, as is Moser's gentle smile – at the time, it was still rare to emotionalise the subject of a portrait in this way.

The painting also owes part of its appeal to the photorealistic rendering of the skin, especially on the face. There is an extremely sharp and precise quality to the portrait; the plasticity of the figure borders on the extreme and is further reinforced by the fact that the muted colours and absence of contrasts in the background make the distant scenery dull in comparison to the technical brilliance and vibrant colours of the main figure.

Since 1829, Ferdinand Georg Waldmüller had been a professor at the Vienna Academy and was the curator of its collection. Later, his rejection of the academic doctrine of art, and in particular his preference for studying nature as opposed to copying the old masters, often brought him into conflict with his fellow professors, culminating in his premature retirement in 1857.

Today Waldmüller is considered one of Austria's most important Biedermeier painters and his pictures continue to enjoy great popularity.

Venus after the bath

Josef Ernst von Bandel
(1800–1876)
Venus at Her Toilet
1838–1844
Marble
Height: 166 cm
(including base)
Diameter: 63 cm

The life-sized goddess of love is sitting on an ornate three-legged stool with her right leg tucked under; her robes have slipped down around her. A richly ornamented jewellery box stands at the naked figure's feet, overflowing with pearl necklaces and a hair band. Fresh from the bath, the beautiful Venus is braiding and tying her flowing hair and arranging the tresses on her head.

But it is not just the goddess' hairstyle and classic profile that are captivating; the depiction of her entire body is inspired by the art of antiquity. In particular, the artist based his sculpture on the Capitoline Venus, even though the latter's posture is totally different. When Ernst von Bandel was making the initial models for his Venus in 1831/32 and 1834, the famous Roman statue – a copy of the lost Aphrodite of Knidos by Praxiteles – had just gone back on display in the Capitoline Museums in Rome.

Bandel started work on his Venus in Carrara in 1838, during his second trip to Italy. After a long interruption he completed it there between 1843 and 1844, and in 1846 the marble sculpture with its smooth, once highly polished surface went on show at the 14th Hanover Art Exhibition.

During those years, Bandel had started work on his most famous work of all: the Hermanns-denkmal. The monument features a colossal 26-metre-high statue of Arminius, with references in style to antiquity, at least in some minor details. Erected in 1875, it stands in the Teutoburg Forest near Detmold, at what was believed to be the site of the battle of the Teutoburg Forest, witnessing the decisive defeat of the Roman legions at the time. However, it was his statue of Venus at her toilet that Bandel described as his "principal and most magnificent work".

On the Ides of March

Karl Theodor von Piloty
(1824–1886)
The Murder of Caesar
1867 (or 1865)
Oil on canvas
147.5 × 239.5 cm
Property of the City
of Hanover

In 44 BC, the military commander and statesman Gaius Julius Caesar was declared dictator in perpetuity and thus became the sole ruler of Rome. He then began planning wars and conquests that would pave the way for world domination. About 60 men from the nobility and Caesar's personal entourage formed a group in opposition to his regime. On the famous Ides of March (the middle day of the month), the conspirators stabbed Caesar to death. The day before his assassination, Caesar is said to have been warned by a soothsayer: "Cave Idus Martias" – "Beware the Ides of March!" The phrase was popularised by William Shakespeare's play "Julius Caesar", the third act of which also served as the literary source for Piloty's painting. As in the famous drama, Metellus Cimber kneels before Caesar to plead for amnesty for his banished brother.

The ruler's reaction – his rejection – is clear from his recoiling body language, rhetorical gesture and facial expression. The first to react to the refusal is Servilius Casca, who is standing behind Caesar and has already raised his dagger to make the first thrust. Brutus, who is also about to pull his dagger out of his robes, can be seen on the right-hand edge of the picture.

Since 1856, Piloty had been professor of history painting at the Academy of Arts in Munich – the Mecca of German art at the time – and his prowess is evident in the way he stringently develops the painting's composition along an ascending diagonal running from left to right. His technical brilliance is also apparent from his rendering of the lavish stone floor that opens the setting up towards us. The scene is dramatically lit from the right, with the sunlight adding symbolic commentary.

Piloty's picture is a masterpiece of German history painting and has become part of the nation's visual memory.

A veil of light and steam

Claude Monet
(1840–1926)
Exterior of Saint-Lazare Station (Le Signal)
1877
Oil on canvas
65.5 × 82 cm

In early 1877, Monet set up a studio near the Gare Saint-Lazare in Paris and started drawing interior and exterior views of the station. He used these preliminary sketches to create a series of 12 paintings – contrary to the widespread assumption that the impressionists only ever painted spontaneously, in the open air and directly in front of their subject.
In our picture, the painter is viewing the scene from a section of track outside the station. The tracks run diagonally from left to right, leading into the arrivals and departures hall. The steel girders of the Rue de Londres bridge can just be seen on the far left of the picture. The buildings and halls in the background stand in a triangle formed by several streets.
In order to be able to work on the station premises at all, Monet obtained a permit straight from the director of the western line. He only had to pay a few francs to have platforms closed off, trains stopped or engines stoked with extra coal so that they would produce more smoke – because ultimately, the way the light plays with the steam and smoke is the real subject of this painting and not, as in the other pictures of the series, the feats of structural engineering, the "cathedrals of technology". Of all Monet's station pictures, the one in the ArtWorlds exhibits the highest degree of abstraction, the greatest disintegration of material reality. Accordingly, it came in for severe criticism – not least of all because of the banal signal on the vertical central axis which, to make things worse, is also obscured by shadows!
Today Claude Monet is probably the most famous impressionist of all. The word impressionism is derived from his painting "Impression, Sunrise" and was originally meant pejoratively. But the term was soon adopted by those it aimed to rebuke, and they used it consistently to distance themselves from the established art world of the Salon de Paris.

So far and yet so near

Alfred Sisley
(1839 – 1899)
Welsh Coast
1897
Oil on canvas
53.5 × 64.9 cm

Along with Camille Pissarro, Edgar Degas, Auguste Renoir and Claude Monet, Alfred Sisley was one of the original impressionists and was involved with the famous exhibitions right from the start. Although it was painted two decades later, Sisley's "Welsh Coast" still embodies his swift technique, rapid brushstrokes and "on the spot" execution – just one of the reasons why the work is considered a masterpiece of French plein air painting.

The painter uses different techniques for applying the paint to create three distinct zones within the picture. The vivid impact of the overgrown slope on the left is achieved by thickly painted bright colours. The intensity of the violet, pink and turquoise hues fades in the shade of the triangular stretch of beach that follows on the right; there is nothing but the silhouettes of two strollers to indicate how far away it really is. Without this hint of three-dimensionality, the composition would seem almost abstract. It is completed by the second triangle: the sea zone, ablaze in the dazzling sunlight. A barely visible horizon divides the lower section of this area into another triangle – the sea – with the rectangle of the sky above it. An almost imperceptible steamship can be made out where the two meet. It is seen from the painter's and the beholder's vantage point at the top of the cliff, establishing a connection between the distance and the foreground.

The picture is part of a series of coast paintings that Sisley completed during a trip to England in 1897. They show various sections of the landscape and feature varying views and subjects. The bold diagonal composition that subdivides the picture into foreground and distance while nevertheless establishing a close link between them points to the powerful and enduring influence of Japanese colour woodcuts.

Auguste Rodin
(1840–1917)
Eve
Around 1881
Bronze
Height: 173 cm,
Base: 49.4 × 58.5 cm
Property of the City
of Hanover

Expulsion from paradise

It is hard to identify the life-sized bronze statue as a historical figure merely by looking at it because the powerful and thickset nude is totally lacking in attributes.
The woman's arms are wrapped around her upper body as if she is trying to protect herself from something. Her left hand is resting behind her right ear on her bowed head, causing her face to sink into the acute angle formed by the crook of her arm. Gripped with emotion, she seems to be trying to hide her face – a metaphor for the shame she feels. Her left palm is turned outwards, in a gesture not just of defence but of not listening. Her right arm is protecting her upper body, especially her breasts.
Whereas her right leg is straight, supporting her weight, the sole of her left foot seems to be lifting off the rocky ground, implying tentative forward movement.
There is no way of knowing the sculpture depicts Eve except for the story of how it came to be made. Rodin had been working on designs for the entrance portal of the Musée des Arts Décoratifs in Paris since 1880. Because it depicted scenes from the "Inferno" based on Dante's "Divine Comedy", this work came to be known as "The Gates of Hell". Rodin planned to flank the portal with two life-size bronzes of the first human couple: Adam was to stand to the left of the entrance, Eve to the right. Although he abandoned this design soon afterwards, the sculptures were nevertheless produced. The later reliefs on the wings of the door depict human failings and their punishment by spiritual and physical torment. This is already expressed by the bronze statues: Adam and Eve are the archetypes of private transgressions, responsible for humankind's suffering, but initially for their own. That is why Eve is turning away from the consequences of her sin in despair – to no avail. At the same time, she is trying to protect herself from those same consequences. But the first step has been taken, and the expulsion from paradise has begun.

How over what

With 17 paintings, portraits, townscapes, landscapes and still lifes in its possession, the ArtWorlds owns an unusually comprehensive collection of works by a painter who embarked on his artistic journey in the late Biedermeier period before ultimately arriving at a muted form of impressionism via naturalism and realism. Born in Vienna, Schuch is considered the main exponent of a loose association of artists centred around Wilhelm Leibl. These painters, known as "the Leibl Circle", attached great importance to the alla prima technique, an approach that aims to show that the painting has been "made". Mistakes had to be scratched off down to the canvas and then redone. Corrective superficial overpainting or varnishing was looked down on and considered unartistic. Essentially, it was strived to keep the paints evenly moist and paint wet-on-wet so that the finished picture looked as if it had been made in one go. The image was constructed out of short brushstrokes, each with a separate colour, in an attempt to create the picture entirely out of colour: small flecks were used both to give shape to objects and to indicate spatial dimensions. Accordingly, the objects in Schuch's still lifes are modelled out of areas of colour and not based on a precise preliminary sketch.
These still lifes, including our painting, occupy an important position in the history of art. Most of them were painted between 1882 and 1894, when Schuch was in Paris. During this time, he studied the works of Gustave Courbet and Edouard Manet intensely and became a trail-blazer of the "l'art pour l'art" aesthetic – the aspiration to create art for its own sake, without it serving any other purpose. Just like Paul Cézanne, Schuch spent decades looking not for the "what" in art but for the "how".

Carl (Charles) Schuch
(1846–1903)
Still Life with Apples
Around 1887–1890
Oil on canvas
61.6 × 78.5 cm

Worpswede as a brand

The "Moor Landscape" at the ArtWorlds is the biggest painting that Otto Modersohn ever made. Modersohn was a founding member of the Worpswede artists' colony, which is today considered a prime example of such creative communities.
The painting dates from 1903 – the end of the colony's heyday – and combines virtually all the standard subjects of the "Worpswede brand", depicting them in the rich and heavy tonal palette of black, brown, green, white and blue characteristic of the old masters. Those subjects include the canal through the moor, which combines with the path running along it to open up the landscape and create an extremely naturalistic effect. Moorland cottages, the damp dwellings of the peat cutters, were another popular motif. In this painting, the watercourse and the avenue of birches lead to such a cottage, simultaneously drawing our attention into the distance. Trees – and particularly birches – likewise play an important role in the colony's imagery. The specific but nevertheless often varied subjects also include the "girl by the tree", a component that Modersohn uses on the left bank of the canal: the child is standing all alone at the edge of a cut bank, her dress billowing in the wind. She is gazing longingly but hopelessly across the vast plain that opens up in the far distance to a place where, behind the cottage, the sun is shining.
"For we live under the sign of the plain and the sky," wrote Rainer Maria Rilke in his Worpswede monograph, which was published in the same year that Modersohn's painting was created. However, this enchanting land was a myth created by the artists: it was certainly not the land inhabited by the lost girl, who had no prospects whatsoever in her real, incredibly bleak life. But that did not matter to the artists, because for them the "biblical simplicity" of a lonely child, seemingly rooted in nature, was only meant to convey an abstract, thoughtfully melancholic mood – the same atmosphere communicated by the blue-black depths of the water running through the moor.

Otto Modersohn
(1865 – 1943)
Moor Landscape
1903
Oil on canvas
111 × 215 cm
Property of the
City of Hanover

“That’s my sister!”

Paula Modersohn-Becker
(1876–1907)
Nursing Mother
1903
Oil on canvas
70 × 58.8 cm
Property of the
City of Hanover

Josefine Wellbrock sat for the artist involuntarily. Paula Modersohn-Becker drew her secretly while she was nursing her daughter during a break from cutting peat – at least that is what her brother told the “Hannoversche Presse” newspaper in an article from Saturday, 18 June 1949 entitled “That’s my sister!”

The artist has zoomed in so closely to the half-length figure that her left elbow and unusually cut-off head do not even fit into the picture. The mother’s blank gaze reveals a state of permanent misery and daily exhaustion, and her skin has been weathered by the hard outdoor work. Both mother and child are dressed in poor, shabby clothes. The mother’s hands are “as big as frying pans” and contrast starkly with the rosiness of the baby’s flesh and the whiteness of her own breast. The picture focuses entirely on the two figures; nothing hints at the surrounding circumstances, nothing defines the space they occupy.

Throughout the centuries, mother-and-child portraits have been a popular subject for artists, their style and symbolism influenced by Mary and the baby Jesus. That goes for the artists in Worpswede, too, who often looked to the local inhabitants of the Teufelsmoor region for their subjects. Fritz Mackensen, for instance, who Modersohn-Becker once took drawing lessons from in Worpswede, exalted a nursing peasant as “The Moor Madonna” in a picture entitled “The Infant”.

For Modersohn-Becker, too, this was a subject that she returned to throughout her life. In her diary, she says of a mother-and-child drawing done in 1898: “And the woman gave her life and her youth and her strength to the child in all simplicity, without knowing that she was a heroine.” Her “Nursing Mother” painting from 1903 evokes neither heroic sacrifice nor glorification and promise, just resignation to fate. It is the totally unadorned portrayal of an impoverished life full of deprivation.

Life in an empty space

Vilhelm Hammershøi
(1864–1916)
Interior on Strandgade
1901
Oil on canvas
62.4 × 52.5 cm
Gift from the Sponsors Association of the State Gallery of Lower Saxony

There is a disturbing quality to the interiors that Danish painter Vilhelm Hammershøi is famous for, and which have led to him being called "the Danish Vermeer". Puristic, stark and dispassionate, they often feature rooms in the house at No. 30 Strandgade where Hammershøi lived with his wife in Copenhagen.

We see a simple parlour furnished and decorated in a late neoclassical, Biedermeier style – and can look out through the window at the facade on the opposite side of the street. It looks surprisingly close and exudes a powerful attraction. A woman dressed in black is looking out at the street from the left-hand window; she seems relaxed, but totally captivated by the outside world.

The picture invites comparison with Caspar David Friedrich's "Woman at the Window", which was created almost 80 years earlier. But in the Romantic painting, Friedrich's wife Caroline is staring out at passing ships and the landscape as if filled with longing. For Hammershøi's wife Ida, the model featured in this and many of his other paintings, there is no such view. Only the longing seems to remain.

Nor are we presented with a snug and cosy home. The colouring of the entire picture is subdued and muted, while the melancholy mood conveyed by the grey hues is enlivened somewhat by the diffuse daylight. That gives rise to shadows – like the cross on the wall above the open piano; others – like those cast by the front table legs – are inexplicable. The bareness of the room is strange, too: without the woman, it would look totally uninhabited. The calculated sense of apprehension is heightened by the absence of a chair in front of the piano, even though there are notes on display. But there would not actually be room for a chair anyway, because its position is occupied by a table covered with a white cloth. In front of the narrow section of wall between the windows, we see a vase on an occasional table. It is empty – just like the two picture frames above it. The windows seem hermetically sealed, the person's body is rigid. Silence reigns.

What a wonderful world

Max Slevogt
(1868–1932)
The Parrot Man
1901
Oil on canvas
81.5 × 65.3 cm
Property of the
City of Hanover

On a wide sandy path flanked by trees we see Burkhardt, a keeper who worked at the Zoological Garden in Frankfurt (Main) around 1900. Appropriately for "the parrot man", he is framed by four birds. A green Amazon parrot is sitting on his crooked lower arm and there is a blue-and-yellow macaw on a swing, accurately depicted with white cheeks and the colourful plumage that gives the species its name. A green-winged macaw is climbing on the keeper's shoulder. It owes its name to the colour of its wing coverts, but the feathers on its body are mainly red and the wings largely blue. Finally, there is a sulphur-crested cockatoo hanging upside down from a second swing, its striking crest flashing bright yellow between the keeper's legs. To begin with, the birds' magnificent colours focus our attention entirely on the dark brown figure of the zookeeper, before the outlines of four strollers draw us into the depths of the painting.

Although the elusiveness of the painting makes it impossible to precisely render the objects' different material qualities, they are nevertheless distinguishable from one another. This is achieved on the one hand by the intensity with which the paint is applied, which is at its strongest in the depiction of the main figure, and on the other by the changing directions of the brushwork. The path, for instance, is depicted relatively evenly, using slightly diagonal strokes of thick paint that correspond to the incidence of light. By contrast, the bushes in the background consist of irregular patches of thinly applied colour, leaving the canvas visible to make it seem as if the light is shining through the twigs.

Slevogt spent several weeks in Frankfurt in 1901, during which his artistic interest was particularly aroused by the animals in the Zoological Garden, which he had visited as a child. He completed numerous watercolours and drawings during this time, as well as 29 oil paintings that include three versions of "The Parrot Man". Slevogt's Frankfurt Zoo pictures are the first of his works to be entirely influenced by the impact of French impressionism.


Familie

A mirror of family life

Lovis Corinth
(1858–1925)
The Artist and His Family
1909
Oil on canvas
175 × 166 cm
Property of the City of Hanover

"Why don't you come into the studio? There's a big mirror in there, let's have a look at it." That is how Lovis Corinth informed his family that he wanted to paint them.
The resulting picture is exactly the same size as the mirror that Corinth used in his Berlin studio apartment in 1909. His daughter Wilhelmine, who was born in June of that year, had been christened there a few weeks before he did the painting. Dressed in her christening robe, she is cradled safely in the lap of her mother Charlotte, who was 22 years younger than her husband. The mother-and-child group seems to be the focal point of the family, and if nothing else is the centre of the group portrait's composition. The couple's son Thomas, who looks older than his four years, is standing on a footstool to the left and serves as a counterpart to his father on the right in terms of both composition and colour.
The painter looks as if he is playing a little joke – perhaps so that the baby will make big eyes at him in the mirror. The son is turning towards his father and seems to be laughing at his antics and face-pulling. There is something almost intimidating about the way Corinth, with his palette and brushes in both hands, is gesticulating wildly above the heads of his wife and daughter. At the very least, it seems reasonable to fear that the oil paints could spill onto their white clothes and make a mess of the lavish neo-baroque hat his wife is bedecked with.
Corinth was known to have a restless nature, which the picture seems to convey, and to be extremely tense before and during a portrait session. The children usually avoided their father's studio and found spending a long time alone with him difficult. And Charlotte, who was her husband's first pupil in drawing and painting and once had intended to become an artist herself, said of the sitting: "Constantly seeing all four of us in the mirror at the same time was very hard work."

Artistic self-analysis

Max Liebermann
(1847 – 1935)
Self-Portrait with Straw Hat
Pre-1915
Black chalk on paper
32.2 × 26 cm
Property of the City of Hanover

Besides an outstanding collection of Max Liebermann's paintings, the ArtWorlds also holds an excellent collection of his graphic art, including the "Self-Portrait with Straw Hat", which depicts the artist with a drawing pad, i. e. at work. Liebermann began filling his first sketchbook in the Berlin studio of his teacher Carl Steffeck from 1866 on – with copies of works by Titian, Ingres and Menzel. But he did not start making himself the subject of his art until very much later, and seems far less euphoric and passionate about it than Lovis Corinth. A comparison of this drawing with the latter's "family portrait" reveals that the two artists had very different characters.

The chalk drawing does not so much as hint at a setting. The only indications that Liebermann is portraying himself as an outdoor artist are the hat and the sunlight from the left. The shapes of his body are clearly defined, and although he has captured the strict outline of a classic three-quarter-length figure with all the skill of an old master, it looks as if it has been sketched with incredible swiftness. With his drawing pad in hand and dressed in informal middle-class attire, the stroller is turning slightly towards the beholder – and thus also towards the mirror that provided him with his model in the studio. Due to the fact that it is a mirror image, Liebermann is holding the chalk in his left hand, although the artist was actually right-handed. The sketchpad in front of his body consists of a large rectangle of blank paper and contrasts with the dark jacket and waistcoat. The artist is looking up from the paper for a second to focus on his subject. The very next moment, he will be sketching. But first, his keenly attentive eyes peer out from beneath the rim of his straw hat, and his raised right eyebrow embodies the concentrated gaze of a meticulously analytical artist.

A straight path to the lake

Max Liebermann
(1847–1935)
The Artist's Garden
1918
Oil on canvas
85.5 × 106 cm
Property of the
City of Hanover

In 1909, Max Liebermann bought a garden property at Lake Wannsee in Berlin – and was proud of the fact that he had earned the money he needed to buy it with art. It was here that the pioneer of German impressionism – already 62 at the time – had his own "little castle" built. Modelled on country houses in Holland and Hamburg, the building had its own studio and served the family as a summer residence from 1910 on.

The picture shows the garden as seen from the lake, which the painter has his back to. Looking from the west, we glimpse Liebermann's house through a little birch grove; we can just about discern the outlines of its yellow facade behind the grid of tree trunks. A dead straight path leads from the house to the beholder. Although it divides the green grounds in two, there are four trees in the middle of it obscuring the view. In the right-hand half of the picture, the composition opens up in the form of a reddish brown zone that was usually a flower bed but was sometimes used as a turnip field during the war.

On the lawn behind it, the – full-time! – gardener is working the soil of the park-like grounds. A splash of yellow signifies her headscarf, a dab of brown her head and a dash of light blue her body, partially immersed in the greenery.

Liebermann designed the estate together with his friend Alfred Lichtwark, the director of the Hamburger Kunsthalle. It was on his advice that the path leading to the water was executed in a straight line. However, Liebermann did not see any reason to cut down the trees to make room for the path. Today the painting is considered a late masterpiece of impressionist garden paintings. And rightly so, even if for no other reason than the rich play of colours and shadows caused by the light filtering through the treetops – and Liebermann's elusive yet masterful depiction of it on the canvas. In the meantime, the picture has even taken on a significant role in preserving German cultural heritage: the painting in Hanover was used to help reconstruct the current design of the property.

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überall geht ein
frühes ahnen
dem späteren
wissen voraus.

humboldt → 1769–1859

it is always an
early premonition
that paves the
way to later knowledge.


»roter franz«
claude monet,
the gare saint-lazare
½ made beaver token
Steller's sea cow
skull
cuban
crocodile
colon figure
quipu string
copper
cyclosilicate
quetzal


the golden panel
max liebermann,
the artist's garden
giovanni paolo pannini,
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