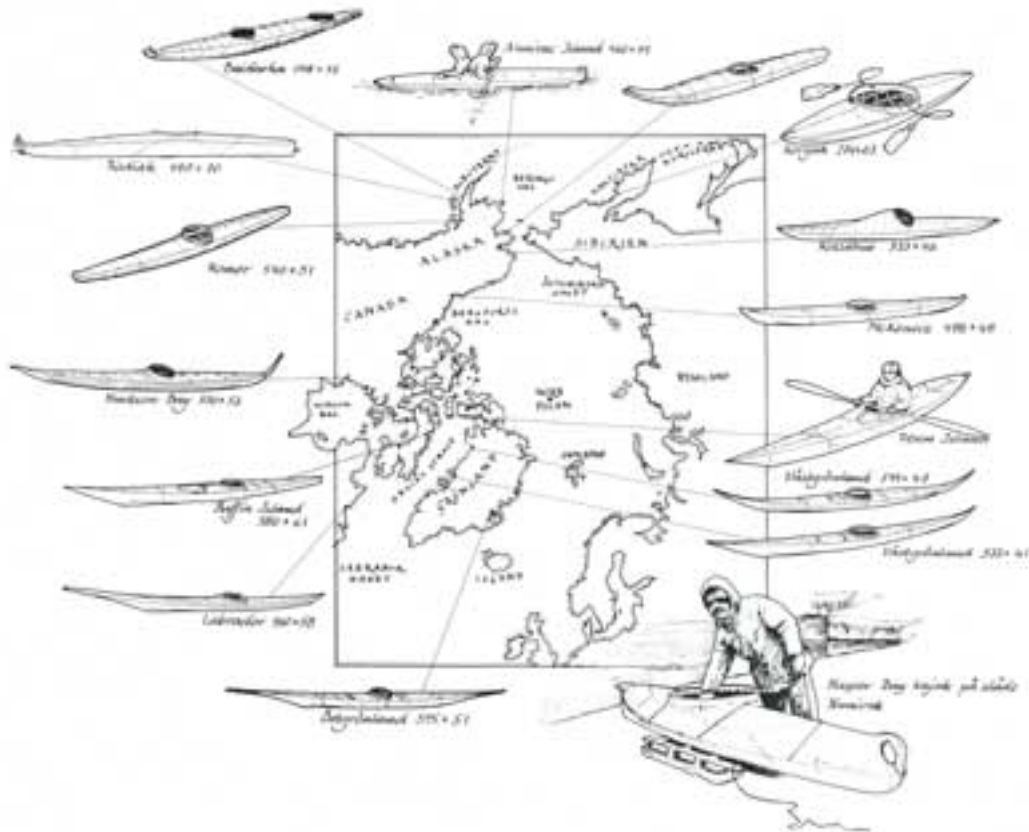


# Paddling Greenland style

## *The early history*

The origin of kayaks is relatively unknown. We know from identified archeological finds that they 2000 years ago looked much like modern Greenland kayaks. But some years ago fragments of what may have been a 5000-year-old rib was dug up on a site in Western Greenland, together with tools reminding of a modern harpoon and fragments of a paddle. The excavation showed that the people lived on sea mammals that could not have been caught without boats. But kayaks may be even older – archeological finds from the coast of Bering Sound indicate that some kind of skin boat may have been in use 8000 years ago.

The problem is that these crafts were built in natural material and decomposed quickly even in the cold arctic areas. The clues are mostly pieces of bone or stone that may have been used with the kayaks or umiaks – not the very crafts and paddles.



### *The people*

The arctic north was colonized from Siberia in a number of waves. First were the fishing/hunting tribes of the Paleoarctic Tradition that around 11000 BC wandered across the Bering Sound that in those days were dry land. They may have used boats but we do not know for certain.

After them came the Arctic Small Tool Tradition, 4500 BC, leaving behind them the aforementioned harpoon and paddle.

Next in line was the Norton Tradition, 3000 BC, also with some evidence of marine activities.

The Dorset Culture was of Indian/Eskimo heritage and settled on the west coast of Greenland 500 BC, leaving no traces of kayaks or related tools. But archeological finds were made on remote islands that suggest the use of some kind of boats.

Then came the Thule Tradition (proto-inuits), ancestors of the modern day Inuit's, settling in Canada, Alaska and Greenland and dominating the area until the 17<sup>th</sup> century, using umiaks and kayaks of modern types.

### *Kayaks in history*

Skin boats are mentioned in literary sources from the 13<sup>th</sup> century, but we cannot tell if they are umiaks or kayaks. With the emerging trade between Norway, Iceland and Greenland, decorative pictures and models of kayaks started to appear in churches and stately homes.

The Danish cartographer Clavus depicted a relatively correct kayak on a chart from 1424.

In the 17<sup>th</sup> century captured Eskimos were showing their rolling and harpooning skills at the European courts, regarded by the clueless onlookers as some kind of entertainment spectacles. But from the same time there is a very detailed and initiated report by David Crantz, a Moravian missionary, watching Greenlanders perform ten different rolls and hunting with harpoons.

### *The kayaks*

Harvey Golden identifies 40 different types of kayaks, indicating that they were closely adapted to the local conditions and kind of hunting – far from modern days global standards.

The Greenland kayaks that have made it into the commercial consensus are primarily the western and eastern types. The western being the most popular with their maneuverability, seaworthiness and general adaptability to modern needs, exemplified by Anas Acuta, Nordkapp, Qaanaaq and a long line of kayaks from Derek Hutchinson, Nigel Dennis, Nigel Foster, Aled Williams and many more. The eastern type came later, to some extent following the popularity of Black Pearl: Kayaks from Tahe, Arrow, Outer Island, Walrus kayaks. They are generally faster and with less volume, less windage and a tighter fit.

When the kayaks made their way into our modern-day paddling culture, they often grew in width, beam, weight and outfitting, departing more and more from the role models and thus sacrificing some of their original qualities. Those based on the eastern kayaks were generally more "Greenlandic" in this respect – an attempt to return to the sources.

### *The gear*

Paddles from Greenland have not always looked like they do today. The old ones may have had the lanceolate blades that almost all primitive cultures around the world have used. Some of the 17th century kayaks in museums were equipped with those, although it is not quite clear if they are original. Some scholars believe that the paddles were influenced by Viking oars, since they seem to have appeared at the same time the Vikings reached Greenland. And why not? It must have been quite a sight when a couple of longships with twenty pair of narrow oars in good speed approached the coast.



Our knowledge is heavily based on specimen in museums, and a problem is that we know very little of the selection process. Are these artifacts really representative? Or were the good ones worn out, and what was left for us to find, study and build our understanding on, the ones that were discarded as unusable?

Paddles from Greenland differ from our standard sea kayak paddles in many respects, but mainly because they are optimized for energy as opposed to standard and wing paddles that are optimized for power. This means a lower heart rate and less fatigue for the same speed using a Greenland paddle.

In Alaska and Siberia the kayak hunting culture were gone by the end of the 19th century, and what little we know has been deducted from studies of

museum artifacts. The situation was not that bad on Greenland. There were old hunters with kayak building skills still alive, but in most cases too old to show how they were used. Those skills were revived from oral local tradition and with the help of among others the American John Heath, who spent years gathering information on the Greenland culture.

The arctic paddle jacket, the *tuliq*, was an extension of the kayak skin. It was made in sealskin, the same way as the kayak skin, and fitted tightly to the cockpit rim. When secured in place, the *tuliq* and the kayak became in essence a one-piece skin, with nothing but the paddler's hands and face showing – an impressive arrangement for safety and comfort. In Alaska walrus intestines were used, producing a very light semipermeable drytop, performing as (but surpassing in efficiency) Gore-Tex.



Survival was about righting the kayak after a capsize. Wet exits were strongly discouraged, since the waters were freezing cold and most Inuits could not swim.

The *tuliq* still works very well with the Greenland concept. Compared to a wetsuit or drysuit it offers several advantages:

1. It seals around your face, your hands and the cockpit rim, keeping your head dry and warm (no surfers ear syndrome), and the hood moves with your head without interfering with vision and hearing the way drysuit hoods often do.
2. It fits loosely around the body without restricting movements – important when trying the more difficult Greenland rolls.
3. Air can circulate through the garment and down in the hull, meaning that condensation is minimal even when paddling hard.

4. The air in the garment isolate against cold, and offers floatation, that helps when rolling.
5. It is far easier and quicker to take on and off than the alternatives.

Of course you should stay in the cockpit with the seal unbroken at sea, as did the Greenlanders. A wet exit with a tuiliq may be a very chilly experience. A couple of minutes is fine –the air in the tuiliq keeps your upper body dry, but eventually the air leaks out and is replaced with cold water. Brrrr...

An alternative in challenging circumstances is to use a very light drysuit under the tuilik.

### *Rolling*

As David Crantz reported the rolling skill were highly evolved during the second half of the 17th century. A civilization living on the very border of human survival had no margins for error. Everything connected to hunting and paddling had to be extremely energy conserving and reliable.

Rolling as well as paddling has evolved to produce the maximum result from a minimum of effort. A standard Greenland roll uses less energy than a normal paddle stroke. It does not depend on strength, timing or fast reactions. It is a slow turning movement, where you move the kayak in under your body, and the paddle is used as a passive support to further minimize the effort.



### *Paddling*

The paddling technique is as effortless as the rolling. Based on a smooth, contained and sustained stroke sequence, it provides a good mileage, a healthy safety margin and leaves an undisturbed wake.

Taoist tradition talks about Wu Wei – often interpreted as “*effortless action*” or “*doing without doing*”. This concept does not come natural to most of us, conditioned as we are to be action-oriented and preoccupied with a “doing” that is vigorous, noisy and tiring. We may misjudge the efficiency of the Greenland paddle stroke because of the surprising lack of struggle, noise, splash and pain, compared to modern power-optimized wide blade paddles.

But be not fooled! When you find the inherent flow of the narrow stick, you will be amazed by the result. Do not force or overpower the paddle. Go with the flow and enjoy the efficiency, precision, naturalness and elegance.

The Greenland paddle is very easy to start using, but takes a little time to find the proper *modus operandi* (more the longer you have used a euro paddle or wing paddle) and it is a lifelong challenge to gain access to the full potential. In comparison, mastering the wing paddle is a piece of cake: the paddle tells you everything you need to know – stroke geometry, cadence, catch angle, lift – and lesson learned, it is just a lot of practice to perfect that one stroke.

### *Buying or building*

This kind of Greenland paddling is yet relatively new. The market is preoccupied with the notion that history has little to teach us. There is a naive extrapolated tech-Darwinism, stating that every new generation per definition is more competent and knowledgeable than the last, and thus that new kayaks, paddles or gear automatically are better than what was before.

But slowly, there is an emerging awareness that a culture using kayaks for their survival in a hostile environment may have an edge or two on our culture, where kayaks mostly are the means for summer outings.

My personal favorites are slim kayaks with a tight fit, such as Seabird Black Pearl LV, Tahe Greenland or Qaanaq, but I would not mind using one of Nigel Dennis' or Aled Williams' kayaks. If you want to build a kayak, order individualized plans for my Black Pearl, or build a skin-on-frame kayak with a good manual as reference (Chris Cunningham: *Building the Greenland Kayak*, Robert Morris: *Building Skin-on-Frame Boats*, H C Petersen: *Qaanniormermut Ilitsersut: Instruktion i Kajakbygning* or Mark Starr: *Building a Greenland Kayak*).



Good Greenland paddles have long been hard to come by. Many of the commercial alternatives have been heavy, or with odd configuration (too wide blades or too much shaft), and the only reasonable option have been to build one yourself. There are several good plans on the internet. But lately several

companies have released very nice paddles in wood or carbon, ranging from very affordable ones to pure state of the art. Beware of paddles though that just pretend to be Greenland paddles: euros or wings with narrower blades and fancy names, marketed as “the best of both worlds”. A Greenland paddle is a Greenland paddle if it can be used as a Greenland paddle. Period. There is no free lunch. Go for the real deal and start learning to use it – or stick with your old one.

There are a few manufacturers of tuiliqs, but you can also find advice and patterns on the Internet to make one yourself – a daunting task for one who has never used needle and thread, but why stop at building a kayak or carving a paddle?

Curious about Greenland paddling? I hope so. Join the steadily growing number of paddlers who come to enjoy a very rewarding way to exercise his or hers favorite outdoor activity.