

2ND FLOOR

ENGLISH

SELECTED

EXHIBITION TEXTS



MAMUZ

SCHLOSS ASPARN/ZAYA

TEXT 01/ROOM 1

From stone to metal – it began 8,000 years ago

From stone to metal. The step is undoubtedly a big one. Without metal, there would be no efficient tools, no effective weapons and, all the more, no complicated machines. But it required several steps which, in the end, led to what we comprehend in archaeology.

We use archaeological finds to try to understand how it took place. We know the oldest metal objects and observe the gradual development. The individual eras of the Metal Ages are named after the new materials in each case – the Copper Age (around 4,000–2,200 B.C.), Bronze Age (around 2,200–800 B.C.) and Iron Age (around 800–15 B.C.).

Knowledge of metallurgy probably spread from the Middle East via the Balkans to Central Europe.

In the preceding Neolithic Period, the people already knew solid gold, copper and iron as rare materials.

The decisive breakthrough, however, was the discovery of how to smelt pure copper from copper ore. In the Copper Age the first copper tools arrive in Austria. They probably come from Southeast Europe. Those people who mastered the art of copper mining were undoubtedly in-demand specialists. Copper ore was excavated in mines from the start of the 4th millennium B.C. In the long run, the processing of the metal led to a division of labour within society and to the formation of professions.

But it takes almost two thousand years until the soft copper is replaced by the harder bronze. The Bronze Age is defined by a new discovery: alloying copper with tin to

make bronze. The artisanal and artistic bronze technology is raised up to a level of perfection. This material is easier to cast, can be forged better and is hardened more easily. This means that in the Bronze Age magnificent forms of jewellery, better tools and completely new weapons emerge.

Wide-reaching contacts are needed to cover the high demand for raw material. The ores are not easily available, after all, and tin deposits in particular are rare.

At the end of the Bronze Age and the start of the Iron Age, the high level of bronze working already seems to be almost part of the routine.

There is also a new material coming into play – iron. Like with bronze, the knowledge of iron smelting also spreads from the Middle East to Central Europe at the start of the 1st century B.C. The highest artisanal and artistic level is also soon reached with this.

Several thousand years pass from the first copper axes of the Copper Age to the finely decorated works of art of the Celts in the Late Iron Age. But every item along this path represents a milestone in history.

TEXT 02/ROOM 2

Fire in life – fire in death

Fire protects, fire provides heat, fire gives light.

Fire makes food edible, fire makes food last longer, fire preserves.

Fire creates farmland.

Fire hardens clay, fire melts metal.

Fire destroys houses, fire brings misfortune, fire kills.

Fire helps pass from this world to the next.

“Man is the only creature that dares to light a fire and live with it. The reason? Because he alone has learned to put it out.” *Henry van Dyke (1852 - 1933), US author and clergyman*

TEXT 03

Humans have been using fire for around 400,000 years

Lightning and spontaneous combustion are natural causes of fire. Humans in Europe have been using fire for around 400,000 years.

Fire does not only mean light, it also means protection against the cold, wild animals and insects. Heating food – by roasting it on an open fire or cooking it in lined pits or later in vessels – helps make food easier to digest.

In the Upper Palaeolithic Period around 35,000 years ago, fire is also used to fire clay for the first time. From the Neolithic Period this use becomes widespread. Vessels, statuettes, spinning and weaving utensils are shaped in clay and fired in pits or special ovens.

But if the fire gets out of control, the blessing becomes a curse.

Fires are not rare in prehistoric villages.

Here the misfortune of some people is good luck for others.

Wood residues preserved by carbonisation and seeds of cereal crops, fruits and herbs are unique messengers from a distant age.

Fire plays a particular role from the end of the Neolithic Period.

Fire is used to smelt metal, the new material copper. The new period is also named after this – the Copper Age.

TEXT 04/ROOM 3

Highs and lows – settlements on hills, flat graves and burial mounds

The room diagonal which is part of the architectural design tells of the settlements on hills and interments far below.

Fortified settlements, probably central locations, emerge on naturally protected hills in the Early Bronze Age. Stable fortifications with a wall and ditch aim to protect against attacks or perhaps also fulfil a prestigious purpose.

The location seems selected for strategic reasons, often close to a river or at the edge of a valley. The locations are possibly connected together. The horse as a mount and the use of carts make it easier to communicate and travel large distances.

Small clay wheels prove knowledge of carts, certainly not only in miniature form. In the settlements there are also parts of a harness, which prove the use of horses as mounts.

Often the settlement contains its own artisanal areas in the interior, sometimes there is also evidence of bronze working.

The people live in small hamlets with longhouses with post constructions, in between sunken storage buildings and smaller huts, perhaps outbuildings. An Early Bronze Age community of roughly 30 people is estimated.

Agriculture provides the basis of their existence. Since the Neolithic Age, people have gathered experience in the cultivation of grain and animal breeding. Cattle, sheep and goats remain popular domestic animals alongside pigs and dogs. Horses have been among the domestic animals since back in the Copper Age. Fish from nearby rivers complement the diet.

New field crops are added, the menu becomes more varied. Research indicates the cultivation of the spring grains barley, emmer, millet and the winter grains spelt and einkorn. In between, the fields lie fallow and are used as pastureland.

The important protein is now provided by the broad bean, which is maybe also used as feed for the animals in winter. Life is still hard and full of deprivation, however. Children in particular suffer from deficiency diseases. Many adults die in what today would be considered their “prime”.

In the Early Bronze Age the dead remain right next to the living. They are placed in a grave in a crouched position with their head in the south or north but looking towards the east. Usually the skeletons are buried in simple flat graves. Some graves have stone or timber constructions. In some cases the dead are burned.

In the Middle Bronze Age the burial customs change. The dead are now stretched out on their backs. Mounds are heaped over the grave, often made of stones. On account of this burial custom, archaeologists also give this period of the Bronze Age the name Tumulus Bronze Age. The dead are buried with their magnificent bronze jewellery. As impressive as the burial grounds of this period appear, we know very little about the dwellings. Archaeological excavations of settlements are rare.

TEXT 05

Flat graves in the Early Bronze Age, burial mounds in the Middle Bronze Age

In the Traisen Valley the cemeteries of the Early Bronze Age are right next to the settlements. The living do not put their dead far away, they keep them within sight. For 600 years they maintain the tradition and bury their

dead in the same cemetery. At Franzhausen around 2,400 graves were discovered – the biggest Early Bronze Age cemetery in the whole of Austria.

Usually they are rectangular up to oval shafts dug between 40 cm and 400 cm deep. Sometimes they put the dead in tree trunk coffins, often surrounded by and covered with stones.

Here they differentiate between men and women, only the crouched position remains the same for both.

They place the men on the left side of their body with their head pointing north, the women on the right side with their head to the south. Both always look to the east. The pottery vessels are probably originally filled with food and drink, the animal bones in the graves come from sheep and sometimes also from goats or cattle. In one grave there are fruit stones and even the seed of a grape vine.

Over the course of the Middle Bronze Age there is a change in how people deal with the dead. In Pitten, district of Neunkirchen, we can see the changes which occur over time. The Early Bronze Age tradition is continued at first. Flat inhumation graves dug in the ground with the dead in a crouched position count among these older burials.

Later the dead are buried under a burial mound. A ring ditch is dug, a stone cladding placed all around, a burial chamber built for the corpse and a stone mound placed on top. Occasionally another grave is dug inside an older

mound; the old mound is then rebuilt and piled up again. Are they relatives who shall also remain together in death? Or did the people have another close connection in life? Unfortunately we do not know.

At the end of the Middle Bronze Age the attitude to death changes again. The dead, in particular women, are burned more and more often. There are elaborate preparations preceding a cremation. The burned remains are then placed in a grave shaft in body length as if the body were still intact.

TEXT 06/ROOM 4

Transport of goods – transfer of knowledge over space and time

Europe in the Late Bronze Age – marked by changes. This room shows how material goods and artisanal knowledge from different cultures intertwine and therefore overcome geographical boundaries.

It is perhaps bronze which encourages contacts in distant countries because there is great demand for the raw materials copper and tin to produce bronze.

Copper was available from mines in the area which is today Austria. Where the tin came from is not certain. Some European tin deposits known today may have been used in the Bronze Age. But was this enough?

A large number of tin bars and other goods are transported in a sailing ship travelling in the

Mediterranean in the 14th century B.C. It sinks on the southern coast of what is today Turkey, close to Cape Uluburun. In its hold the sailing ship is carrying goods from at least eleven different cultures: goods coming from the Baltic region up to the Middle East as far as Egypt. At this time Akhenaten and Nefertiti, the parents of Tutankhamun, are ruling in Egypt. Diplomatic correspondence proves connections to the powerful empire of the Hittites in Asia Minor.

The Greek mainland is in the golden age of Mycenaean culture. Its products are also found outside Greece. Mycenaean swords find their way up to Georgia, in Bavaria there is an amber tablet with Mycenaean written characters, Mycenaean double axes are found in Ireland and Great Britain.

In Central Europe we have still not discovered writing, we do not have any written down messages. Information is probably passed on verbally from generation to generation.

Evidence from this period is in the form of archaeological finds, in particular goods from graves. With an increase in the population, already existing settlements increase in size and often become fortified, and new ones are also created.

There is now already almost 2,000 years of experience in the handling of metal. Casting techniques become more sophisticated, new forms such as sheet bronze containers and solid-hilted swords can now be produced. The required know-how is passed on verbally.

A way of treating the dead spreads over large parts of Europe in an apparently short amount of time. The Middle Bronze Age custom of burying bodies under a mound changes to burying the burned remains in an urn.

How do people know about each other?

How does communication work?

TEXT 07

Atmosphere of departure in the Late Bronze Age?

Like in previous periods, agriculture still remains the basis of existence. But new structures and organisations are required for the growing population. New territories, previously uninhabited, are now opened up.

Large villages spread out in the open lowlands. Long, hall-like residential houses, small buildings for artisans and post in ground storehouses are spread out over the settlement. These large farming villages are probably able to feed more than just their own communities.

This means a certain division of labour and specialisation are possible in the society. Hill fort settlements are of key importance.

Strategically advantageous places, always naturally protected, are reinforced with strong ramparts and provided with gate systems. On the ramparts there are often also additional rows of palisades to increase the feeling of security. Anxious times seem to demand such measures. On the other hand, communication networks

also become established with a flow of knowledge and goods.

The large fortified hilltop settlement on Schanzberg near Thunau am Kamp in the Waldviertel region is on a ridge with a good view of the surrounding land. A steep slope secures the site in the east and south, a powerful wall protects it on the other sides. The settlement is entered via two gates.

In the residential houses, baking ovens, weaving looms, storage pits and cellar areas ensure the inhabitants are supplied with the items they need every day. Casting moulds made of stone and clay even prove the existence of bronze working in the settlement.

After a disastrous fire, the inhabitants have to give all of this up. In hillside house 01, part of the house's inventory has been preserved by the fire and is found in its original position. Inside the house in a corner, a stove top remains preserved, on the outside wall there is the rest of a baking oven.

Many vessels near the stove illustrate the range of containers in a Late Bronze Age household. There is even a grinding stone for grinding grain still leaning on the house wall. Grain is also carbonised by the fire, which gives us valuable information on Late Bronze Age agriculture.

Barley dominates alongside emmer, einkorn, spelt, cone wheat and proso millet.

The already known high-protein plants pea and lentil are now joined by field bean and bitter vetch. False flax and poppy are used as an important source of vegetable fats. Where did the people go after they had to hastily leave their house and farm?

TEXT 08/ROOM 5

Hoard of the Bronze Age: offering, material storage place, hiding place – a bit of everything?

Like in a cramped warehouse, the different hoards are stacked in boxes here. Most of them are accidental finds. Sometimes they are found close to a prehistoric village. Often without any broader context. But it is always a surprise.

They are pottery vessels stacked neatly inside each other, carefully deposited objects made of copper, bronze and sometimes even gold.

These kinds of depositions begin in the Copper Age and reach their high point in the Late Bronze Age.

Ceramic hoards consist of a number of vessels, ranging from a few up to a hundred, carefully stacked in a pit. A food and drink offering seems to be the intention behind these depositions.

Smith's hoards are the name of those hoards which contain metal objects in different combinations.

Their composition varies and it changes over the course

of the Bronze Age. The Early Bronze Age ingot hoards consist of rings, brooches or axes. They are often interpreted as means of payment or standardised ingots. So-called equipment hoards are reminiscent of grave goods.

Magnificent bronze jewellery and other ornate bronze objects are a reminder that it is not only the value of raw materials that counts, it is also the object itself.

In some of these hoards there are additionally broken, used, often damaged metal goods. In other hoards people bury tools for metal working, distorted and broken objects, scrap metal, broken scrap metal and *aes rude*. Are they raw material storage places or offerings?

The main interpretation is that the jewellery hoards were a hiding place. What safe is safer than the earth? So safe that it can keep its contents secret for several thousand years?

TEXT 09

The phenomenon of the hoard

The depositions are interpreted as being part of someone's life and community. The fact that the items are buried close to or even in settlements seems to support this interpretation.

The different compositions of the hoards could indicate the possible incentives and backgrounds leading to the depositions.

It is primarily food and drink offerings which are connected with the vessel hoards, with a subsequent “disposal” of the vessels. These kinds of offerings are often made by farming cultures as part of periodically recurring annual events. Ritual actions are also assumed to be behind the so-called smith’s hoards. Maybe the earth is supposed to be symbolically given back a part of what was “robbed” from it previously from the mines.

Nevertheless some hoards must also be considered solely as material storage places or perhaps even hiding places. But it is curious that the items in these storage places are no longer retrieved in many cases. The so-called equipment hoards perhaps have similar goals to the smith’s hoards. With some equipment hoards and jewellery hoards we could also think of hidden “family silver”.

A hoard combines all elements of archaeological research into past cultures. It contains the sacred aspect of burial, the secular aspect of everyday life, the technical aspect of handcraft – even if the reason for the deposition is often not clear.

TEXT 10/ROOM 6

Handcraft in perfection

We have to ungrudgingly acknowledge that we could not do it better today. High quality, achieved without our modern technical means, leaves question marks and also admiration in our eyes.

The copper curtain here in the room separates the Hallstatt period from the La Tène period and represents a typical ornament of the era in question.

Pottery, metal working, textile art – the people of the Iron Age build on a tradition passed down verbally over many generations of artisans.

The results do not arise by chance. Targeted use and carefully considered application of experience are behind the articles of daily use, pieces of jewellery and weapons. Blacksmithing undergoes a particular period of bloom among the Celts in the Eastern Alpine region. Ironworking reaches a quality admired even by the Romans. Even according to today's standards, the wrought iron deserves to be called "steel".

The Celts also become masters in the area of glass-making. They manage to colour unworked glass and produce seamless bracelets – using a technique which is unknown in the Mediterranean countries.

Medical knowledge is widespread. Even skull operations (trepanations), which require great surgical skill, are often carried out successfully.

In the 3rd century B.C., Celtic tribes begin to mint their own coins in Lower Austria. At first these are based on Hellenistic coins, but soon they develop a system of coinage with their own weights and coin designs.

TEXT 11

Only the best is good enough for the journey into the afterlife?

Archaeologists try to portray everyday life, life and death using things which have remained preserved until today. Most and the best preserved objects come from graves. It is often assumed that the grave goods represent a social order, that they act like a “mirror” for the life in question. They should not only explain the wealth or the poverty of the dead while they were alive but also their status in the community.

The graves do not reveal the world of thought of the society, but they do give evidence of the customs used in dealing with death.

What change in people’s ideas is indicated by the burning of the dead on a funeral pyre and the burial of the remains in urns?

The spread of this practice can soon be seen over wide areas of what is today Central Europe. Archaeologists also call this period of the Bronze Age the Urnfield period. Why and from where does this burial custom start? Why is the corpse “destroyed”? In what way does this burial custom spread?

Maybe it is the expression of a communication network, which is also assumed for the distribution of the raw materials copper and tin.

The dead person is presumably burned in their best

clothing with the jewellery, weapons made of bronze and other personal items on the funeral pyre and the remains are then buried. But often there are also unburned items made of bronze in the grave alongside whole series of vessels which are not put in the fire either. Here we do not know whose property the objects in the graves are: do they belong to the buried people or to the surviving members of the family?

Even if we do not know the philosophy behind the burial customs, we try to see the people and to surmise their sorrow.

“Wherefore all these last offices and ceremonies that concern the dead, the careful funeral arrangements, and the equipment of the tomb, and the pomp of obsequies, are rather the solace of the living than the comfort of the dead.”

Augustine of Hippo, 354 – 430, Bishop of Hippo Regius, in what is today Algeria

TEXT 12

Giant mounds characterise the landscape of the Weinviertel region

They are burial sites which, for around 2,500 years, have been a reminder of the dead buried underneath them. In the Early Iron Age, the Hallstatt period, the burial customs are manifold. The dead are buried under a mound or, without a mound, in a flat grave.

In Lower Austria it is common practice to burn the dead,

together with jewellery, weapons and tools. The use of eating and drinking vessels as grave goods is of great significance. Are these for the last feast in this world or for eating and drinking in the afterlife?

The terrific burial mounds, either individual ones or in groups of three, like in Gemeinlebarn, Bernhardsthal, Rabensburg, Oberweiden, are impressive.

The biggest among them is the Großmugl, which is 14 m high and 46 m in diameter. It is now alone but was originally part of a small group which, unfortunately, is levelled today and can be seen only as an outline in aerial images.

In Absdorf, Gaisruck, Niederhollabrunn, Niederfellabrunn the impressive individual mounds are on an elevation which makes them look even more majestic.

“Lebern” or “Lewarn” means earthen mound

The “place where burial mounds are” is called

Langenlebarn in a document in 836 A.D. The burial mounds come from the Hallstatt period. One of these, Tumulus 3, contains a large burial chamber made of wood with an opulent dinner service.

The burned skeletal remains of the dead person were placed almost exactly in the middle of the grave, originally probably in a light wooden box. At least seven clay figures accompany the deceased, three of which are painted half in black and half in red. Like these figures, the equestrian figure and the vessel with attached bull’s heads are probably an expression of the ceremonies with this magnificent funeral.

TEXT 13

Coins with own design and own minting process

The Celtic tribes of Lower Austria mint their own coins from the 3rd century B.C. The idea for this comes from the Mediterranean area. In Asia Minor and among the Greeks, the production of coins is already known back in the 7th century B.C.

The model for the Celtic coins is staters (gold coins) of Alexander the Great of Macedonia (336 – 323 B.C.). The Celts managed to come into possession of such coins as mercenaries, with raids or via trade.

The Celtic coin finds north of the Danube (in Lower Austria, Bohemia, Moravia and parts of Slovakia) are attributed to the tribe of Boii.

This Celtic tribe is first mentioned in the Danube region at the end of the 2nd century B.C. One particular feature of this so-called Boian coinage is the idiosyncratic division into third, eighth and even tiny twenty-fourth pieces which are only 5 mm in size.

Celtic coins are minted piece by piece using hammers. The coin blank or planchet made of gold or silver is placed on a firmly embedded die with the motif on the rear. The coin is minted with a hammer blow on the front side die. Unfortunately such coiner's dies have very rarely remained preserved. Clay plates in which the planchets, the coin blanks are cast, are found more often though.

Most Celtic coin finds in Lower Austria come from the central settlement of Roseldorf, district of Hollabrunn.

At least 1,500 coins are known, it is therefore assumed Roseldorf had its own mint. Ancient forgeries of coins with a bronze interior and a precious metal coating are even found in Roseldorf.

It is also assumed there was a mint at the Oberleiserberg hill site. In addition, here we find many coins in particular from the 1st century B.C. which can be traced back to trade relations with the neighbours. The contacts which can be proved by the coins go up to the area of today's Slovenia, Hungary, Serbia, South Germany and France.

TEXT 14

Two sensational instances of Celtic medicine

In Guntramsdorf, district of Mödling, a 30-35-year-old man is having surgery on his skull. His left parietal bone is pierced (trepanned). The intervention is successful and the wound heals well. The drilled out small piece of skull is reinserted. A second operation on the right parietal bone, also a trepanation, is interrupted but this wound also heals well. Then there is a third intervention just to the side. This clover-shaped triple trepanation shows signs of inflammation at the wound edges. The patient does not survive for long after this operation. The reason for the surgical interventions has not been discovered.

It is a different story with the man from Katzelsdorf, district of Wiener Neustadt. The 30-35-year-old undergoes an operation because of an inflammation of the cranial roof. The aim is to heal the inflammation by drilling three holes.

Two holes are completed, the third is not finished. The patient probably dies during the operation.

In many cases, skull injuries and inflammations have been successfully operated on since the Neolithic Period. There is a lot of evidence of people healing after interventions. The trepanation used with the two men is a method known only in the Mediterranean area at the time. It is maybe a foreign doctor passing through who carries out these trepanations, in the period between 300 and 250 B.C. Or a local has learned the skills abroad and wants to use them in his home country. The level of success is rather modest.

The perforated skull parts sometimes found in settlements have nothing to do with trepanations as they were not produced until after death. The round pieces of skull are interpreted as amulets but may also have been used as kinds of relics in ancestor worship.

TEXT 15

A large Celtic central settlement in the Weinviertel region

The Late Iron Age is named La Tène period after a Swiss find spot. Archaeologists attribute the La Tène culture to the Celts.

How the Celts call themselves is largely unknown, however.

In an early period, the Celtic population prefers open

unfortified settlements, often close to rivers. They live mainly from agriculture. As self-sufficient people and skilled artisans, they make everything they need from many materials such as bone and iron and they also produce textiles.

An increase in the population means that some of these rather small villages become large central settlements. This is the reason for the emergence of a Celtic central settlement on the Sandberg hill near Roseldorf, district of Hollabrunn (around 250 – 130 B.C.). Magnetic measurements show a huge area of 40 ha, i.e. 400,000 m², with an enclosure ditch and a gate system in the south.

In the town-like settlement there is a lot going on. Beef cattle are delivered from the surrounding area and grain is stored in large quantities.

The people mint their own coins here. Foreign coins come to Roseldorf because of the lively trade and show that the people in Roseldorf have far-reaching contacts.

The sphere of cult and religion is connected with everyday life.

Seven square ditches, interpreted as sanctuaries, are remarkable throughout the whole of Europe. In these ditches there are large quantities of animal bones, pieces of jewellery, weapons, parts of carts and a horse harness made of iron. Many objects are twisted, nails and bore holes lead to the assumption of an installation, perhaps on poles.

In the square ditch of the so-called “Great Sanctuary” an antler of a huge stag was found. It could be part of a statue of the Celtic god Cernunnos, who is always shown in human form with a stag’s antlers.

Human bones in the moat of the “Great Sanctuary” could be connected with human sacrifices, ancestral worship or even cannibalism.

The research work is not yet complete, an explanation still has to come. The “Great Sanctuary” of the Sandberg hill is reconstructed at the museum’s open-air site.

Towards the end of the La Tène period, fortified hilltop settlements also emerge such as the Oberleiserberg hill. Just a few kilometres away is Michelstetten with workshops for pottery, iron and bronze working.

TEXT 16

The landscape changes

The square ditch of the “Great Sanctuary” of the Sandberg hill near Roseldorf contains an abundance of plant remains. Their archaeobotanical examination makes it possible to reconstruct the landscape in the La Tène period.

The extremely fertile ground surrounding the settlement contains extensive fields with einkorn, spelt, barley, millet and emmer. The high-maintenance pulses pea and lentil and also the oil seeds false flax, opium poppy and flax are grown in small gardens close to the houses. A grape

seed discovery indicates that there may already be small vineyards.

The swampy lowlands with their wet meadows and remnants of alluvial forest are used as grazing grounds for cattle and horses and for haymaking.

Sheep and goats, which are sensitive to wet conditions, probably graze on the higher up loess hills. We have to imagine the landscape around the settlement as being very open. With the high demand for wood for fuel, construction and woodworking, the woodlands may have dwindled away to small remaining areas. The forest is also used as a pasture area: pigs rummage around the forest soil, cattle and horses eat the saplings. Picking green branches as winter fodder and extracting litter for animal housing contribute to the overuse and clearing of the forest.



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