6. Denmark's History

6.0 The Kongemose Culture

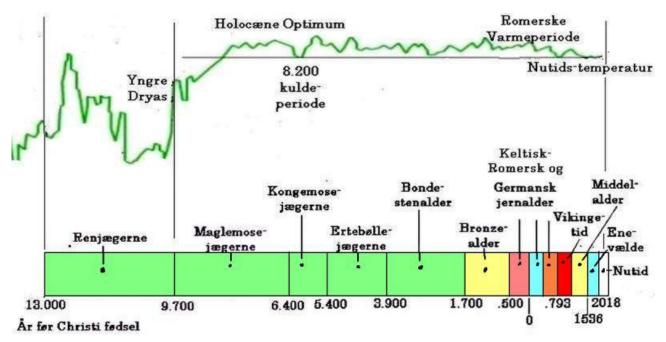
The Kongemose culture is named after a settlement found in Kongemose, that is a part of the bog Aamose on Sjaelland. It was found in 1950 in connection with peat cutting. The culture is known by its distinctive trapezoidal arrowheads, which are also known in much of western Europe.



Typical trapeze shaped arrowhead from Kongemose culture. The idea must have been to have a pointed arrow that can penetrate deep into the

prey, and at the same time have an arrow that makes a large input wound, causing the animal to bleed to death quickly.

The Kongemose hunters lived in the period 6,400 to 5,400 BC (which is 8,400 to 7,400 years before present). It was a combined forest and coastal culture, which represented a technological development compared to the Maglemose culture. They used core axes and clubs of flint, fishhooks of bone, fishing tools of hazel and fish traps of willow twigs.

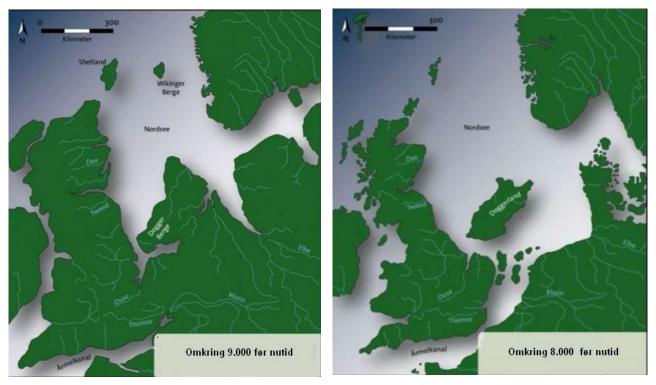


During the Kongemose period from 6,400 to 5,400 BC occurred both the "8,200 cold period", which was a kind of small ice age with probably similarly low temperatures as in 18th century Europe, and the "Holocene optimum", when the temperature in Denmark was about three degrees higher than today. Around 6,000 BC occurred the Storegga Tsunami, which was triggered by a colossal underwater landslide off the Norwegian coast.

The temperature rose quickly and Denmark was completely covered by a primeval forest in which the Maglemose hunters hunted and fished. They were succeeded by the hunters of the Kongemose culture, who were most certainly descendants of the Maglemose people.

It was not until the peasant Stone Age that people began to keep livestock and cultivate the land. Around 500 BC the Bronze Age was replaced by the three periods of the Iron Age. The Viking Age started with the attack on the monastery of St. Cuthbert on the island of Lindisfarne in England AD 793. and ended with the killing of Canute the Saint in 1086 AD. The Middle Ages ended in 1536 with the civil war The Count's Feud and the Lutheran Reformation.

Nothing suggests that there has been new immigration, conquest or similar compared with the previous Maglermose culture. It is almost certainly the same people, who simply have adapted and developed its way of life to the changing conditions.



Left: North Sea by the end of the Maglemose period. As can be seen, the land area was twice as large as today. England was connected with the continent, and a large part of the present North Sea was covered with forest.

Right: North Sea by the end of the Kongemose period, as shown the land area had been greatly diminished. Photo Wikipedia.

6.1 Geography and Climate

The Kongemose hunters experienced dramatic changes both in geography, climate and fauna. The sea surface level rose and turned the Maglemose period's endless forests into a landscape characterized by long coastlines with many large and small wooded islands separated by straits and fjords. Many of The Maglemose culture's settlements are today covered by the sea. It is reasonable to assume that the Kongemose culture's technological development was a response to these changes. As sea surface level rose and the previous land became flooded, there was a shift from hunting for animals of the forest towards fishing and hunting for seals, porpoises and seabirds.

By end of the Maglemose period, the climate in Denmark was close to subtropical, the average temperature was several degrees above today. But already about 8,400 before present (6,400 BC.) temperature began to fall, and after well a hundred years the "8,200 cold period" reached its maximum. Through 300-400 years Europe must have experienced temperatures similar to the eighteenth century's Little Ice Age, where two-digit freezing temperatures ruled, and seas and rivers far down in Europe were covered by thick ice in winter.



Such the Danish primeval forest can have looked like in late hunter's stone age period. Photo Facebook

Some historians wonder why the Kongemose hunters did not eat oysters in the same way, as the subsequent Ertebølle coastal hunters did. But the explanation is probably that it was too cold in the summers; oysters did not live along the Danish coasts. Even after the "8,200 cold period" was over, it may have taken several hundred

years for oysters again to spread along Europe's coasts to this northern sea.

After some hundred years in the refrigerator, the hot and humid Atlantic climate returned, and the temperatures rose to new heights. This period is called the Holocene optimum, because it is assumed to be the most hot period in our present interglacial, with temperatures close to three degrees above today's. All of the remaining dry land in southern Scandinavia became covered by dense primeval forest. Lind, elm, pine and oak became common trees in the forest.

Prior to the construction of Amager Strandpark near Copenhagen, a marine-archaeological study was conducted, while the area was still covered by water. They found large quantities of flint chips from the Kongemose culture around 6,000 BC. The layers contained furthermore bones of various terrestrial and marine animals, including swordfish, sturgeon and tuna, which are all species that today live under warmer climes. It is also known that Dalmatian pelican and pond turtle were living in Denmark during this period.

6.2 Hunting, Weapons and Tools



Reconstruction of a Kongemose arrow with typical trapeze shaped arrowhead - This arrowhead is attached only with birch bark tar, which is said to work quite well. Photo Danske Stenalder buer og pile og dere rekonstruktion

The old hunters went for all animals of the forest, beach and sea. In their settlements have been found remains of red deer, roe deer, wild boar, beaver pond turtle, aurochs, fox, seal, porpoise, gannet, stork, duck, swan, red kite, crane, seagull, crow, sea eagle, Dalmatian pelican, capercaillie, lom, eider, duck, mergansers, plaice, flounder, eel, garfish, dogfish, cod, pike, pollock, herring, swordfish, sturgeon and tuna.



A reconstruction of the Blak bow is being tested. Photo Buer og Pile og deres rekonstruktion

The Kongemose hunters used characteristic trapeze shaped arrowheads that both had a point, so they could penetrate the prey, but also was wide, so they could generate a wide wound that would cause the animal to bleed to death quickly. It is obvious that such a powerful arrow requires a very strong bow.

There have been found remains of a bow from the Kongemose period. About 1995 the underwater archaeologist Søren Sørensen found remains of a bow in the underwater Kongemose settlement near the island of Blak in the southern part of Roskilde Fjord. However, for technical reasons, it could only be brought to the surface in smaller pieces.

However, it could be measured and reconstructed to have been 140 - 150 cm. long. It had no notches at the

ends for attachment of the string. One can imagine that to the ends have been glued bone or horn tips with notches.



Left: Flint-edge spearheads from the Kongemose culture with painted zig-zag bands of tar - they can be seen in the museum Færgegården in Frederikssund.

Right; Tools for making fish traps from Roskilde Fjord found near the island of Blak. Among other purposes, they have been used to produce fish traps made by willow twigs - mostly made of metatarsal bones of deer Photo Færgegården.

A group of history-interested tested the reconstructed bow regularly. They conclude: "*The bow* resisted regular shooting for half a year before it began showing folding marks. After that its days were numbered. Shortly afterwards it broke"; and further: "*This short, slender bow may have been a*

boy's bow or a bow especially suited for hunting in an original forest. It appears unlikely that it had been drawn very much more than half a meter, or it has been used for a larger game - at least without using poison".



Kongemose core ax Photo DBA

It has been suggested that the ancient hunters dipped their arrows in poison, extracted from mistletoe. This parasitic plant is very rare in Denmark today, but in the almost subtropical climate of the Stone Age hunters, it grew in the Danish primeval forests. Mistletoe contains viscotoxin, which

is toxic by entering under the skin but harmless when taken by mouth, that's what some experts write. Maybe the stone age hunters could kill even large animals when only the arrow had been dipped in mistletoe's poison.

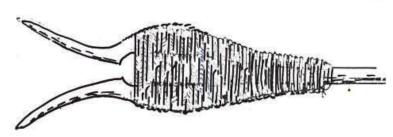


Reconstruction of eel traps woven from willow twigs from the Kongemose period -This design is still used in modern eeltraps - with a cylindrical container and introverted funnel-shaped mouth. Wikipedia

In Snorri's report on Balder's death, he explains briefly the mistletoe as still a lethal plant, but he apparently had no clear idea on how the plant looks like. He thought that it is a plant, which

grows in soil.

In collaboration with scuba divers, the museum Faergegaarden has explored several stone age settlements on the bottom of Roskilde Fjord. Close to the island of Blak, several of the characteristic flint-edge spears from Kongemose culture have been found. The spearhead is made of bone, along the edges are inserted some pretty big flint microliths, fastened with black tar



Reconstruction of well-preserved luster found at Skjoldnæs on the island of Ærø.

The sides of the spearheads are beautifully decorated with tar in a zigzag pattern, not unlike the three zigzag zag lines on the Maglemose aurochs' bone from Ryegaard. It is

characteristic for the Kongemose culture that their tools are beautifully decorated, quite often with zig-zag patterns.

In the same underwater Kongemose settlement, Blak II, many tools for making fish traps of willow twigs have been uncovered. Some of these tools may also have been used to puncture holes in skin in connection with sewing. They are usually made of metatarsal bones of deer.

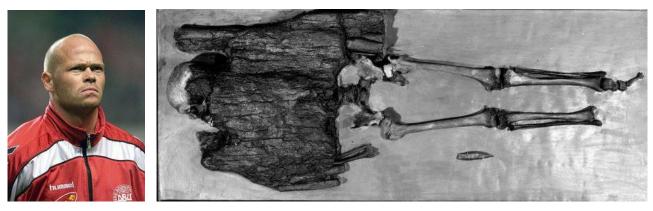


Luster tooth from the Hunter Stone Age -A luster tooth is the tip of a harpoon often with multiple points. It is carved from bone or antler with small barbs - It was loosely attached to the handle with a

string tied through a hole, so that one could pull the fish into the boat. Many such tips from hunters' stone age have been found, as it was not unusual that they got stuck in the bottom, or the string broke, and the fish escaped with the tip. Luster teeth are known from throughout hunters' stone age.

6.3 How did the Kongemose Hunters Look Like?

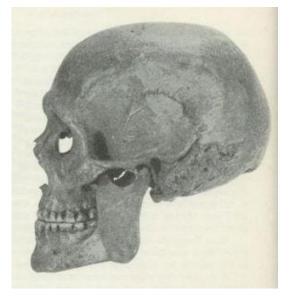
By deepening of Korsør Havn in 1943 bone fragments from at least seven individuals were found. The skeleton of a man, who was about forty years of age, when he died, lay in a well-preserved grave. He was approximately 166 cm tall and strongly built with solid bones, significant eyebrow arches and strong jaws. His skull has marks after two blows, so severe that the skull had been broken. But the man had survived both his wounds and lived many years thereafter. His skull is the largest among all ever found from the entire Danish prehistory. His teeth are worn, but they are otherwise in good condition. He was lying on a kind of a stretcher of branches, and a layer of bark was wrapped around the body. It seems like they have debarked a whole tree trunk and used the bark as a kind of coffin. At his belt was a simple knife of flint.



Left: Stig Tøfting can be a contender on how the Korsør man looked like, he is also heavily built and not very tall. He has visible eyebrow arcs, high nose bridge and slightly protruding jaw. However, he has a rather high forehead - Stig Tøfting started his career in AGF, he played a total of 41 matches on the Danish national football team. He ended his active football career in 2007 at the age of 38 as the hitherto oldest field player in the best Danish league. He was a typical defensive midfielder with an incomparable fighting spirit. Right: The Korsør man was found wrapped in bark from an entire tree trunk as a sort of coffin. He had a flint knife in his belt. Foto arkiv.dk

How did he look like? He may not be very different from the Maglemose period's Koelbjerg woman, except that she was somewhat slender built. He was a powerful man, of strong build, but not very tall; He had a large head with significant eyebrow arches, gently sloping forehead and

slightly protruding strong jaws. Maybe he looked something like the former national team player Stig Tøfting.



The skull of the Korsør man seen in profile.

Life in Hunter Stone Age was short and dangerous. In a Kongemose settlement in Nivaa skeletons from totally 15 individuals have been uncovered, some of which can be seen on Hørsholm Egnsmuseum. A woman had received two blows from ax or club to the head, in the forehead and one in the back of the head; but she had recovered from her wounds, and died of unknown causes in an age of 35. She was buried together with a man, who was 25 years old when he died.

A young man had received a severe ax blows in the back of his head, which had pierced the skull. However, he recovered from his wounds that healed, and he died at

an age of 25 from unknown causes. He was buried together with a child of three years. They had a necklace of red deer teeth in the grave.

Although many of the deceased were only 25-35 years old, they had worn teeth; the food was probably coarse, and they have softened skin by chewing on it.



Left: A skeleton of a five-year-old boy from 7,450 before present. - Hørsholm Egns Museum. Right: A reconstruction of the five-year-old Kongemose boy - Hørsholm Egns Museum.

Unfortunately, there is no information about how the other buried persons in the Kongemose settlement in Nivå may have looked like, how tall they were, heavily or lightly built, skull shape and so on. One can only rely on the visual impression of the exhibited skeletons. Until other information is available, it is probably fair to assume that they belonged to the same Cro Magnon type similar to the Koelbjerg man and the Korsør man. That is some not very tall, broad types with strong bones and an adult height for men around 166 cm - for women 154 cm - with sloping forehead, high nasal bridge, eyebrow arches and slightly protruding jaw.

6.4 Sailing in the Kongemose Period

There has been found no intact dugouts in Denmark from the Kongemose period, but during the marine survey prior to building of the Amager Strandpark was found processed wood, which could have been part of a dugout. In the cultural layers of the settlement were also found remains from dogfish. It seems logical to assume that they must have had a boat to catch dogfish.



Left: Dugout found in the bottom of Tissingvig in 1875 - Morslands Historiske Museum - Note that the sides are very thin, this boat is lighter, and, therefore, it could not have had the same stability as the Lejre reconstruction. When the old hunters sailed, they must be careful to keep the balance, in the same way as sailing in a kayak. Photo - Morslands Historiske Museum

Right: A reconstruction of a dugout in Lejre Forsøgscenter in 1995. - Note that the sides are very thick. The man is sitting aft on a big lump of wood. The kids seem to be moving quite carelessly around, the boy in the bow sits half upright. This boat's stability comes from the fact that it is a big lump of wood with a center of gravity which is below the buoyancy center. But because it is so heavy, it may also be difficult to paddle. Photo - Lejre Forsøgscenter

Furthermore, Moesgaard Museum retrieved in 2001 a piece of a Kongemose dugout in Lystrup-Vejlby Enge near Aarhus Bay, it is made of linden and is about 7,000 years old. It has been about 6 m. long and had a slightly lifted fore end. There were traces of a bonfire in the bottom.

It has been said quite rightly - that dugout canoes are not suitable for sea voyages; they are too narrow and round and thus too unstable. They must preferably have been used on rivers and lakes.

6.5 The Culture of the Kongemose Hunters

6,000 years ago, it was close to three degrees warmer than it is today; the sea surface level was several meters higher. At Nivå in northern Sjaelland a now dried out fjord stretched far into the land. 24 stone age settlements have been found along the Nivå fjord. They are dated from the between 6,300 and 4,000 BC. Excavations have taken place since 1912.

The settlement "Nivå 10" has brought new information about the ancient hunters. For the first time, we have a detailed insight into how their homes were designed. There have been found four well-preserved cottage remains.



Excavation of one of four Cottage remains in Nivå 10. As one can see, they did not have many square meters. The hunters probably spent most time in the open -Rudersdal Avis..

Settlements from both reindeer hunters and Maglemose cultures have been found before, but they all have resembled temporary shelters, perhaps

used during hunting excursions. The Nivaa settlements have been found to have been real permanent dwellings, some of the old hunters' true homes. It must indeed be the case that the place, where the ancestors are buried, must be the tribe's actual home.

In Nivå 10, twelve graves with the remains of the hut's residents have been excavated quite near the four cottage remains.



In Hørsholm Egns Museum's exhibition on the stone age hunters from Nivaa, is included a reconstruction of a Kongemose Cottage. It is a fairly light construction. The walls are made of braided willow twigs, plastered with clay. The roof is a frame of hazel rods covered with skin. It is believed that the ancient hunters also used bark flakes or maybe especially straw as roof covering - Rudersdal Avis.

The Kongemose hunters had close relations with their ancestors. Graves were namely located quite near the cottages. Sometimes, parts

of the deceased were even stored in the houses. Under the floor in one of the cottages, an arm bone was buried; there has been found evidence that a skull was placed near the fireplace in another cottage. Maybe it belonged to a dear deceased, whose wisdom his descendants still wanted to take advantage of.



Skull with an inserted pole of wood from dried out lake at Kanaljorden near Motala in Sweden from about 8,000 years ago. . Foto: Fredrik Hallgren

One comes to think of the Asir Mimer in the Norse mythology. He was the wisest of all and was given to the Vanirs as a hostage after the war between Vanir and Asirs. However, he was beheaded by the Vanirs, and only his head was sent back. His head is standing

at one of the springs at the world tree Yggdrasil's root, at Mimir's well, where Odin got his wisdom by drinking a sip of the well's water; However, Odin had to give one of his eyes in exchange for his magical abilities.



Another skull with inserted pole of wood from dried out lake at Kanaljorden near Motala from about 8,000 years ago. Foto: Fredrik Hallgren

Like so many other settlements from hunter's stone age, the settlement was located on an island, which could not be easily be accessed. It was a dangerous time, and it was very important to live protected and withdrawn. Anytime enemies or wild animals could attack the settlement's women

and children.

It is estimated that each Nivaa 10 cottage housed a maximum of 5-6 persons. The cottage's residents may have been a nuclear family or part of an extended family, it is not known.



Left: A third skull with inserted pole of wood from Kanaljorden at Motala from 8,000 years ago. Photo: Fredrik Hallgren

Right: Phallus of horn from Kanaljorden at Motala, also 8,000 years old. PHoto: Fredrik Hallgren



Cro Magnon Phallus from Mas d'Azil -20,000 til 30.000 years old –. It has two holes, which suggests that it has been worn around the neck. 20,000 to

30,000 years old 20.000. as you can see, this symbol is deeply rooted in Europeans' history. Photo - Loïc Hamon, Musée des Antiquités nationales

In connection with excavations for a new railway remains of 11 skeletons from the Kongemose period were found at Kanaljorden near Motala in Sweeden, men, women and children. Two of the skulls were mounted on the tip of poles, and several other skulls showed signs that they had been on display in this way. Parts of a female skull was arranged inside another woman's skull.



Stone-phallus, which is assumed to be 28,000 years old, found in the Hohle Fels cave near Ulm in the Swabian Alps. It measures 20 cm. in length and 3 cm. in circumferential. Foto Wikipedia

Excavation leader Fredrik Hallgren believed that the

heads on the tip of the poles could have been a part of a funeral ceremony for dead tribe members. Another option, Hallgren considered, could be that victorious warriors had brought home the heads of slain enemies and displayed them as trophies. A future analysis of the found bones would show, whether the skulls were local, or they came from a remote location.

Analyses of bones has shown that the Swedish tribe from Kongemose period ate a lot of fish. From animal bones found in their settlement, one can see that they hunted wild boar, deer, moose and bears.

Analyses of bones from an underwater Kongemose settlement on Argusgrunden in Guldborgsund at the island of Falster has also shown that marine food made up between 50 and 80 percent of their total protein intake. On a Kongemose settlement at Taagerup in Scania, it was found that the two most preseved kinds of fish bones were herring and flatfish, then came eel and salmon fish.

Some of the Nivaa 10 graves were double-graves. A man of about 25 years was buried side by side with a woman in the late thirties. We'll never know whether they were a married couple, mother and son or brother and sister.

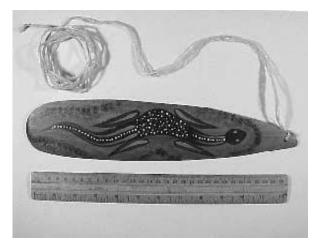


A man and a woman in a shared grave in Nivå. The man on the left was approximately 25 years old when he died; the woman on the right died when she was about 35. The woman has two healed wounds from blows from club or ax respectively in the forehead and in back of the head - Also note their characteristic Cro Magnon features, which are sloping forehead, eyebrow arches, long skull and prominent jaw. Photo Rudersdal Avis

Both their bodies have been wrapped in skin, and on the breasts and around the back of the heads are clear traces of red ochre.

Use of red ochre for burials has very deep roots in the history of Europeans. Both Neanderthals and Cro Magnon used to sprinkle red ochre over the body, in the Neanderthal grave Shanidar in Iraq as well as in almost all known Cro Magnon burials.

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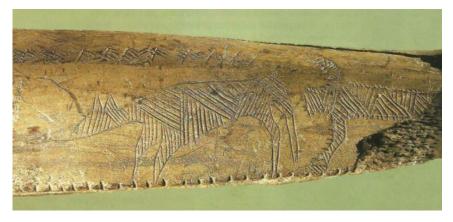
En Australsk aboriginal bullroarer Foto Researchgate.

In Kongemosen on the island of Sjaelland a piece of bone with a hole have been found that many think is a musical instrument. When tying a string to the hole and swinging it around in the air, it produces a sound, a hum, therefore it is called a "hummer".

Australian aboriginals use a similar instrument, which in English is called a "bullroarer", which is misleading as there were no originally cattle in Australia. The aboriginals' original word for the

instrument means something as "secret-sacred". It is said that the ancient Egyptians and Canadian Inuits had similar instruments.

On an antler stick found in Aamosen in western Sjaelland is a carved image of a deer and a humanlike figure. We can imagine that it is a sort of good luck charm intended to produce, what all hunters dream about, namely the game coming out of the woods.



Antler stick with engraved figures found in Aamosen.

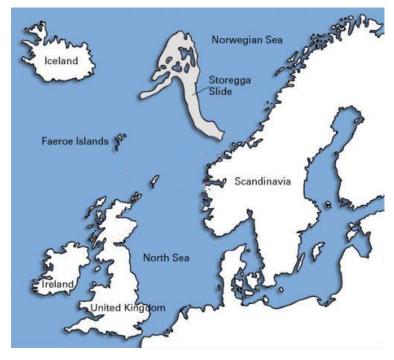
The human-like figure can be a forest god, who in his mercy drives the game out from their hiding places. It looks like he has hair on the body, also the head is shaded in the same way as the rest of the body also with a few hairs. Maybe

it's the god in the shape of an animal. The trees of the forest are seen above.

P. Mellars tried in 1975 to calculate how much larger game such as deer, fallow deer, wild boar and the like, which annually are hunted down per square kilometer in today's northern European forests (there are such statistics based on hunters reporting). On this basis, he concluded that there may have lived perhaps 8,000 individuals in the forests of the hunters stone age in Denmark. Fishing, gathering of nuts, herbs, eggs, and hunting for smaller animals are not included.

However, we know from analyzes of bones and waste heaps, that fish, birds and smaller animals accounted for a large part of the diet. So maybe we can assume that the old hunters and their families in the area of present Denmark numbered between 10,000 and 20,000 individuals.

6.6 The Storegga Tsunami



A huge underwater landslide in the Storegga area off the Norwegian coast caused a colossal Tsunami around 8,000 years before the present. Photo Old Maps, Expeditions and Explorations

All along the east coast of Scotland and along the north of England have been found an unexpected layer of sand. It has been confirmed that this layer was deposited by a tsunami triggered by a huge undersea landslide in the Storegga area off the Norwegian coast, 100 km north-west of the coast of Møre. About 8,000 years ago slid 290 km. of the Norwegian continental shelf and an area the size of Iceland out in the Atlantic deep, thereby causing a

massive tsunami. Its effects are visible not only in Scotland but also along the coasts of Iceland, Norway, Faroe Islands and Shetland. There are evidences that the tsunami reached a height of 25 meters in Shetland, 3-6 meters at the Scottish coast and 3-4 meters on the coast of southern Norway. Some believe that the underwater landslide was triggered by an earthquake.

The incident has been thoroughly investigated in connection with the preparation of the Ormen Lange natural gas field. One of the conclusions is that the landslide was caused by material built up during the Weichsel glaciation.

In Denmark, the effects of the tsunami have not been detected, but there can be no doubt that it has been disastrous for the scattered groups of Kongemose hunters, who lived in low-lying coastal areas.

It reminds me of the legend of the gods Odin, Vile and Ve, who killed the original giant Ymir, and the flow of his blood drowned all Jotuns except Bergelmer and his wife, who saved themselves on a millstone; and from them sprang the race of Jotuns.

6.7 Literature

Danske stenalder buer og pile og deres rekonstruktion Hafting microliths – from Scandinavia moors to high alpine slopes Kongemosekultur Wikipedia Forudgående afsnit: <u>5. Denmark's History – 5.0 The Maglemose Culture</u> Efterfølgende afsnit: <u>7. Denmark's History – 7.0 Ertebølle Culture</u> <u>Dalum Hjallese Debate Club</u> dhdebatklub (snabel a) gmail (punktum) com

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