

Nordic clinker boat traditions

The clinker boat tradition has traditionally been present all along Denmark's coast and is still practised countrywide, although to a more limited degree.



The clinker-built coaster Liv lands at Thorup Strand after a day fishing with Danish seine. May 2016. Photographer: Kirsten Monrad Hansen, Han Herred Havbåd

The clinker-built boat is a special Nordic boat-type, which has been of vital importance for the Danish people's use of the sea for the last two thousand years. The boat type has varied in terms of form and size, depending on the type of waters it was used in, whether it was built for transport of cargo, fishing, carrying passengers or long-distance sailing, who and how many the boat was built for, as well as which materials were available. The clinker-building tradition has helped shape Denmark as a seafaring nation. Clinker-building describes the construction of the hull itself, or the outer shell, if you will. When clinker-building, the horizontal boards (planks) overlap each other.

How is it practiced today?

New clinker-built boats are still being constructed in Denmark, but at a much more limited rate. We know of only a few boatyards building clinker-built boats for commercial purposes (fishing and tourism). Individual museums and private craftspeople build new traditional boats or copies of older clinker-built vessels for private use and as a means of communicating maritime craftwork. It is also becoming difficult to acquire several of the original raw materials used. As an example, iron today is of a different quality to that which was previously used for producing rivets. Modern iron nails have a much shorter longevity.

Similarly, long-fibred hemp is no longer produced in Europe, as demand for hemp for the production of rope has disappeared. Today, hemp is produced for the textile industry, in response to their demand for short fibres. The Viking Ship Museum must import hemp fibres from China in order to produce rope of hemp. Niche products such as this are very expensive and sometimes impossible to acquire, once commercial demand disappears.

The coastal boats are built based on direct experiences from (all of) the preceding boats, as well as the fisherman's demands in terms of layout and the type of fishing it will be used for. In addition, the boat is also built based on the boatbuilder's experience with what is required in order to make a boat seaworthy and at the same time, usable, in union with the available materials. Boatbuilders still make abundant use of traditional tools such as axes when hewing frames and floor timbers, but modern tools are also used, where it makes sense to do so.

Denmark still has many active maritime milieus, where the clinker-built boat is in focus: milieus concerned with the construction, use and maintenance of boats. Likewise, the social activities in associations organising traditional events, and in networks for owners and users of clinker-built boats, are also many and various. These milieus are disparate and vary in terms of their organisational structure. They are typically rooted in specific local contexts with connections to maritime environments in harbour areas, which have developed out of local boatyard and slipways, local history museums, maritime museums or networks of owners of traditionally built boats.



Træskibs Sammenslutning arranges sailing events and regattas around Denmark. Here, the clinker-built boats from both Roskilde Fjord and Ise Fjord are gathered for the Wooden Boats of the Fjord Regatta. Photo: Werner Karrasch, Viking Ship Museum

History and background

Historically, traditional clinker boatbuilding was about building boats for a commercial purpose or for subsistence. The boats provided food for the table, transported people and goods across the water, and ensured trade and connections between different parts of the country, as well as being utilised for military purposes (Viking Age longships). The form of - and the equipment present on board - the traditional clinker-built boats was decided by the intended use, users, the boat's 'commercial' purpose and the relevant building tradition.

The name 'clinker' refers to the way in which the boards (planks) are fastened together using iron nails - a technique dating back to before the Viking Age. More recently, copper and stainless flat-headed bolts are also used.

Today, the clinker-built boat does not play such a large role in terms of subsistence and it is primarily hobby enthusiasts who maintain the craftwork. However, even vessels newly built for leisure still require that the craftsman can build a boat that meets the demands for seaworthiness, cargo capacity, specific sailing conditions and so on. The same traditional skills are necessary in order to adapt and integrate modern requirements while understanding the connections between form and function – just as when a boatbuilder built a boat for its original intended purpose. Several original clinker-built working vessels are maintained and renovated with the intention of preserving a 'snapshot' of the commercial ship's history. Here, the craftwork involved in maintaining, using and sailing these vessels, where there is an endeavour to preserve knowledge concerning past practices, techniques and materials, is necessary in order to sustain the traditional skills. Traditional craftsmanship is therefore kept alive but is in danger of being phased out in the absence of the development driven by commercial use.

Traditionally, a boat's lifespan was expected to be around 25 – 30 years, after which point it was no longer economically feasible to continue repairs. Today, many of the clinker boat milieus are preoccupied with maintaining the older vessels beyond their natural lifespan. This requires new skills in relation to maintaining and preserving the old craft traditions. Træskibs Sammenslutning, the national association for old working vessels, includes a collection of roughly 500 boats (both carvel and clinker-built). Approximately 100 of these are 100 years old or older.

Transference of traditions and skills

Fishermen continue to use the coastal boats professionally, and commercially optimise and develop the clinker-built vessels in line with present-day conditions and requirements. However, use of the clinker-built boats is also kept alive through races, leisure sailing and other forms of maritime outdoor pursuits. The specific type of the boat is still connected to the waters it is built to sail in and its required function and users endeavour to acquire and master traditional skills.

The communities of practice and networks that incorporate the clinker-built boats today help to keep the traditional crafts alive and to adjust them to the ships' new purposes. With the gradual phasing out of the traditional industries, tourism has emerged in their place. Tourism maintains a purpose for the ships but it also

instigates new demands and requires new standards of the clinker-built boat. The national organisations Træskibs Sammenslutningen (TS) and Dansk Forening for Ældre Lystfartøjer (DFÆLE) organise the owners, associations and networks around the ships.

Museums with active museum boats also contribute with knowledge and skills concerning the ships' interaction with the local milieus. Furthermore, boat guilds, maritime milieus and boatyards run on a voluntary basis constitute new communities, which take over maritime milieus and boatyards that previously had a commercial purpose. These milieus are also an important recruiting ground for getting young people professionally involved in the maritime world.

In Denmark, there are several festivals for older wooden boats and ships – including the clinker-built boats. During these festivals, the ships and the old maritime crafts connected to the clinker-building tradition, such as rope-making and clinker-building, are communicated and demonstrated. In addition to the informal communities of practice, there are also the formal institutions such as the boatbuilder and sailmaker schools, which take in 20 students annually. It is also possible to take an education as a seaman or machine master, to attend a maritime boarding school or production school, to take an upper secondary general education in seafaring or to join a school ship.

The traditional clinker-built boat is not built using drawings – rather, it exists as a model in the mind of the boatbuilder. More recently, sketches, models and moulds were all used as the basis for building a clinker-built boat. Apprentices must therefore learn specific skills in order to be able to construct a clinker-built boat themselves. This transference of skills has 'always' gone from master to apprentice. Knowledge about the wood – which type fits to which boat – as well as knowledge about the shaping of the boat, the boats' intended function and the water it will sail in, are all imperative types of knowledge, which must be handed on to the next generation.



The Viking Ship Museum's boatyard constructs new clinker-built boats, in this case, based on a Fejø eel-drifter dating from 1905. Volunteer boat guilds both sail with, and help to maintain, the boats. Photo: Werner Karrasch, Viking Ship Museum.

What will happen in the future?

The clinker-building tradition will not survive on its own, but luckily, there is a broad awareness among private individuals, museums, associations, schools and nationwide organisations. Interest in preserving maritime milieus – and thus ensuring the physical framework for practicing clinker-building traditions – is increasing, among both politicians and the many different partners in harbour areas. Foundations are also becoming aware of the many worthy ship projects.

Initiatives to unite the many players and bearers of knowledge in a stronger collaboration between researchers, practitioners, professionals and enthusiasts have already begun. The goal is to co-ordinate the efforts for preserving knowledge concerning tradition, craftwork and use of the clinker-built boat, as well as recruiting a new generation who will be the recipients of all these inherited immaterial skills, which lie at the heart of our Danish seafaring history and the Nordic/Danish clinker-building tradition.

Clinker-built boats are still used commercially for coastal fishing in northwestern Jutland. Here, it is vital that the vessel in question is a clinker-built boat which is strong, but at the same time flexible enough to withstand being 'stranded' on a daily basis, when they must make the passage in over the sandbanks in order to be hauled up on to the beach. Coastal fishing with these boats is making headway, even if the number of boats is not especially high.

10 years ago, a collaborative project was started with the landing places in Han Herved: Han Herved Havbåde. With financial support from EU funding and the local municipality, a project was begun to renovate/rebuild the older fishing boats as well as establishing an apprenticeship education, led by one of the last boatbuilders who was trained in building coastal boats for fishing from the open strand. This was done in order to preserve this expertise within the tradition of clinker-built coastal boats. Today, the boatyard is an independent company, which builds new boats for the fishermen in Thorup Strand. In all, three apprentices have been trained and a fourth is still taking an apprenticeship. At other places, such as the Viking Ship Museum, new clinker-built boats are regularly constructed for sailing with Danish and foreign tourists and for educational purposes. There is an increasing demand for these sailing trips, which are intended to communicate the intangible cultural heritage from both an historic and modern perspective.

Practitioners and those who can

The various milieus, institutions, associations and nationwide organisations connected to maritime environments where the intangible cultural heritage associated with clinker-building traditions are practised and maintained, are plotted – and regularly updated – on the maritime google map. The map also includes links to the various milieus, which also have a known website or Facebook page. There are both qualified boatbuilders and apprentices engaged in the tradition with constructing clinker-built boats.

This living culture is familiar to the fishermen and sailors who use the boats, but it is also widely known throughout Denmark. There are more than 100 volunteers under

the auspices of Han Herved Havbåde. The Boat Guild at the Viking Ship Museum has over 300 members for its 12 guild boats, and an additional eight boats that are used for educational purposes and sailing with tourists. TS has over 1000 personal members representing 500 vessels. Around 300 of them are clinker-built vessels. All of these volunteer members and owners work daily with maintaining and sailing these clinker-built boats and hereby keeping the Nordic clinker boat traditions alive. In addition to these milieus, there are also many other clinker boat milieus spread around Denmark. You can find them on the aforementioned google map.