

The Egtved Girl

Travel, Trade & Alliances In The Bronze Age

Abstract

The Egtved Girl was buried in Egtved, Denmark 1370 BC. Famous for her well-preserved grave, she has become an icon for the Danish Bronze Age and the object of continuous archaeological study. The latest groundbreaking research has revealed that she was not local from the Egtved area but instead grew up far from present day Denmark, and travelled long distances in her short life. The Egtved Girl is thus directly linked to the trade and alliance networks that existed across Europe and the Middle East in the Bronze Age. This article wishes to sum up the Egtved Girl's fascinating story and bring new perspectives to understanding her identity and social role in the Bronze Age.

Key words: Early Bronze Age, Egtved Girl, Mobility, Identity, Travel, Trade, Oak Coffin Burials, Archaeology & Science.

Introduction

The Egtved Girl is an iconic female from the Early Nordic Bronze Age (1700 – 1100 BC). She was buried in a mound in Egtved, Denmark in the year 1370 BC, and has since she was found in 1921 personified the Danish Bronze Age (fig. 1). The Egtved Girl died as a young woman and her death has remained an enigma. Her

burial has been studied for nearly 100 years and continues to reveal new dimensions of Bronze Age life. New scientific methods have recently been developed making it possible to follow the young woman's movements from her early childhood years to her death and following burial (Frei et. al. 2015).

Fig. 1. The Egtved Girl in her coffin / Egtvedpigen i kiste. Photo: Roberto Fortuna & Kira Ursem, National Museum, Denmark.



A grave is revealed... The original investigation

The story begins in February 1921 when farmer Peter Platz in Egtved was removing a burial mound from his field. This was not illegal at the time and thankfully he stopped when he discovered something unusual – a large coffin made from an oak log. Believing it was an old grave of importance he stopped the work and wrote a personal letter to the National Museum in Copenhagen. (Hvass 2000).

When senior archaeologist Thomsen arrived in Egtved to inspect the find he was

not disappointed. It was indeed an oak coffin burial from the Early Bronze Age (fig. 2). This was the first oak-coffin grave to be discovered in Denmark in over three decades. In the previous century several other oak-coffin burials from the Early Bronze Age had been discovered, many of them showing remarkable conditions of preservation (Boye 1896).

At the site in Egtved, the lid of the coffin was carefully lifted. The inside of the coffin was exactly as when it had been sealed over 3000 years ago. Nothing was touched on

Fig. 2. The coffin in the mound / Kisten i højen 1921. Photo: National Museum, Denmark.



this preliminary inspection, and the coffin was transported via train to the National Museum in Copenhagen. Here it was to be investigated by archaeologist Thomas Thomsen in close collaboration with the conservators Gustav Rosenberg and Julius Raklev (Thomsen 1929; Glob 1970). It is this professional excavation and following conservation that is the reason why scientists still today, after almost 100 years, can carry out groundbreaking research on the Egtved Girl.

At the National Museum the excavation began. A cowhide had been placed as lin-

ing in the coffin with the hair towards the body. Under it a big woven blanket had been placed covering the dead. Everything organic in the grave was well preserved and coloured brown due to the acidic and waterlogged conditions in the coffin. Underneath the blanket the remains of a young woman was revealed. She had loose shoulder length hair, cut short at the front. Under her hair, the brain was still in place and the last enamel of her teeth preserved. A small container made of bark was placed near her head. Inside were several personal grave goods; a bronze awl with a wooden

Fig. 3. The Egtved Girl's belt plate / Egtvedpigens bælteplade. Photo: National Museum, Denmark.



handle, a hair net, a few cremated human bones and some organic material (moss, heather, wool and a leaf) (Thomsen 1929; Glob 1970 41ff).

The Egtved Girl's clothing consisted of a corded skirt and a woven blouse. To this day it is the only fully preserved corded skirt we know from the period. The skirt was 38 cm long, which gave it a length to above the knee. It was made up of many cords and wrapped twice around the waist. Around her waist she was also wearing a woven belt, which held a comb and a decorated belt plate made of bronze. The belt plate decorations were made out of spirals, a characteristic feature for the time (fig. 3). Around each wrist she was wearing a bronze bangle, and a small earring could be seen where her ear would have been. No proper shoes were found in the grave but her lower legs and feet were wrapped with irregular bits of clothing. Near the feet another piece of wrapped clothing was found. This contained the cremated bones of child and had carefully been placed by her side. A birch bark container had been placed in the foot end of the coffin. It had originally been placed on top of the cowhide and thus was one of the last things to go into the grave before it was sealed. At the bottom of this container the remains of a dried up drink was found. The residue was analysed and revealed that it had been an alcoholic beverage – a mix between beer and fruit wine made of wheat, cranberries or lingonberries, and myrtle. The drink was sweetened with honey (Thomsen 1929). The drink must be the last remainder of a ceremonial drink shared by the mourners at the funeral before it was given to the girl for her last journey.

A final detail of the grave was the find of the flower yarrow (*Achillea millefolium*) it was found by the Egtved Girl's knee on top of the blanket but under the cowhide (Glob 1970: 45). Thomsen does in his original publication not think much of the flower and regards its presence in the grave as a coincidence but maybe rather the flower should be interpreted as a touching gesture from the people left behind as a gift to the deceased. The little flower tells

us that the burial must have taken place sometime during the summer months. Also the yarrow is known for its medicinal purposes and this must already have been known in the Bronze Age. The Latin genus name derives from the mythical Bronze Age Greek hero Achilles who in Homer's *Illiad* is told to have brought *Achillea millefolium* to the battle of Troy to treat the wounds of his soldiers (Iliad book XI).

Rather than being a coincidence the flower could instead be seen to have some special relation to the Egtved Girl. Perhaps the young woman knew the healing powers of the flowers and was therefore also given one in bloom for her last journey? Knowledge of healing plants would have been of important value when travelling long distances.

Another burial

Thomas Thomsen returned to Egtved for further investigations of the remains of the mound. Here he learned that Peter Platz four years earlier had encountered (and removed) a big stone platform 4 m south of the Egtved Girl's grave. This stone paving had belonged to another oak-coffin burial but this was not preserved and had been robbed, presumably already in prehistory. This second grave was placed 0.5m above the original ground surface and it is therefore surmised to be later than Egtved Girl's grave (Alexandersen et. al 1981:22, Thomsen 1929). One can only speculate to the identity of the person in this second burial, perhaps it was the Egtved Girl's husband?

The Egtved Girl becomes famous

The Egtved Girl was an astonishing find and received much publicity when she was found and she was quickly given her name Egtvedpigen (the Egtved Girl) (Thomsen 1929). During his work with the grave the conservator Rosenberg drew a little sketch drawing of the girl (fig. 4) and this drawing is probably one of the reasons why the Egtved Girl has such an iconic status in Danish prehistory. The burial was so well preserved, with the clothing and jewellery intact, that

National Museum and the burial mound in Egtved.

The Clothing

The Egtved Girl especially became famous for her short corded skirt (fig. 6). In Denmark a total of seven well-preserved Bronze Age costumes from the Early Bronze Age are known (four male and three female), of which the other two females were found wearing longer skirts (Broholm & Hald 1935; Broholm 1938). The Egtved Girl's short corded skirt was therefore a break with the previous view on the Bronze Age female clothing as being covered up and demure. This young woman with her more daring clothing was seen as something exotic and she was quickly presumed to hold a special function in the society, perhaps a ritual dancer (Thomsen 1929).

The corded skirt is not, however, an unknown phenomenon from the period. It is known from other graves from the Early Bronze Age, albeit with poorer preservation. When no organic material is preserved the skirts are only recognised by small bronze tubes that have been found where the skirts would have been. This would have made a chiming sound when the woman moved. The short corded skirts are also seen depicted on small bronze figurines (fig. 7) as well as seen in rock art. It is therefore fair to assume that the corded skirt was not uncommon, but its function in society remains ambiguous and could hold ritual significance.

The girl's blouse was like the other pieces of clothing made of brown wool. Its cut and design is identical to previously known female blouses from the same period (Broholm 1938: 31). Reconstructions of the Egtved Girl's costume have brought new thoughts on the type of wool used in the Bronze Age which was very fine and brought ideas to what kind of loom that could have been used for the weaving. When studying how the fabric was cut to make the blouse there are signs showing a link to the tradition of working with skin and hide (Broholm & Hald 1935; Alexenderson et. al. 1981; Batzer & Demant 2015).



Fig. 4. Sketch drawing by G. Rosenberg 1924 / Skitse tegnet af G. Rosenberg 1924. Illustration: National Museum, Denmark.

we could all imagine this girl, as when she was alive.

Not only Thomsen and Rosenberg fell under her charm. The Egtved Girl has made an impact on everyone involved with her story and she has thus become the female icon of the Northern Bronze Age. This unique ability to reach out and touch modern day people is without comparison. Even today she is deeply rooted in the identity of local community in Egtved (fig. 5) as well as with the many tourists who visit the



Fig. 5. The Egtved Girl is today an important part of the identity of the local community. Here a 6 m tall Egtved Girl greets the bicycle race 'Post Danmark Rundt' as a symbol of the town / Egtvedpigen er den dag i dag en vigtig del af den lokale identitet i Egtved. Her hilser en 6m høj Egtvedpige cykelløbet 'Post Danmark Rundt' velkommen til Egtved. Photo by author (2015).

Fig. 6. The Egtved Girl's clothing / Egtvedpigens dragt. Photo: Roberto Fortuna & Kira Ursem, The National Museum, Denmark.



Fig. 7. Bronze figurine depicted with corded skirt. Find from Fårdal, Denmark / Bronzefigur med snoreskørt. Fårdal fundet, Viborg Amt, Danmark. Photo: Roberto Fortuna & Kira Ursem, The National Museum, Denmark.



New research based on strontium-isotope analyses of the wool has showed that all the Egtved Girl's clothing was made from non-local wool. This discovery has implications on our perception of the wool trade in the Bronze Age which might have been a much more specialised field than previously assumed (Frei et. al. 2015).

The Grave re-visited

In 1980 the remains of the Egtved Girl's mound was excavated again (Alexandersen et. al. 1981; Hvass 2000). The aim was to see if there was any valuable information left in the mound. At this time only a slight rise in the field revealed where once the monumental burial was placed. The excavation revealed the full diameter of the mound reaching 22m with some of the kerbstones preserved in places. Around the mound the remains of stone paving was seen. Furthermore, the section revealed that the mound had another building phase added on its southern side. This would correspond with the later disturbed burial found in the mound. Finally, an urn burial dated to the Late Bronze Age/ Early Iron Age was found in the SW periphery of the mound.

After the excavation the mound was reconstructed to its former dimensions and it is the reconstructed mound we see today when visiting the site. Along with the new excavation a revised study on the material from the original burial was also carried out.

The bone material in the Egtved Girl's grave was very sparse due to acidic conditions in the grave. In fact, only teeth, hair and nails are preserved from the Egtved Girl herself. The preserved enamel from 27 teeth formed the basis for the age determination of the girl.

The new study of the teeth could establish that the Egtved Girl was 16 – 18 years old when she died (Alexandersen et. al. 1981: 23ff). The focus of the study was to determine the Egtved Girl's age in relation to the child. The study of the cremated bones of the child revealed that it must have been 5 - 6 years old when it died. It

was possible to determine the age based on fragments of a jawbone and a milk tooth. The study could establish with certainty that the cremated bone which was found in the cloth and in the little bark container were from the same child. Why the bones were separated into two places in the grave still remains a mystery. The revised study revealed significant results in relation to the Egtved Girl and the child. She and the child were both determined to be slightly younger than previously estimated and the conclusion therefore was that it was unlikely that she was the mother, as she would have been 13 years old when having the child. Maybe instead, the girl and the child should be seen as siblings? (Alexandersen et. al. 1981: 30ff).

The Egtved Girl and a new era of scientific research

In 1991, the Egtved Girl's coffin was dated using the method of dendrochronology (year ring dating) as the big oak-log was well suited for the purpose. The results revealed that the massive oak tree was felled in 1370 BC to make the coffin. It is presumed that this must have happened the same year as she was buried (Jensen 1998: 24ff; Christensen & Jensen 1991: 11ff). The results added to the Egtved Girl's fascinating story with such a precise dating of a moment in time that allows us to come very close to an event that happened on a summer's day 3.386 years ago. The Egtved Girl and the exact time of her death has become a rare window to the distant past.

As the scientific methods continues to develop the Egtved Girl remains uniquely interesting to study as her burial is so well preserved that it allows for returning research with renewed focus.

The latest chapter in the Egtved Girl's story is research based on isotope analysis and has revealed that the Egtved Girl was in fact not from Egtved in present day Denmark but instead born and raised 800 – 1000 km from this place where she was buried in her mound (Frei et. al 2015).

Strontium is a chemical element that exists in the earth and therefore in all that we eat and drink. In our lifetime, strontium is obtained and stored in our bone structure and levels of strontium can be measured in the human or animal bones and tissues, even after death. Because strontium values differ regionally based on the local geology it serves as a useful tool for archaeological studies of provenance and mobility.

The study showed that the Egtved Girl in her short life travelled over vast distances and that her last journey was made only months before her death (Frei et. al 2015). This research has shed new light on the mobility of the individual in the Early Bronze Age and thereby linked Egtved directly to the larger trade network of continental Europe.

The exact geographical location of the Egtved Girl's origin is difficult to pin point exactly and based on the strontium analyses alone the Egtved Girl could come from as many regions as Sweden, the British Isles and large parts of South and Central Europe. Interestingly the burial custom of oak-log coffin graves is known from almost all the same areas represented by the matching strontium signature (Thomsen 1929: 196ff; Melton et. al. 2010).

Based on one group of archaeological finds, the octagonal hilted swords, it is suggested that the Egtved Girl could originate from the Black Forest region in Southern Germany as a distribution pattern show a high number of swords in these two areas (Kristiansen & Suchowska-Ducke 2015). However, additional studies on more artefact groups and settlement patterns needs to be analysed, and further interdisciplinary studies focusing on several aspects of the archaeological material in relation to the isotope data is necessary in order to gain a fuller understanding of the Egtved Girl's origin.

Regardless of the exact location of the Egtved Girl's birth and upbringing it is clear that strong links and exchange networks existed between the Nordic region and the Central European area in the Bronze Age.

Assuming that the Egtved Girl originated from the Schwarzwald region it would have been an important connection for the local chief in Egtved to have formed an alliance in this area as it was close to the highly important metal ores containing copper and tin as well as being close to the mountain passes over the Alps.

Therefore the Egtved Girl could with reason be thought to be from this area and take part in such a strategic alliance formed by two powerful families. This would secure the flow of imported prestige goods between the regions but also make the long journey more secure when having formed alliances in foreign territory. Even the language could have been an issue and having someone speaking the local tongue would have been of great value.

The strontium analyses of the Egtved Girl's burial were based both on human tissues as well as samples of her clothing. The humane samples were taken from her teeth (first molar), hair and nails. These three tissue types highlight different stages of her life.

The strontium level of the tooth showed 'non-local' values. This means she could not have spent the first years of her life in the present day Denmark (Bornholm excluded).

The sample of her hair was divided into four segments and showed that she had been away from Egtved and travelled the distance between Egtved and her birthplace twice within the last two years of her life. The youngest hair segment closest to the scalp, representing the last few months of the Egtved Girl's life, showed a 'non-local' strontium signature. This means that months before her death she was not in present day Denmark and that is fascinating as not long after she was buried in Egtved, which implies that she must have made the journey back just before her death (Frei et. al. 2015).

How the Egtved Girl and the child died, and why, still remains a mystery. Perhaps their untimely death was a result of illness in combination with the hard journey. Nor do we know why the child was cremated, perhaps for practical reasons in order for it

to be brought back to Egtved after dying whilst travelling. Perhaps special care involving burning was required for the ritual of passing of young children not yet of adult age.

Frei has with her study and new scientific approach opened up for a discussion of Bronze Age mobility on a different level making it possible to study movements of the individual through different stages of their life. It has always been known that people, objects and ideas moved and were exchanged but it has always been uncertain how many 'stop-overs' and 'middle-men' there were on the way. Never before has it been shown how far an individual person has travelled and we now know that people in the Bronze Age could travel long distances even several times in a lifetime. The study links Egtved directly to large trade routes that existed throughout Europe and the Middle East in the Bronze Age.

The Nordic Bronze Age

To understand whom the Egtved Girl was we must understand the time she was from. The Egtved Girl lived in the Bronze Age - a dynamic period with far reaching international connections. The Nordic Bronze Age lasted 1200 years dating from 1700 – 500 BC. It followed the Stone Age and the new metal bronze, which became the new sign of wealth and prestige, defines it.

The Bronze Age in Northern Europe and Scandinavia was a time period without writing but instead filled with symbols preserved on bronzes and carved in stone. The many symbols and illustrations speak of a time with a religion that was based on fertility and worship of the sun (Kaul 2004). The ship and the horse were powerful symbols directly linked to the sun's travel across the sky. The famous sun chariot from Trundholm bog in Zealand is one of the finest examples of this worship of the sun and also shows the importance of the horse. The archaeological record from the period shows that it was a hierarchical society based on farming and herding. Power was based on chiefdoms with warrior aristocracies. This

elite formed powerful alliances that secured the flow of wealth to the region (Kristansen & Larsson 2005; Holst & Rasmussen 2013). People lived in longhouses and farm units with social and practical networks but were not yet organized in the villages we know from later periods (Artursson et. al. 2010: 87ff.).

Bronze Age oak coffin burials

The Egtved Girl is not the only oak-coffin burial in Denmark or the Nordic region. She is part of a burial custom with many examples from Denmark where the dead are buried in oak-coffins under mounds (Boye 1896; Glob 1970; Jensen 1998). Also in Great Britain, Northern Germany and Central Europe this burial custom is known (Thomsen 1929: 196ff; Melton et. al. 2010). The dead of high status were buried in mounds that were erected in numbers of thousands across the land.

However, not many graves are found with such remarkable preservation. This is only known from a handful of oak-coffin burials from Denmark of whom the Egtved Girl is one.

The Oak coffin burials from the Early Bronze Age in Denmark show signs on a uniform social expression with a 'type set' of respectively male and female burial goods (Boye 1896, Thomsen 1929).

The unique preservation seen with the Egtved Girl and a handful of other well-preserved burials is caused by special conditions in the ground where a hard shell of natural iron in the soil has been created around the central part of the mound, causing it to remain wet and waterlogged. This phenomenon is especially known in the Southern and Eastern parts of Jutland (Breuning-Madsen & Holst 1995).

Less well-preserved oak coffin burials are known from across present day Denmark and they are a characteristic of period II with slight continuation into period III of the Nordic Bronze Age. In places where conditions for preservation are less fortunate not much of the burial remains. Usually the organic materials such as the oak coffin and clothing will have vanished but the stone

paving, weapons and jewellery can indicate what type of grave was once there. Even under plough damaged mounds these burials still wait to be discovered. However, it is unlikely that we will encounter another burial as well preserved as the Egtved Girl's because farming or ancient grave robbing will have disturbed the wet core of the mound.

Burials and social identities in the Bronze Age

Burials give us a unique insight into the social dimension of past societies. The way people were buried in the mounds reveals much about who they were and how the society at the time was structured.

Artefacts and grave goods provide an insight into identity as certain artefacts are thought to hold certain meanings. An indication of a shared identity can be seen in the expression of personal artefacts. In the Nordic Bronze Age this is seen in the conforming female expression from c. 1400 BC onwards (Sørensen 2013).

For example, jewellery is seen as an indicator of social grouping, wealth and status (allowing for grading within a hierarchy) whilst other artefacts such as awls could be linked to domestic skills or specialised craftsmanship. Plants such as the yarrow in the Egtved Girl's grave could refer to medical knowledge and the amulet pouch found with the Maglehoj woman indicates a special role as a priestess or shaman-like identity (Boye 1889).

It is clear, that many social identities existed in the Bronze Age and that identity is a very complex matter and it can be expressed and understood in many ways. This has recently been emphasised by the Egtved Girl study, which revealed that a 'local' archaeological assemblage attributed to a woman from a non-local origin (Frei et. al. 2015). The Egtved Girl's expressed identity, however, conformed to the social group where she was buried. Scientific isotopic studies of the individual persons have proven useful to give new and unexpected insights to the provenance of the people with certain expressed identities. These

new methods combined with an attentive focus on the objects, how they were used and were part of the life cycle of the person could prove useful to shed light on the individuals and their expression of identity in the Bronze Age (Bergerbrant 2007, Sørensen 2013).

The mounds and the landscape

The burial custom in the Early Bronze Age transformed the land and thousands of mounds were erected over a relative short period of time. The temporality of the mound groupings and the social organization within them allows for the study of local and regional organization within these landscapes. Travel and movement was directly linked to these mounds and the people in them (Holst & Rasmussen 2012; 2013).

When studying the Egtved Girl's burial it is crucial to understand it in its wider context. The mound does not stand-alone but is part of a larger monumental mound landscape (fig. 8).

A study of the local area reveals several mound groupings that would have been of crucial importance for the social organization and the regional movement within the landscape. A view on the local area at Egtved reveals several linear mound groupings in the landscape that would have been used for the marking of social groups and also created lines of sight and guidelines for movement and travel within the region. Cattle were at the core of the local community and thus grazing lands were an important of the economy. During the Bronze Age local herders would have a wider range of movement beyond their local community, and based on mound groupings and lines in the landscape, a communal understanding between several communities could be reached so grazing lands could be of benefit to several groups within an agreed social and political framework (Holst & Rasmussen 2013).

Pollen analysed from the Egtved Girl's grave and mound revealed how the landscape had been formed in Egtved during the Bronze Age. At the time of the burial it was a land based on agriculture with

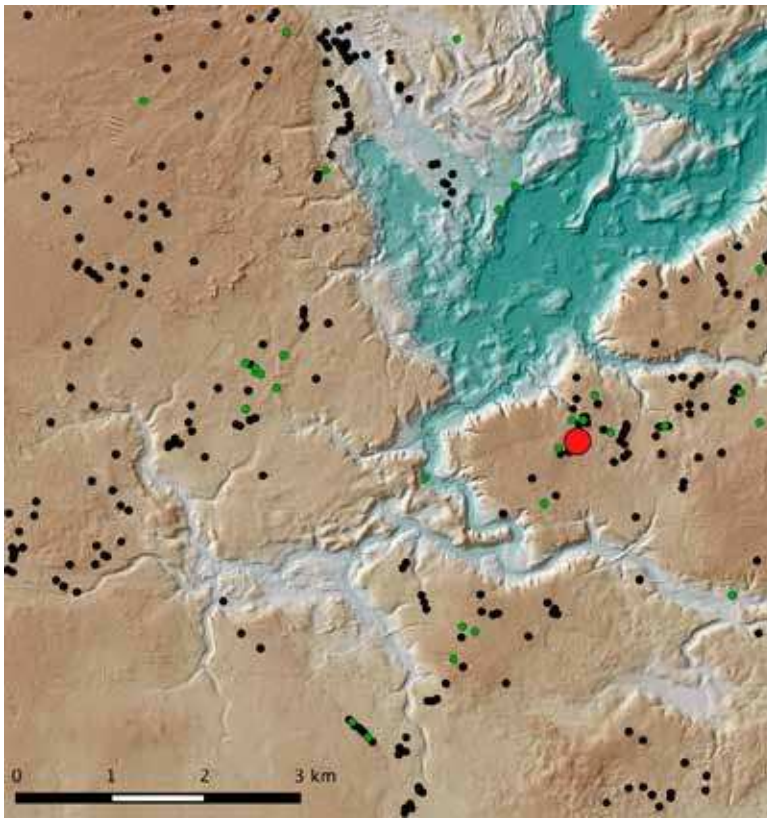


Fig. 8. The burial mound landscape near Egtved. The Egtved Girl's mound marked with red. Other burial mounds marked with black dots. Green dots represents burial mounds securely dated to the Bronze Age./ Gravhøjslandskabet omkring Egtved. Egtvedpigens høj markeret med rød prik. Sorte prikker viser øvrige gravhøje. Grønne prikker markerer høje dateret til bronzealderen. Map by author. Map-data: geodatastyrelsen. Monumentdata: Slots- og Kulturstyrelsen.

pastoral meadows and open forests. The continuing cutting down of the big forests made room for fields and grazing. Wheat was an important crop and small fields lay spread in the clearings of the woods. Sheep and cattle grazed on the pastures. It was in this landscape that the Egtved Girl's mound was built and she was laid to rest (Jensen 1998:21).

The mounds represented the ancestral rights to the land and therefore they were not placed randomly but the placement held great significance for the local structure of power in the society.

We do not, sadly, have many signs of Bronze Age settlements in the Egtved area but typically the settlements would have been within 'local distance' of the mound groupings. There is no reason why this would not be the case in the Egtved area

also. Further research like fieldwalking and geophysical surveys could provide us with a better understanding of the settlement pattern in the area.

Trade, Travel & Alliance

Bronze had to be imported into many regions and this movement of metal (copper and tin) opened up for large trade and alliance networks across Europe. Changes in material culture can be seen taking place simultaneously over vast distances and different regions, suggesting a whole new order of dependent relationships. A further connection with the Eurasian steppes with the pastoral economy was opening up for an extensive mobile economy. Goods, ideas and people were spreading and travelling fast and widely over the European and

Eurasian continent. The trading of metal for making bronze has been a catalyst for these massive movements of ideas, people and goods (Kristiansen & Larsson 2005: 141ff).

Sought after commodities in the Nordic region were especially metal and glass, in return Baltic amber was regarded as very valuable throughout Europe and especially held in favour of the Mycenaean Kings.

Bronze

In Denmark, copper and tin were imported to produce the valuable bronze. A study undertaken on Swedish bronze artefacts showed that the metal, here too, was imported even though copper exists locally in Sweden. The metal compositions of the bronze objects suggested that the copper sources came from the Alp region, the Iberian Peninsula, Sardinia and the British Isles. All of these places were of importance for the Scandinavian import. Tin sources were less frequent but still available and often in the same regions as the major copper mines. Transport and trading routes can be seen to be directly linked with these major copper and tin ores. Baltic amber is not uncommonly seen in the same places as the rich metal ores (Ling et.al. 2014).

Amber

Baltic amber was traded for precious metal from central and south Europe. It is not possible to pinpoint the exact geographical origin of the amber within the region but the Danish coasts are an excellent source of Baltic amber. The archaeological record is full of evidence for amber as a prestige material from the Neolithic (Stone Age) and amber continues to be of great importance in Bronze Age Denmark (Jensen 1982).

In the region of Thy, northwest Denmark, evidence has been found of amber being collected at the settlement at Bjerre (Bech 2003:57). The amber would have formed part of the economy otherwise dominated by animal husbandry and agriculture. The region is well known for its abundance of Bronze Age settlements and burial mounds.

One could easily draw a link between the amber and the wealth of the region.

The amber was a sought after commodity in the south and made it as far as the Mycenaean graves in Greece. Trading posts with Baltic amber have been located throughout central Europe and Northern Italy, allowing us to follow the amber trails from North to South (Kaul 2013).

Glass

Several blue glass beads have been found in high status female graves from the 14th century BC in Denmark. These blue beads are very interesting and bear witness to distant connections to the south and east (fig. 9). The resemblance to Egyptian and oriental beads was already pointed out by Sophus Müller in 1882 but there was never any scientific research done to test it (Müller 1882). Now new research based on chemical analyses has shown that the blue glass beads did in fact originate from Egypt and Mesopotamia. These scientific results are another important step in understanding the long distance trading systems that was already well established at this point in the Bronze Age. Nordic amber and glass beads from Mesopotamia and Egypt were at opposite ends at a large network, spanning the known world at the time (Varberg et.al 2015).

Wool

Another dimension of the trade in the Bronze Age is textile production as part of the economy. This must have had held

Fig. 9. Blue glass beads from Early Bronze Period II. Left: Hesselager, Fyn. Right: Ølby / Blå glasperler fra ældre bronzealder per. II. TV: Hesselager; TH: Ølby. Photo: Arnold Mikkelsen, National Museum Denmark.



a greater significance than previously thought. Isotope analyses show that all of the Egtved Girl's clothing was made from 'non-local' wool (Frei et. al. 2015). This implies that the wool quality and the type of wool (and sheep) must have been of importance. Perhaps the local sheep in Egtved were not producing wool of high enough quality for the dresses required?

Already in Thomsen's original publication he mentions that the Egtved Girl's blouse is made of finer quality wool than that of the otherwise identical blouse worn by the woman from the oak coffin burials in Borum Eshøj (Thomsen 1929: 187). Based on the strontium analyses the wool that made the Egtved Girl's clothing had a non-local signature. This interesting observation raises new questions about the wool trade and could these new results maybe indicate that the Egtved Girl had a special connection to the textile fabrication and wool trade? It would be interesting to follow this line of thought with more interdisciplinary studies based on strontium analyses as well as analyses of the method of the weaving combined with studies of the quality of the wool. In this way it could be possible to gain information to the origin of the cloth and approach the identity of the person wearing it.

The quality of the wool points to interesting perspectives but we must also bear in mind that one aspect of the Egtved Girl's costume and fine quality could be that it was in fact a summer dress and therefore of lighter quality than the other known fabrics from the oak coffin graves that might reflect another (colder) season of the year.

Mobility in the Bronze Age

The possibility for repeated and safe journeys was central for the securement of prestige goods between north and south and thereby maintaining the local control of power. Through alliances, such networks were secured and maintained with the use of social constructs such as foster care, guest friendships and inter alliance marriages (Kristiansen & Suchowska-Ducke 2015; Kaul 2016).

The recent interdisciplinary studies have provided a more detailed picture of the complex exchange, trade and alliance networks that were under constant negotiation and transformations in the European Bronze Age (Kristiansen & Suchowska-Ducke 2015). The studies have scientifically confirmed the vast exchange networks in the Bronze Age across Europe and the Middle East, which in the archaeological record was already known within the theoretical tradition of *ex oriente lux*, which formed the basis for the Montelian understanding of the Bronze Age (Montelius 1885, 1899; Müller 1882).

Mobility and the changeability was thus at the core of the Bronze Age society and it is clear that it needs to be studied in more detail and at several levels to be fully understood.

Mobility can imply the movement of ideas, people and goods. But how far each individual person, idea or artefact moved can be studied in different ways (Reiter et. al. 2014; Vandkilde et. al. 2015; Urry 2007). The role of women cannot be underestimated when studying mobility in the Bronze Age and this has recently been emphasized by the new studies of the Egtved Girl. The new research provided a detailed insight into the life of the young woman, revealing an upbringing at least 500 - 800km from the place she was buried. Furthermore it was revealed that she had travelled this distance at least twice in her lifetime and that the last journey could be done in a couple of months (Frei. et. al. 2015).

The analyses of the Egtved Girl brings nuances to the historical understanding of the geographical spread of certain female artefacts types as an indicator of alliance networks and interregional marriages where women were married away to places of strategic advantage (Bergerbrant 2005; Jockenhövel 1995; Sørensen 2013).

Who was the Egtved Girl?

The Egtved Girl continues to play an important role in Bronze Age research and has done so since she was discovered in

1921. The Egtved Girl's coffin was precisely dated to the year 1370 BC and in her coffin archaeologists found a flower (yarrow – *achillea millefolium*), which tells us it was a summer burial. This extremely detailed image and precise dating of a moment in time is a rare quality for an archaeological find in prehistory, and therefore the Egtved Girl has always been special.

So who was the Egtved Girl? After almost a century of research the fascinating story continues to unfold. The latest results added an important chapter to her story linking Egtved directly to wider international networks of Europe.

The Egtved Girl played an important social role of her time. It is likely that she was part of a political alliance married to someone because of a strategical advantage. This is seen with many other examples throughout Europe in the period, known as the *Fremde Frau* phenomenon (Jockenhövel 1995). However, we must remember that even though women were the ones to move to new homes and families, the men were also part of this system of what were likely to have been arranged marriages between families of high status to form and maintain political alliances in the Bronze Age.

Even though the Egtved Girl was an 'alliance bride' it does not mean that she did not possess political power. The fact that she has been proven to travel the long distance between her original home and Egtved several times in her young life shows that she was an important part of the contact between the two regions. On these journeys she could have possessed several important roles: someone with knowledge of medicinal plants; an interpreter ensuring the communication and thus the relations between the parties of the alliance; perhaps she possessed special knowledge related to the wool and textile craft and her part during the travels was related to the securement and trade of special goods. The Egtved Girl could have possessed one or all of these social roles making her a woman with real political power in her time. The Egtved Girl can be seen as being a central part of an alliance that secured the safe passage

of people and prestige goods on the long journeys through Europe. This makes the Egtved Girl a very important political and powerful person without whom the political systems of the Early Bronze Age could not have functioned.

The exact location of the Egtved Girl's origin remains uncertain. A reasonable possibility is the Schwarzwald region of Germany close to the important metal ores and near passes of the Alps. Many finds from the period shows where meeting places and trading sites are located along routes from Scandinavia to Central and Southern Europe and even beyond to Egypt and Mesopotamia. However, the strontium analyses points to other possibilities of the Egtved Girl's origin in regions across Scandinavia, Central Europe and Britain where the oak coffin burial custom is also known. None of the geographical possibilities, however, change the fact that the Egtved Girl as a young woman played an important political role in her society.

What the future holds...

The Egtved Girl has so far revealed a unique tale. And the new chapter in her story has highlighted the importance of careful excavation, preservation and sample strategies for future research. Who could have known in 1921 that new knowledge would still be revealed after almost 100 years? We have the good work by the local landowner, the professional archaeologists, the careful conservators and knowledge-seeking scientists to thank for it. The National Museum still holds samples taken from the Egtved Girl's grave and mound, and with the scientific methods in rapid development there are still potential for further analyses.

This latest chapter in the Egtved Girl's story can only inspire further research. We need to contextualise her story by looking at the dynamic and international Bronze Age society she was part of. Do the other well preserved oak-coffin burials share a similar story? Is it possible to pinpoint the Egtved Girl's origin more precisely? Can we recreate the long journeys by tracing the routes and trading systems? And can we

get a better understanding of the alliances, which were formed and maintained across Europe in order to secure the import of prestige goods to the North?

With every answer, many more questions arise thus allowing for several more chapters in the Egtved Girl's story.

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Bibliography

- Alexandersen, V., Bennike, P., Hvass, L. & Stærmose, Nielsen, K. – H.** 1981. Egtved-pigen – nye undersøgelser. Aarbøger for Nordisk Oldkyndighed og Historie 1981. Pp. 17 – 46.
- Artursson, M. et al.** 2010. Settlement Structure and Organisation. In: Earle, T & Kristiansen, K. (eds.): *Organizing Bronze Age Societies. The Mediterranean, Central Europe & Scandinavia Compared*. Cambridge University Press 2010. Pp. 87- 112.
- Batzer, A. & Demant, I.** 2015. Egtved-pigens dragt – en rekonstruktion i 2013. *Dragtjournalen* Årgang 9 nr. 12, 2015. Pp. 31 – 43.
- Bergerbrant, S.** 2005. Female interaction during the early and middle Bronze Age Europe, with special focus on bronze tubes. In: Hjørungdal (ed): *Gender Locales and Local Genders in Archaeology. BAR International Series* 1425. 2005.
- Bergerbrant, S.** 2007. *Bronze Age Identities: Costume, Conflict and Contact in Northern Europe 1600 – 1300 BC*. Stockholm Studies in Archaeology.
- Bech, J. H.** 2003. The Thy Archaeological Project – Results and Reflections from a Multinational Archaeological Project. I: Thrane, H. (ed.) 2003: *Diachronic Settlement Studies in the Metal Ages*. Report on the ESF workshop at Moesgård, Denmark, 14 – 18 October 2000. Jutland Archaeological Society.
- Boye, V.** 1889. Maglehøi – Fundet. *Aarbøger for Nordisk Oldkyndighed og Historie* 1889. København. Pp. 317 – 340.
- Boye, V.** 1896. *Fund af Egekestegrave fra Bronzealderen i Danmark*. København. Genudgivet udgave af forlaget Wormanium, Aarhus 1986.
- Breuning-Madsen, H. & Holst, M. K.** 1995. Genesis of Iron Pans in Bronze Age Mounds in Denmark. *Journal of Danish Archaeology*, vol. 11. 1992-93. Pp. 80 – 86.
- Broholm, H. C & Hald, M.** 1935. *Danske Bronzealders Dragter*. Nordiske Fortidsminder II, hefte 5 -6. København.
- Broholm, H. C.** 1938. Kvindedragten i Bronzealderen. Nationalmuseets gule bøger. Gyldendal.
- Frei, K.M. et al.** 2015. Tracing the dynamic life story of a Bronze Age Female. *Scientific Reports*. 5, 10431; doi: 10.1038/srep10431 (2015).
- Christensen, K. & Jensen, J.** 1991. Egtved-pigens alder. *Nationalmuseets Arbejdsmark* 1991. p. 11ff.
- Glob, P. V.** 1970. *Højfolket*. København.
- Holst, M. K. & Rasmussen, M. (eds.)** 2012: *Skelhøj and the Bronze Age Barrows of Southern Scandinavia. Vol. I: The Bronze Age barrow tradition and the excavation of Skelhøj*. Jutland Archaeological Society Publications vol. 78.
- Holst, M.K & Rasmussen, M.** 2013. Herder communities: Longhouses, Cattle and Landscape Organization in the Nordic Early and Middle Bronze Age. In: Bergerbrant & Sabatini (eds): *Counterpoint: Essays in Archaeology and Heritage Studies in Honour of Professor Kristian Kristiansen. BAR International Series* vol. 2508. Oxford 2013.
- Hvass, L.** 2000. *Egtvedpigen*. Sesam. København.
- Jensen, J.** 1982. *Nordens guld. En bog oldtidens rav, mennesker og myter*. Gyldendal. Pp. 61-96.
- Jensen, J.** 1998. *Manden i Kisten, Hvad bronzealderens gravhøje gemte*. Gyldendal.
- Jockenhövel, A.** 1995: Zur Ausstattung von Frauen in Nordwestdeutschland und in der deutschen Mittelgebirgszone während der Spätbronzezeit und Älteren Eisenzeit. In: ALBRECHT JOCKENHÖVEL (Hrsg.), *Festschrift für Hermann Müller-Karpe zum 70. Geburtstag* (Bonn 1995) 195-212.

- Kaul, F.** 2004. *Bronzealderens religion. Studier af den nordiske bronzealders økonomi og religion. Nordiske Fortidsminder serie B.* 2004.
- Kaul, F.** 2013. Forbindelser mellem sydlige og nordlige verdener i ældre bronzealder. Videnskab.dk i samarbejde med Nationalmuseet. 2013. <http://videnskab.dk/kultur-samfund/forbindelser-mellem-sydlige-og-nordlige-verdener-i-aeldre-bronzealder>
- Kaul, F.** 2016. Bronzealderens vidstrakte forbindelser – hvordan var det muligt? Præsentation ved seminaret *Status og samfundsstruktur i yngre bronzealders kulturlandskab*, 2. – 3. marts 2016, Viborg.
- Kristiansen, K. & Larsson, T. B.** 2005. *The Rise of Bronze Age Society. Travels, Transmissions and Transformations.* Cambridge University Press 2005.
- Kristiansen, K. & Suchowska-Ducke, P.** 2015. Connected Histories: the Dynamics of Bronze Age Interaction and Trade 1500 – 1100 bc. *Proceedings of the Prehistoric Society*, 81, pp. 361 – 392.
- Laux, F.** 1972. Ein bronzezeitliches Frauengrab aus Lüneburger Heide. *Harburger Jahrbuch* 1968/72, XIII. pp. 43 – 51.
- Ling, J.; Stos-Gale, Z.; Grandin, L.; Billström, K.; Hjärthner-Holdar, E.; Persson, P.** 2014. Moving metals II: provenancing Scandinavian Bronze Age artefacts by lead isotope and elemental analyses. *Journal of Archaeological Science* 41 (2014) pp. 106 – 132.
- Melton, N. et. al.** 2010: Gristhorpe Man: an Early Bronze Age log-coffin burial scientifically defined. *Antiquity* 84 (2010). pp. 796-815.
- Montelius, O.** 1885. Om tidsbestämning inom bronsåldern med särskilt afseende på Skandinavien. Stockholm.
- Montelius, O.** 1889. *Der Orient und Europa. Einfluss der orientalischen Kultur auf Europa bis zur Mitte des letzten Jahrtausends v. Chr.* Stockholm, Kessinger Publication.
- Müller, S.** 1882. Den europæiske Bronzealders Oprindelse og første Udvikling, oplyst ved de ældste Bronzefund i det sydøstlige Europa. *Aarbøger for Nordisk Oldkyndighed og Historie*. Pp. 279-356.
- Neugebauer, C & Neugebauer, J. – W.** 1997. *Franzhausen. Das Frühbronzezeitliche Gräberfeld I.* Fundberichte aus Österreich Materialheft A 5/1 & 5/2. Horst Adler, Wien.
- Oelze, V. M., Nehlich O. & Richards, M. P.** 2012. 'There is no place like home'—No isotopic evidence for mobility at the Early Bronze Age Cemetery of Singen, Germany. *Archaeometry*, 54, 752-778.
- Reiter, S; Nørgaard, H. W; Kölcz, Z & Rassmann, C. (eds).** 2014. *Rooted in Movement. Aspects of Mobility in Bronze Age Europe.* Jutland Archeological Society.
- Reiter, S & Frei, K. M.** 2015. Migration and Identity At the Early Bronze Age Cemetery of Jelsovc, Southwest Slovakia: The Strontium Evidence. In: : Suchowski-Ducke, Reiter & Vandkilde (eds): *Forging Identities: The Mobility of Culture in Bronze Age Europe*: vol. 1. BAR S2771.
- Sørensen, M. L. S.** 2013: Identity, gender, and Dress in the European Bronze Age. In: A., F. H. A. H. (ed.) *The Oxford Handbook of the European Bronze Age.* Oxford University Press
- Thomsen, T.** 1929. Egeketfundet fra Egtved fra den ældre Bronzealder. *Nordiske Fortidsminder II.* København.
- Ure, J.** 2007. *Mobilities.* London, Polity Press.
- Vandkilde, H; Hansen, S; Kotsakis, K; Kristiansen, K; Müller, J; Sofaer, J & Sørensen, M.** 2015. Cultural Mobility in Bronze Age Europe. In: Suchowski-Ducke, Reiter & Vandkilde (eds): *Forging Identities: The Mobility of Culture in Bronze Age Europe*: vol. 1. BAR S2771.
- Varberg, J.; Gratuze, B.; Kaul, F.** 2015. Between Egypt, Mesopotamia and Scandinavia: Late Bronze Age glass beads found in Denmark. *Journal of Archaeological Science* 54 (2015). Pp. 168 – 181.