## HOW OLIVER CHANGED NORWEGIAN MARITIME HISTORY

by Rein Dammann

In 2003, right after we had started building our wilderness camp, someone found a 2000-year-old dugout in Glomma, the longest river in Norway. The river was extremely low that year, so that the whole mud bank where the boat was lying was exposed. Only the edges of the dugout were visible. A family living nearby claimed they had seen the boat many years earlier, also during low water.

Scientists carefully uncovered the dugout, and when the water in the river rose again, they floated it down to the main road. Heidi and I went to the site in order to watch the scientists lift it out of the river and onto a truck, to prepare it for display in a national museum. Radiocarbon dating revealed that the boat was made around the year 170 B.C. This was sensational because that was twice as old as the oldest boat that had ever been found in Norway until then!



Preparing to lift the Glomma dugout onto a truck. Photo source: http://www.villmarken.no/stokkbaat.htm

The story was all over the television and newspapers, but Heidi and I were shocked at what the scientists were saying. They claimed that dugouts had never been important in Norwegian boat history—in spite of the fact that more than 200 had been found on the bottoms of small lakes in Norway.

Most of those boats had been made out of pine or aspen. The one in Glomma was unusual, in that it was made of oak. That's probably why it has lasted so many years, along with the fact that it had been covered by the silt in the river. Also, the other boats were much shorter, usually only 9 to twelve feet long.

The scientists also claimed that dugouts tipped over all the time, were almost impossible to paddle, couldn't haul any freight, and couldn't be paddled upstream.

To Heidi and me that was simply unbelievable. We started reading and seeking information about dugouts in Scandinavian, English and German history, and found that all the scientists seemed to have the same negative and condescending opinion about them.

Only two people agreed with us: Thor Heyerdahl\* and Oliver! Both of them said: "Why don't you build a similar boat, and prove that the scientists are wrong!"

So we decided to try, and to make a documentary film about the project. We found a videographer from the Norwegian Broadcasting Corporation who filmed the whole project, from cutting of the tree to making the boat, and also the expedition later on.

The problem was that no one in Norway knew how to build a dugout canoe. But Oliver suddenly said: "I know how. I built several of them when I was younger!" And he sure knew. His knowledge saved the project.

He was the one who told us that we had to cut a live, standing tree and carve it out within a month or so, before it dried out. He also showed us valuable ways to judge the trunk (which of course was not 100% straight) so that the boat would come out completely straight on both sides.

He told us that a boat 9.5 meters long should be a little deeper in the center, so that it would be easier to turn, and we did that. It worked perfectly.

Oliver said that the shape of the outside of the boat was more important than the inside, and we actually did use more time shaping the hull than the interior.

He said that the reason the dugouts do not tip over easily—the opposite of what all the scientists were saying—was that the bottom had to be at least twice as thick as the sides. So, we made the sides a little less than two inches thick, and the bottom about four inches.

Oliver got us started, and then left for the U.S. It took us about a month (but only about 110 effective working hours) for us to finish the dugout, with some help from our sons Narvaq and Dyre.

We then had it hauled way up the Glomma. We also found a known Norwegian scientist who wanted to join our crew of six paddlers on parts of our ten-day expedition down the river.



Using a horse to drag the dugout to the water's edge.



Seven paddlers on the Glomma River expedition. Photos: http://www.villmarken.no/stokkbaat.htm

The expedition was very interesting, and very successful. The dugout proved everything we had dreamed of: It could haul a lot of weight and freight, it was very effective in going upstream, and it was not at all as unstable as the scientists had claimed.

Our half-hour documentary movie was shown on Norwegian national television, and had an extraordinarily high number of viewers. But for us, the most important result of our work was that after the expedition, we heard Norwegian scientists say in the media that dugout canoes were fantastic boats, and that they were an important part of Norwegian boating history! They even said that the history books had to be changed.

All of this was very much thanks to Oliver. His help and knowledge about dugouts helped change Scandinavian and Northern European history books and views of the importance of this type of boat.

Here's a funny story about this: The scientists said, in a booklet, that quite a few dugouts had been found on the bottom filled with rocks. Their conclusion was that people in the old days had been fighting, and had been sinking each other's boats.

Oliver had a good laugh when he heard that. He said: "Obviously they don't know anything about dugouts. The only way to store a dugout through the winter is to fill it with rocks and sink it, so that the ice won't destroy it. Also, a dugout will crack really quickly if you store it on the shore".

On the other hand, I don't know if Oliver was correct when he concluded that people in times past would load their dugouts with goods, float them downriver, and then abandon them.

Thor Heyerdahl participated in our documentary film. As a result, he invited us down to his family's homesite in the Canary Islands. We had a very nice interview and visit with him down there. He agreed that the dugouts were important in carrying goods to market, but was convinced that the people used the rivers as roads through the countryside, paddling both downstream and upstream.

I have to agree with him about that, because our expedition showed just the opposite: A long dugout is extremely fit to go upstream. Because it is so narrow, its resistance to the current is smaller than that of any other boat.

Seven paddlers generate a lot of power! We had no problem forcing even very strong currents. I'm sure that we could have paddled all the way up the Glomma. And of course people in olden times would have known about finding back-eddies flowing upstream in the rivers, just as we do today.

I also know that when people back then wanted the boat to be extra sturdy, they made outriggers. They found a log about six feet long and 6" in diameter, split it up the middle, and hung one part on each side of the boat, just above the water. That made a whole lot of a difference! If the boat leaned to one side, the log on that side would float. The full weight of the log on the opposite side would then force the boat back into balance.

A few years later Norwegian Maritime Museum wanted to make a copy of the old dugout that had been found in Glomma. They came out to our camp, took a lot of pictures of our canoe and paddles, and wrote down everything Oliver had taught us about dugouts. They said they hadn't been able to find anyone with that important knowledge anywhere in Scandinavia!

<sup>\*</sup>Thor Heyerdahl is the world-famous author of Kon-Tiki, his account of building a balsa raft on the coast of Peru and floating it across the South Pacific to the Tuamoto Islands in 1947. His goal was to prove that there was no technical reason why people from South America couldn't have settled Polynesia in pre-Columbian times.



Kon-Tiki. Source of text and image: http://en.wikipedia.org/wiki/Kon\_tiki