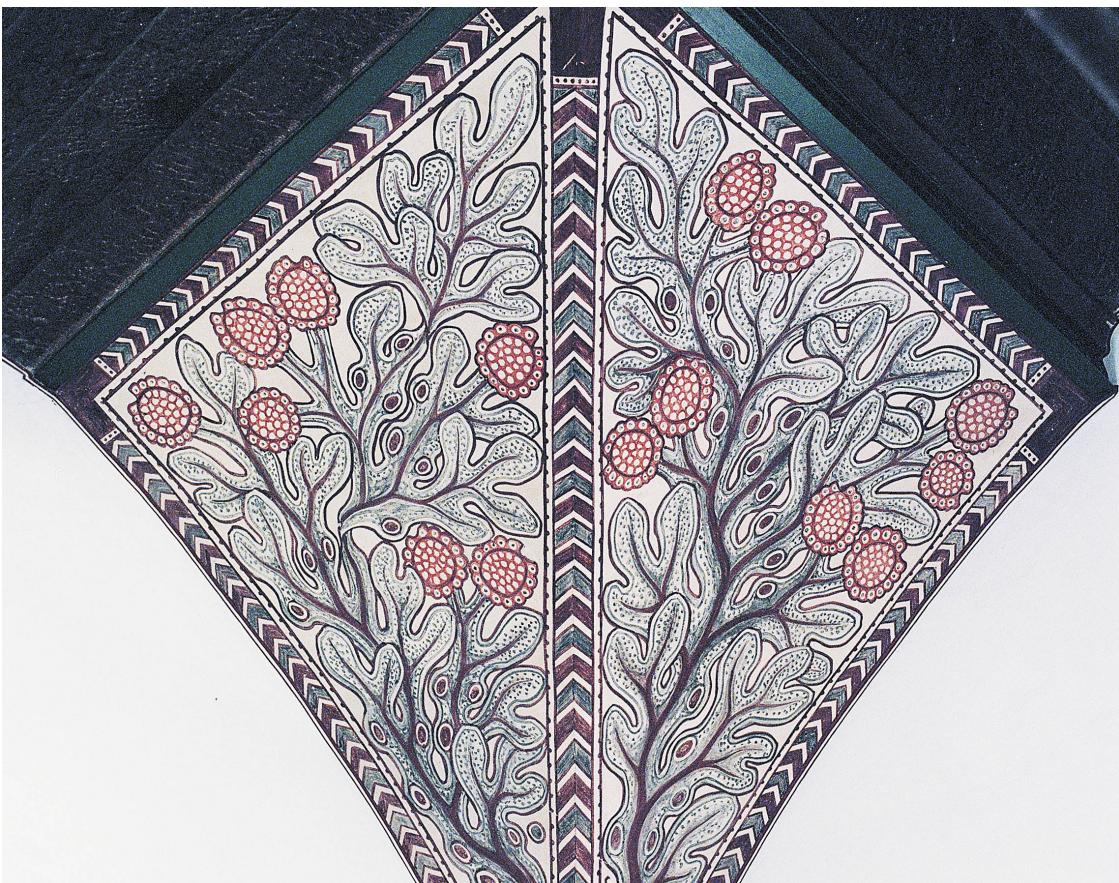


Seaweed artwork at the City Hall of Copenhagen



Introduction

This leaflet briefly tells the story of the seaweed -themed artwork at the Copenhagen City Hall, which reflects the biology and history of seaweed in Denmark in the late 19th century and the beginning of the 20th century.

The artists took some license in their depiction of the seaweeds, however several species can be recognized.

Both the exterior and interior of the City Hall were designed by the architect Martin Nyrop (1849-1921) at the end of the 19th century. The design of the building was inspired by the city hall in Siena, Italy.

The artist(s)

The frescos were painted by Jens Møller-Jensen (1869-1948) and his wife Sigrid Vold (1875-1968) in the years 1902-1903. They learned the technique of fresco painting on a trip to Florence, Italy, where they met the architect Martin Nyrop, who offered them the chance to decorate the City Hall. The paintings are signed only by Jens M. Møller-Jensen although his wife actually made many of the finest paintings. At that time it was not so acceptable, being a female painter.

The decorative motifs in the passages and corridors are taken from seaweed and lower marine animals, reminding the spectator that Denmark is a maritime kingdom, and bringing - as the builder on one occasion wrote - "the taste of the sea-salt to the lips".

The inspiration for the seaweed theme is unknown, but the entire City Hall does have numerous artworks with fish, seafood, beaches, etc. The City Hall is said to be built on sand and herring: sand as the ground and herring as the main diet provided for the builders.

The mermaids: Eigr's Wedding or The Farewell of Eigr.

Eigr was the king of the sea in Norse mythology. The name Eigr related to the word for water, and he is the personification of the sea. His powers can be used both for good and evil, but all the time related to water and the sea. His colleagues are the Greek god Poseidon and the Roman god Neptune.

Eigr is pictured with his daughters on the Danish island of Læsø. Notice the seaweed covering the naked parts of the daughters. The artist is Lorenz Frølich (1820-1908), who often visited Florence for inspiration. In Florentine tradition, the tails of mermaids were divided into two parts as seen here.



The "Wedding of Eigr" painted on tiles by Lorenz Frølich decorates the Magistrate Stairway of the City Hall of Copenhagen.

The inspiration

The illustrations of seaweeds that do not occur in the Copenhagen area indicate that the painters did not get their inspiration from the shores around the city.

It may have come from travelling, but it is more likely that it was obtained from books (e.g. "Flora Danica", the Danish comprehensive atlas of botany), or from phycologists at the University of Copenhagen like F. Børgesen, who was working on the algae of the Faroes, or L. Kolderup Rosenvinge, who was working with the marine algae of Denmark.

Brown seaweeds

Bladder wrack (*Fucus vesiculosus*) and serrated wrack (*Fucus serratus*) can easily be identified, the first by the two opposite airbladders and the second by the saw-toothed edge with flat receptacles. Some of these species are depicted with barnacles (small crustaceans) on the leaves. Both of these *Fucus* species occur in Øresund/The Sound.

Among the other brown algae depicted, some can be referred to spiraled wrack (*Fucus spiralis*). This species grow in the upper littoral zone (near shore area), and is frequent in the Northern Kattegat, but it does not grow in The Sound outside Copenhagen, due to the decreasing salinity through the inner Danish waters towards the Baltic Sea. It reaches the southern limit of its distribution in Denmark at Sjællands Odde (Point of Zealand) and Isefjorden.

Arctic wrack (*Fucus evanescens*) can also be recognized. This species was first found in Denmark in 1948. It probably arrived from the North Atlantic via Norway, and it is now very frequent in Copenhagen harbour.

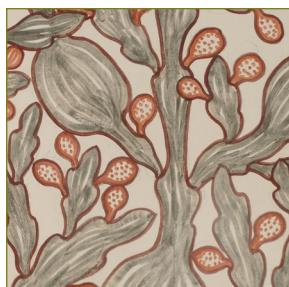
There are small green dots on the fronds (leaves) of some brown algae which may be small clusters of hairs that the seaweeds develop in order to increase their surface area and thereby their nutrient uptake. Also depicted on the seaweeds are eye-like structures, which may be an artistic form of bladders, or could represent egg-sacs of snails (*Lacuna* spp.) or tubes of worms (*Spirorbis* spp.).



Bladderwrack (*Fucus vesiculosus*) with opposite air bladders on both sides of the midrib.

Rockweed, Norwegian kelp, knotted kelp, knotted wrack or egg wrack are all popular names for the seaweed *Ascophyllum nodosum*. It is characterized by having centrally placed air bladders. The receptacles are almost yellow at maturity; they are found at the tip of short branches, and disappear at the end of reproduction.

This species also needs high salinity to survive and reaches the limit of its distribution at Grenaa in Jutland and at Kullen on the Western Swedish coast.

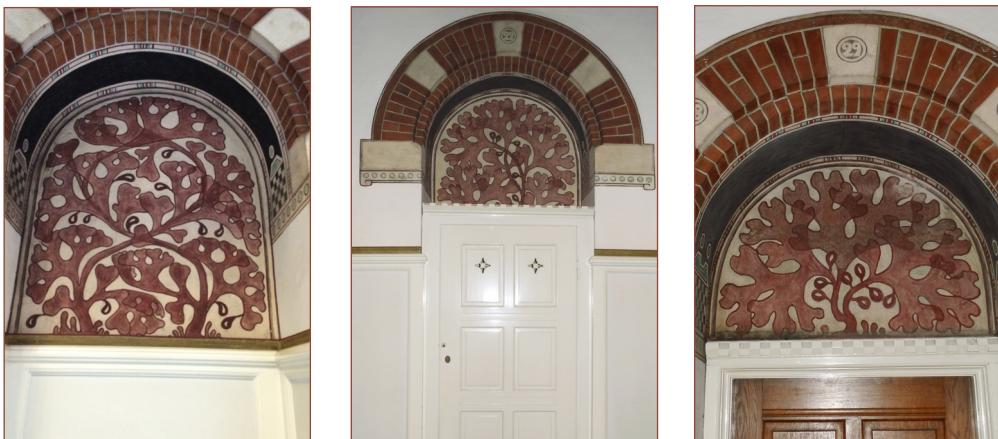


Living Knotted wrack (*Ascophyllum nodosum*) in the reproductive stage with the yellow receptacles, and seaweed artwork by Jens Møller-Jensen.

Red seaweeds

Red seaweeds with fan-shaped leaves are probably Irish moss or carrageenan seaweed (*Chondrus crispus*), which has a flat fan-shaped frond with repeated bifurcations; stalked leaf bearer (*Phyllophora pseudoceranoides*), with a cylindrical stipe, fan-shaped leaves and globular reproductive branches.

Irish moss is sometimes also used as a name for the species *Mastocarpus stellatus* that might also be present. It resembles *Chondrus crispus*, but is darker and has small papillae on the leaves. In Denmark it was first recognized by J.P. Jacobsen (1847-1885) who later became a well-known author.



Left: *Phyllophora pseudoceranoides*. Middle: *Mastocarpus stellatus*. Right: *Chondrus crispus*.

We hope that you will enjoy the beautiful architecture and surroundings of Martin Nyrop and seaweed artwork of Jens Møller-Jensen and his wife.

This leaflet has been prepared by:

The Seaweed Network in Denmark with comments by Ruth Nielsen, prof. emerita and Joyce Svensson, City Hall of Copenhagen.

Inspired by Ruth Nielsen and Joyce Svensson in the preparation for the visit to the City Hall by the delegates from the 22nd International Seaweed Symposium, Copenhagen, June 19-24, 2016.

