



UI·RA·LA

GO ON WATER WAY PLACE, LAND



THE HUMAN EXPANSION BY BOATS

*The theory of the 2nd wave of human expansions
after the establishing of boats after the Ice Age*

PART 1 – DRAFT – FOR ADVANCE VIEWING

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The prehistory of humankind has always been pictured in terms of wandering of tribes on foot; but as a result of flooded conditions underneath the glaciers of the Ice Age, there developed skills for making and exploiting the boat – the dugout canoe initially – and that enabled humankind who had the culture, to travel where they couldn't previously, and many times faster or further than possible on foot if there was solid ground. The boat thus created a second wave of expansions not just where groups migrated as family units, but also where men journeyed to faraway places to hunt, and then later to pursue professional trading, in which case the traders – being men – began taking wives from populations at the destinations of their travels. UI-RA-LA explores this second wave of human expansions and the archeological, genetic and linguistic evidence telling the story.

PREFACE

THE SECOND WAVE OF HUMAN EXPANSION – BY WATER

Traditional thinking about early human expansions has been that they were entirely on foot, with some allowance for the ability to fashion something raft-like to cross a body of water under pressure to do so. Thus the arrivals of early humans into North America for example have only been thought to be via the Bering Strait land bridge of early prehistoric times. The development of watercraft and a way of life that mastered travel on water, has been thought to be relatively recent and local; and yet northern Scandinavia offers us rock carved images of skin boats large enough to handle the seas which have been dated to as much as 6000 years ago. Given the Arctic ice represented a continuous coastline, it is possible that skin boats circled the arctic ocean by following the edge of the ice and sustaining themselves by harvesting the sea as they went. Furthermore, back in Europe, when trading developed in southern civilizations, the northern boat-oriented hunter-gatherers were perfectly pre-adapted to carry on long distance trade along the major rivers reaching north and northwest linking northern goods like furs and amber to the growing civilizations of southeast Europe. There is a large untold story here that begins with the creating of watercraft in the flooded landscape beneath the melting glaciers of the Ice Age.

While humanity has always had the technical abilities to fashion crafts to cross any water to some land in the distance, it wasn't until the end of the Ice Age in northern Europe when the melting glaciers left the landscape there flooded and humanity was forced to develop and use an efficient water-borne vehicle to move around a wet landscape where for the most part walking was difficult or impossible. Formerly studies of human past has assumed humans were pedestrians and boats were an occasional device used when needed. But in fact when boats were invented, it caused a second population explosion and migrations around the world, this time by boat, rather than

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on foot. This second explosion happened early – from about 6000 years before present, judging from dating of the rock carved images of large seagoing skin boats in northern Scandinavia, as well as dating of the first arrivals of humans in the northeast arctic waters of North America. It carried the culture and language of the northern Scandinavian boat peoples around the world, and it explains strange coincidences.

Following the second explosion was a third one for which the boat peoples were responsible – the development of long-distance trade. In ancient Europe long distance trade was invariably done by shipping in boats. While formal professional trading may have begun with marketplaces in Babylon, etc, the boat people who encountered them took the practices into the north, and evidence suggests professional trading across the northern seas began around 6000 to 5000 years before present. (Professional traders did not make goods themselves, but simply moved goods from where they were cheap to where they were valuable, living off the profit in the difference.) This too is an unexplored story, that is covered in Part Two.

While I have developed the theory from archeological, geographical, linguistic and other traditional sources I have studied over the past decades, I recently came across a scholarly paper in *Human Genetics* 116(4):279-91 in Jan 2005 entitled "***Signature of recent historical events in the European Y-chromosomal STR haplotype distribution***" by Lutz Roewer, Peter J.P Croucher, Sascha Willuweit, Tim T. Lu, Manfred Kayser, Rüdiger Lessig, Peter de Knijff, Mark A. Jobling, Chris Tyler-Smith, and Michael Krawczak. The work done is summarized in the ABSTRACT for the article:

Previous studies of human Y-chromosomal single-nucleotide polymorphisms (Y-SNP's) established a link between extant Y-SNP haplogroup distribution and the prehistoric demography of Europe. By contrast our analysis of seven rapidly evolving Y-chromosomal short tandem repeat loci (Y-STRs) in over 12,700 samples from 91 different locations in Europe reveals a signature of more recent historic events, not previously detected by other genetic markers. Cluster analysis based upon molecular variance yields two clearly identifiable subclusters of Western and Eastern Y-STR haplotypes, and a diverse transition zone in central Europe,

where haplotype spectra change more rapidly with longitude than with latitude. This and other observed patterns of Y-STR similarity may plausibly be related to particular historical incidents, including, for example, the expansion of the Franconian and Ottoman Empires. We conclude that Y-STRs may be capable of resolving male genealogies to an unparalleled degree and could therefore provide a useful means to study local population structure and recent demographic history.

This study produced a tree chart showing the male descent suggested by the results. The authors got puzzling results – a ‘transition zone in central Europe where haplotype spectra change more rapidly with longitude than with latitude’ The authors could not explain it other than ideas like *the expansion of the Franconian and Ottoman Empires*. However I immediately saw in the general structure of the tree chart, a chart of human expansions since the Ice Age. The reason it shows up via male descent, is that males were the far-ranging gender, and that when new places were entered, it was by groups of males, who when they stayed, took local women as mates (hence it does not show up in female DNA descent.) I developed a conversion factor for the vertical scale of the tree chart and found I could convert the numbers to years before present, and from that got very close matching to what archeology, etc has already established for some significant developments in material culture – such as the beginning of dugout canoes in the north or the beginning of amber trade.

I then addressed the branchings from more recent times – the branchings that puzzled the researchers – and found I could correlate them quite easily with development of trade routes – starting with trade routes down the Danube and Volga or Dneiper and then the division of trade routes as trader family patriarchs produced sons who moved away to start their own trade routes all initiated from the north from men whose ancestral patriarchs had been leaders of hunter-gatherer boat-people clans – as they all descend from the general boat people phenomenon (which we can identify with the archeological “Maglemose” culture) established fully by 6000 years before present.

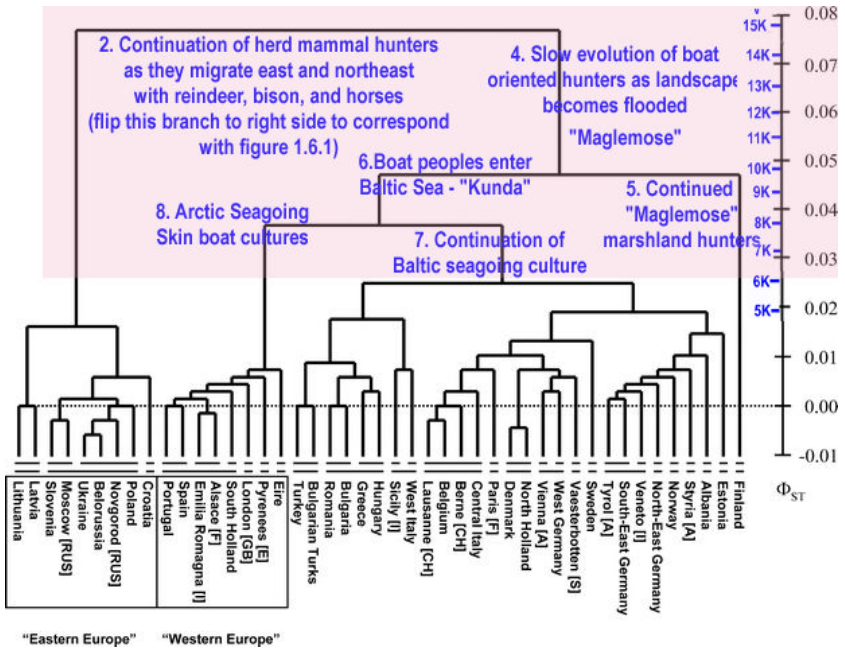
After discovering the correlation, I used it to adjust my version of events only a little. Because the correspondences

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were so good, I have assumed the Y-STR tree chart shows in the many branchings of more recent times the process of creation of new trading routes and patriarchs, who then passed on the command of these trading routes (and all the infrastructure including marketplaces) to their sons. It explains why *the spectra of change is more rapid longitudinally* – it is because trade routes in Europe are vertically elongated regions.

But the new population genetics investigations are new, and we should not use them entirely for our interpretations of the past. We must still find our story told in archeological finds of material culture, enduring manifestations like rock carvings, the story that geographic configurations tell, human social and trading behaviour, the story told in language, etc, etc. The genetics information is only additional new data to reveal the story. And the descent of males is more informative than the descent of females in terms of expansions of humanity of more recent times, because men tended to form the exploratory groups and when too far to return home – on not wishing to return home – they mated with local women. The mtDNA of women may reveal major migrations of early prehistoric family groups, but not reveal very much about more recent historical developments mostly initiated by male groups.

The following reproduces the Y-STR chart of the study, with my own notes attached in blue in the pink area. What happens below this pink area is too complex to show graphically. Note in blue along the right, my conversions into 'K (1000) years before present. The branchings determined purely from the genetic data completely agree with what archeological dating has established. The numbers refer only to the order in which I discuss the developments in the text. The major development of north-south trade from descendants of the boat people is basically everything underneath item no. 7. Developments below the pink rectangle are dominated by developments arising from north south trade.



What is the meaning of UI-RA-LA? This invented word stems first from the fact that the modern Finnic culture can be easily shown to have descended from boat-peoples, and therefore we draw in inspiration from the dominant Finnic languages today – Estonian and Finnish. Relics of an ancient Finnic language in Europe appear in non-Indo-European traces as well like Basque.

The UI- is inspired first by Estonian/Finnish elements *uj- /ui-* 'pertaining to swimming, floating'. Secondly is the fact that the major tribe of the *Aquitani* in Roman times was called *Uiteriges* which interprets via Est/Fin as 'floating nation' (*uide-riigi*). the -RA- is inspired by the apparent presence of the "RA" element in the ancient names of major trade rivers. For example the Loire was *Ligera*, the Volga is shown by Ptolemy as *Rha* (Roman "rh" meant trilled "r"), and indeed the original names of the Rhine and Rhone. In addition Basque uses -RA as the ending meaning 'directed towards', and RA in ancient pre-Indo-European languages like Sumerian has the meaning 'route'. It exists also in Finno-Ugrian, incorporated into words. In Estonian for example *rada* 'trail, path'. Finally the -LA ending similarly has an ancient presence, although sometimes losing the -A. In Est/Fin it is the ending meaning

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'place of, territory of' and it exists in Basque as *ola*. Overall, the construction "UI-RA" would mean 'the floating, sailing, way' and it could be the origin of the Basque word for 'water' *ur*. The full construction "UI-RA-LA" might lie behind the word "Ural Mountains" and refer to the vast areas of marshland adjoining them particularly to the east. (But this is supposition. I hope someone can confirm this.) Last but not least, the UI construction appears in the Inuit language of the Canadian arctic (the Inuit were an arctic boat-people) in relation to the behaviour of water (example: *uijjaqtuq* 'water spins').

PART 1: Ice Age to 5000 Years Ago

THE ORIGINS AND EXPANSIONS OF ANCIENT BOAT-ORIENTED WAY OF LIFE FROM OUT OF ICE AGE EUROPE

Although humans were smart enough to devise rafts to cross bodies of water we are not by nature water-creatures; thus the evolution of a part of humanity into a life using boats and getting around on water could not have occurred spontaneously just anywhere. It had to have occurred in a place where there was no other alternative where survival depended on it. Through natural selection those groups who devised the best ways of dealing with the watery environment were the ones who produced the largest populations and flourished. This side of the European past has never before been told, because traditionally scholars have focused either on the prehistoric migrations of pedestrian hunters, or since around 9000 years ago on the evolution of farming and sedentary civilizations particularly in the Indo-European tradition. Part One deals with the early expansions out of the Ice Age, up until the appearance of farmers with their sedentary settlements and civilizations that produced a need for trade to connect the sedentary peoples together.

1. The General Picture of Origins and Expansions of Post-Ice-Age Peoples

1. 1 The Europeans Who Left: The Traditional Hunters Who Following Large Hooved Mammals

1.1.1 General

The story begins at the height of the Ice Age, when glaciers covered the entire north part of Europe. In southern Europe early humans lived in caves and hunted bison, horses, reindeer and other large animals found in plentiful grasslands.

But when the Ice Age came to an end, the climate warmed, and the southern parts of Europe became increasingly forested. Grasslands vanished, and brought an end to herds of many of the animals. Reindeer herds moved northward keeping above the advancing tree line, until they ran into the northern seas and could not go further northward, other than towards where Poland is today, where reindeer herds could continue northeast and eventually end up in northeast Greater Europe. The Samoyed peoples of today who depend on reindeer are probably descended from the reindeer hunters, developing mongoloid characteristics from never having left the arctic conditions of the Ice Age. And the reindeer hunters who became trapped in northern continental Europe evolved, as we will describe, into boat-oriented aboriginals, not unlike similar peoples (Algonquian cultures) in the northeast quadrant of North America not too long ago. The Finnic and Ugric cultures that survive today are probably descended from this group. The Saami of northern Scandinavia who tend to reindeer today, have some ancestry from reindeer hunters, but appear to have

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mixed with the boat peoples who came later, as their language is of a very Finnic nature. The peoples Scandinavian history called

”Finns” also included forest and coastal aboriginals, and can be viewed as descendants of the early boat people.

Meanwhile, large herds of bison and horses moved eastward to the drier parts of Europe, away from the prevailing wind and rain from the northwest. Tribes dedicated to the herds, followed them eastward. Today some European bison survive in sanctuaries in Poland. Horses once roamed the steppes north of the Black Sea, and are now all of the domesticated kind. The peoples scholars refer to as Indo-Europeans, were probably descended from the horse-hunters, because in ancient history, they introduced horses to the locations they invaded and conquered, where horses had previously been unknown.

As Europe became dense with forests, some of the pedestrian nomadic hunters followed the animal herds to their new places; but naturally some remained behind in southern Europe where humankind had spent the depths of the Ice Age huddled in the caves of southern France and Spain. They had had to contend with the loss of habitat for the herd animals painted on cave walls. The bison and horses and reindeer were gone, but there were also ibex and aurochs the ancestors of goats and cattle, which adapted better to changes in the climate and landscape. I believe that those humans remained behind turned their attention to these animals, and began to assist them to survive. Actions like promoting mating and births were actions which gradually led to domestication and the beginnings of pastoralism with cattle and goats. I predict that investigations into early Europe will discover evidence in southeast Europe of pastoralism, and perhaps sedentary life related to pastoralism, before there is evidence of agriculture. I also predict that it will be discovered that agriculture evolved from the pastoralists promoting the growth of the plants their cattle and goats liked, and then discovering humans could eat it too – after painstakingly separating the grains.

The domestication of these animals led to a worship of the process of birth-creation through a Mother Goddess, and the male force was symbolized by either ram or bull (later in time when pigs were domesticated, the boar was added as a symbol)

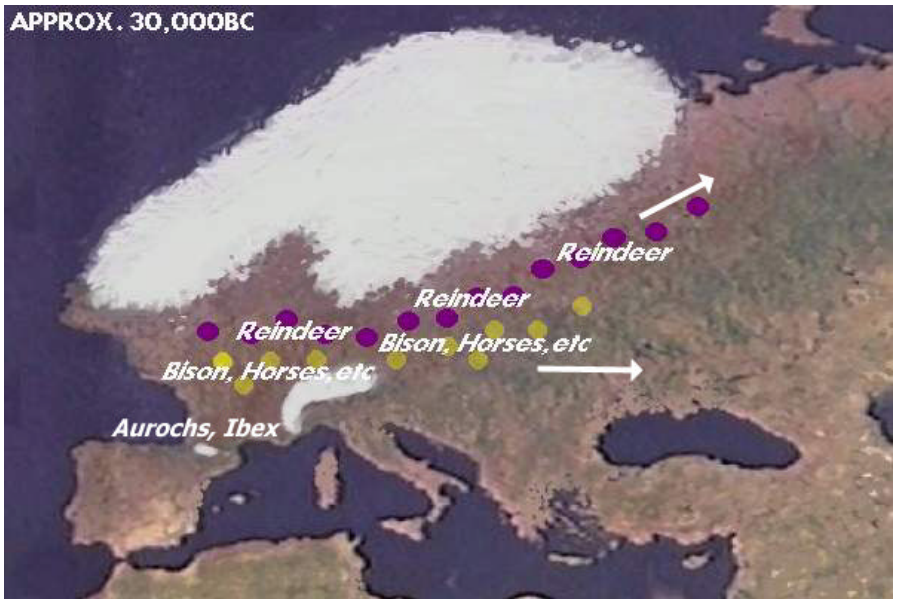
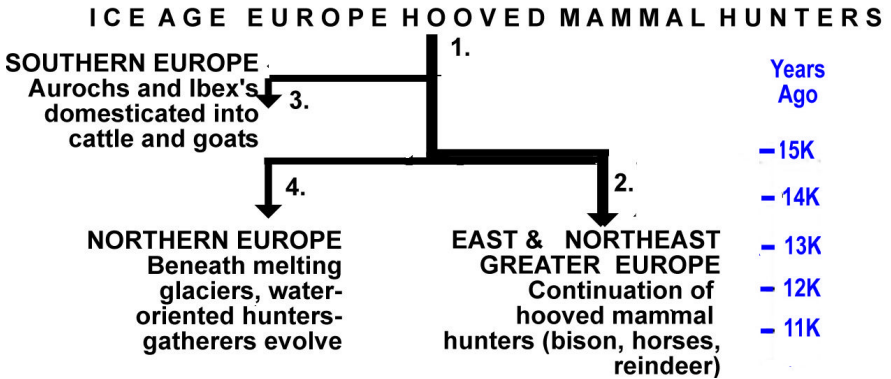


Figure 1.1.1

The Ice Sheet over the north of Europe. Humans who followed Reindeer, Bison, Horses, and other migrating herds were distributed according to the migration patterns of these herds – reindeer towards the north on tundra, and bison and horses towards the south on grassy plains. Meanwhile those who had hunted animals who were less migratory and needed less open space such as aurochs and ibex dealt with their declining populations by actions that gradually lead to domestication and pastoralism (cattle and goats). . The next split was between bison and reindeer hunters and those who remained behind in northern Europe, and adapted to the wet landscape produce by the melting glaciers.

Fig. 1.1.1.B



The chart shows in the thicker lines from 1. to 2. the continuation of the traditional Ice Age, of hunting hooved mammals, mainly animals of the plains like bison, horses, and reindeer. As the world climate warmed and the forests took over Europe, part of humanity (3.) remained in southern Europe – southern France and Spain – while another part followed the bison, horse, and reindeer herds as they moved north and east to remain in relatively open landscapes (2.) They became the reindeer hunters of arctic Asia and the horse hunters of the dry lands of southeast Greater Europe, such as the steppes north of the Black Sea. Meanwhile some of the original reindeer hunters, found themselves trapped in northern continental Europe as the glaciers melted and the lands became flooded with water. Reindeer herds, unable to cope with this habitat, and blocked from northward migration by the seas and the glaciers, diminished and these people (4.) were forced, over several millennia, to adapt to the increasingly wet landscape and new kinds of animals and plants to eat, which ultimately led to a sophisticated way of life highly dependent on boats and travel on waterways.

1. 2 The Europeans who Stayed: Goddess and Bull Peoples

1.2.1 General

(#3 in above chart of Fig. 1.1.1.B) Because our interest is in the northern water(boat) peoples, we will only

acknowledged this group of peoples who remained in southwest Europe while reindeer, bison, and horse hunters left. These people, through concern for the survival of the large animals they consumed at the height of the Ice Age, found the aurochs (wild cattle) and the ibex (wild goats) most capable of surviving the changes in climate and vegetation. Cattle and goats did not need wide open plains. Moderately open landscapes were sufficient for their pasturing needs.

As cattle and goats were domesticated, humans became keenly aware of the reproductive process. They learned how to control it. Instead of having males fight each other for dominance, humans could select the male who would serve the females, and the remaining males were then the ones to be consumed for food, after a ritual of sacrifice to the Mother Goddess. The act of sacrifice was, I believe, a way to slaughter an animal for eating, more palatable than cold slaughter as it gave it a religious dimension.

As a result there developed a religious worldview involving worship of the Mother Goddess and the bull and ram. This religious worldview appears to have traveled east to Asia Minor, as archeologists have found some sites where the Mother Goddess, bull, and ram were strongly represented in artifacts. Otherwise, archeology has found a great number of Mother Goddess figurines throughout western Europe. Today Spaniards celebrate the bull in dance (flamenco) and sport (bullfighting), and we can even find resonances of the Mother Goddess in the strong devotion in the Iberian Peninsula to Christianity's Maria. Wherever Christianity went, where the Goddess was strongly worshipped, Maria was introduced as a replacement.

1.3 The Europeans Who Stayed: The Water-Peoples (or Boat-Peoples)

1.3.1 General

(#4 in chart of fig 1.1.1B) The Water-peoples or Boat-peoples are the central subject of this writing, and we will devote most of the time to the origins, development and expansions of these people. They are people, caught in north continental Europe as

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the Ice Age was ending, finding the reindeer herds at that location dying out while the original tundra landscape turning into bogs, rivers, and lakes.

Humans have always had the ability to devise some means to cross a body of water when needed- such as a raft. We are not talking about that. We are talking about developing an entire way of life revolving around travel by boats, harvesting plants and animals of a watery environment, and generally facilitating survival in a very swampy landscape.

I propose that the only place in the world where enduring pressure to promote this existed, where the humans there could not escape, was in the north of Europe below the melting glaciers, in the late stages of the Ice Age. The melting of the glaciers and the rising of the waters was a very gradual process and the adaptations to this new environment could have occurred so gradually that people weren't even aware they were changing.

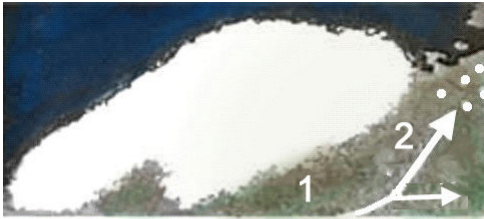
At the peak of the Ice Age, the glaciers descended to the central part of continental Europe. As the glaciers developed they drew water out of the oceans and lowered the sea level. When the climate began to warm, when the Ice Age receded, when the glaciers melted, the sea level did not rise immediately because the glacial meltwater first spilled into the land and inland seas and it would take some time for the water to flow to the sea and raise its level. Thus there was a period of time during which the lands below the glaciers were inundated, and any hunters found there would have no choice but to develop ways to travel on water. Gradually they adapted and soon they had access to a rich bounty of fish, sea-mammals, and waterfowl, not to mention animals that like water like the "moose" (American English) or "elk" (British English).

Geologists tell us additionally that the Ice Age receded initially slowly, and then accelerated. For 10,000 years climatic change was barely perceptible, but then around 10,000-6000BC the warming was very fast. The reason for this is that when most of Europe was covered with glaciers, its white color reflected the sun's rays back into space. But as the melting progressed and the dark colors of the earth were exposed, less sunlight was reflected back into space, and the heat gain of the earth accelerated, causing the glaciers to melt at an accelerating rate until in the very last stages everywhere the land was warming

and the glaciers were depositing their water. Water was being dumped far more quickly than it could drain to the oceans.

Figure 1.3.1

The first map shows (1) the reindeer peoples following



reindeer north – approx 12000 years ago.



Next with smaller ice sheet, reindeer herds and hunters can enter northern Scandinavia (2) Meanwhile (4-5) shows the initial expansion of boat peoples.



Next we have (6) a mastery of boats on the sea, which leads to seagoing culture in the arctic ocean (8) as well as in the Baltic (7).



Finally the seagoing culture in the Scandinavian arctic discover and harvest the bounty of sea life at arctic Norway where the warm waters of the North Atlantic Drift arrive. And (8) from there seagoing Atlantic tribes descend to the British Isles and cross the North Atlantic via Iceland. This would have occurred around 5000 years ago.

(The numbering is made to correspond to the numbering on the tree charts)

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It was a very wet land, but the boat-using hunter-fisher-gatherers flourished, probably more than any other people. It can be argued that the boat-people became the dominant group in Europe.

These people did not intentionally choose their watery world and adaptations to it, since humans by nature prefer to be on land walking on foot; but Nature gave them no choice. They were originally people of north and west continental Europe who pursued reindeer up into the British Isles and possibly into the Scandinavian Peninsula too, in the early times. But with the warming climate the glaciers melted, seas rose, and reindeer migrations were now blocked by the predecessors of the North and Baltic Seas. No longer able to hunt reindeer, and finding the land increasingly impassable on foot, they were forced to adapt to hunting and gathering in the marshes, bogs, rivers, and seas.

Fortunately there was one mammal somewhat like the reindeer, that flourished in such a landscape – the animal that in North America is called the “moose”, in Britain the “elk” in Finnish “hirvi” in Estonian “põder”. This animal no doubt served as a transition between the reindeer and animals in the watery environment people had never hunted and eaten before.

Because the climate was warming, as human adapted to the flooded landscape, they also found their flooded landscape coming alive with life. All water-oriented plants and animals were flourishing. Thus once humans had mastered the art of traveling around in that environment to hunt this bounty of wildlife, their populations began exploding as well. With population explosion, tribes grew too large to remain whole, so groups broke off and started new tribes – having to travel to another territory of course. As the growth in population continued and new tribes were formed, there was an expansion of this culture in all directions that boats could travel – which generally meant eastward along the coasts, and up rivers from those coasts.



Figure 1.3.1B

The “Moose” (“Elk” in British English) is probably the animal that saved northern Europeans when reindeer vanished. This animal was perfectly suited for the swampy conditions at the end of the Ice Age, and proliferated because of being so well adapted. It is capable of living in dense forest, bogland, will swim a large body of water, if it can see the opposite side, and is able to shut its nostrils and browse underwater plants.

Thus it is clear that as the populations grew, breakaway bands and then tribes would have to travel a great distance to remove themselves from the territories inhabited by the parent band. If families were having three children, then a breakaway tribe would form every 50 years or less, and move about 500km away. They could expand 1000km in every century. The most recent example of rapid expansion of a boat-people is that of the Canadian arctic "Thule" culture from Alaska to Greenland in only about 500 years.

It is important to note that the expansion of the original populations was unopposed. Archeology reveals that before the evolution of boat-peoples the water-filled forests south of the tundra were unoccupied. The only people to be found there before the expansion of boat people would have been the reindeer-hunters. But the reindeer hunters were above the tree line and moved around on foot, therefore they were rarely

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found in the niche into which the boat-people expanded. In a sentence--the boat-peoples were unopposed! They did not have to displace any earlier peoples. They did not have to battle with people already there.

It is important for academics pursuing the subject of early humans to understand that humans could not migrate wherever they pleased. Humans are territorial and will claim and defend their economic territory. Thus the first expansion into virgin territory is easiest, and can occur very fast as it is unopposed. But once there are humans there, then newcomers must look for peripheral unoccupied territories and sort out matters of territory with those neighbours already established.

The only way migration might be unopposed by existing inhabitants is if the newcomers have a completely different way of life and pose no territorial threat. For example farmers are compatible with hunters of the wild, as the farmers grow their own food; but farmers must be careful about pursuing the wild animals the indigenous hunter-gatherers pursue. (It is interesting, but logical, that archeology and even genetics has found that hunter peoples and farmer peoples remained each in their own niche, and did not blend together as one might initially expect. Each not only finds peace in *not* trying be like each other, but also each can specialize and then trade, thus benefiting the whole better than if both sides tried to do everything.)

Earlier we identified the descendants of the prehistoric reindeer people with today's Samoyed peoples. Who among modern people are linguistically and culturally descended from the water-peoples? The obvious answer is the Finnic, Finno-Ugric.

According to archeology and climatology, the initial expansion of the boat people occurred perhaps 8000-6000 years ago. Currently some linguists maintain an old notion that Finno-Ugric languages evolved in the east and came west. But that leaves us the issue of who were the original people filling the region between the Baltic and the Ural Mountains?. It is certainly possible to have the large region between the Baltic and the Urals fill up with highly nomadic tribes, and then for there to have been internal developments among them. It is certainly possible to have a basic Proto-Finnic substratum established over the entire northern Europe by 6000 years ago,

and then there can be new movements on top of that basic substratum, which may include east-west movements – perhaps by traders establishing a Volga trade route, the southern customers being at the Black Sea and Asia Minor. (Both archeology and male genetics does suggest a strong influence by trade between the Volga and the Gulf of Finland region.)

1.3.2 Expansions in the Scandinavian Swamplands and Eastward – The Basic “Finnic” Legacy from “Maglemose” origins.

The original boat peoples arose in swamplands south of the glaciers receding to the mountains of Norway. Their dugout boat may have originated from using large logs to cross bodies of water. Burning holes into a log so the passenger could keep his legs dry would have been the next step. Then the drag of the log in the water encourages it to be streamlined on the outside. The inside was enlarged too, to make it more comfortable for the passenger. As they hollowed out the log, they discovered that buoyancy was achieved by water displacement, something they probably observed from floating a ceramic container in water, and that it was possible to remove nearly all the wood and achieve a light, thin-walled, dugout canoe.

A way of life paddling great distances through swamps and along rivers to hunt or to move from one campsite to another in annual rounds of nomadism, developed. Archeology has found the expansions of these earliest water-peoples from Britain to the Urals from their campsites being alongside rivers and on islands, and the presence of adzes indicated they made dugout canoes. The adze, which is like an axe head mounted sideways, was used to make the dugout in a fashion still known to the Hants of the Ob River. Fire was used to burn away wood. The adze was used to chop away coals in the direction the maker wanted the burning to proceed. Unchopped parts where coals built up would stop burning for lack of oxygen. Thus even the crudest stone adze would do – the main tool was fire.

Archeology has identified this culture after a big bog in Denmark – “Maglemose”, and the range of the “Maglemose” culture has been described from the Jutland Peninsula

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eastward, into the south Baltic, where swampland in the Oder River basin is still plentiful. Since archeology identifies a “culture” according to typical material goods found, when this original culture changed a little to adapt to other environmental conditions, it is given another name, even though the people may in every other respect be nearly identical in patterns of behaviour, language, religious ways, etc.

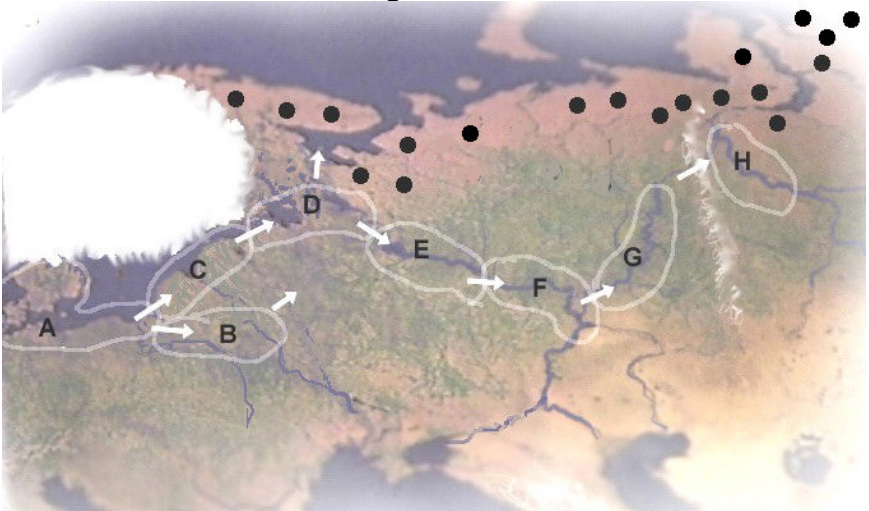
The “Maglemose” form of the water-people was designed for swampy landscapes and small dugout canoes, light enough to move from one waterway to another. It endured unchanged over millennia. Their descendants were all those peoples of the interior of Scandinavia and other interior regions from the Baltic coasts which history has called *Fenni*, *Finni*, *Finns*, etc. I believe that wherever history has used these words, they have referred to the original primitive way of life, unchanged for millennia simply because it was ideal for human survival in the northern swampy landscape.

Originally, when the environmental and economic niche of rivers, lakes, marshes, bogs, swamps was uninhabited by any humans, the expansion from its origins will have occurred very fast. We can estimate how fast it could be. In the warming landscape, if each mated couple had three children instead of two, there would be a new tribe formed every 50 years who would move far enough away to occupy a new watery territory. At that rate if we allowed about 8 steps, the initial expansion from Britain to the Urals would take 400 years. We show the original expansion in the map of Figure 1.3.2 below.

After that there would be additional waves creating new tribes along the trajectory who would now establish tribes on tributaries of the major waterways, occupying those parts that are shown as yet empty in the map – such as the regions above and below the Volga, north towards the White Sea, the upper Ob etc. Eventually the climatic warming would stop and a dynamic equilibrium would develop where there were no new waves and the existing people became established in their territories and cultivated a uniformity from their natural long distance associating. Since boat use tended to be confined within water systems, there was a tendency for the associating between peoples to be confined as well, fostering development of dialects associated with the water systems, and which today

manifest as the distinct Finno-Ugric language families (Ob, Kama, Volga, Gulf of Finland, Gulf of Riga, etc)

Fig 1.3.2



This map shows how initially boat-using hunters would have migrated in the easiest way via the easiest rivers, thus carrying them far, very fast. Late as there were new waves of expansion, the newcomers would have to make their home territories in secondary places. As a result subsequent waves of expansion were more gradual, needing to deal with the tribes already there. (the dots represent reindeer people, ancestors of Samoyeds, Saami)

1.3.3 Expansions Southward up Rivers of Continental Europe

We cannot ignore the fact that the expansion of the early “Maglemose” river and swamp culture not only expanded eastward towards the Volga, etc, but southward as well. Breakaway tribes had opportunities of going up major rivers like the Oder and Vistula, and, to the west of the Jutland Peninsula, up the Elbe and Rhine. It was possible for the “Maglemose” culture to proceed further south, while their cousins migrated east.

UIRALA: The Human Expansion by Boats

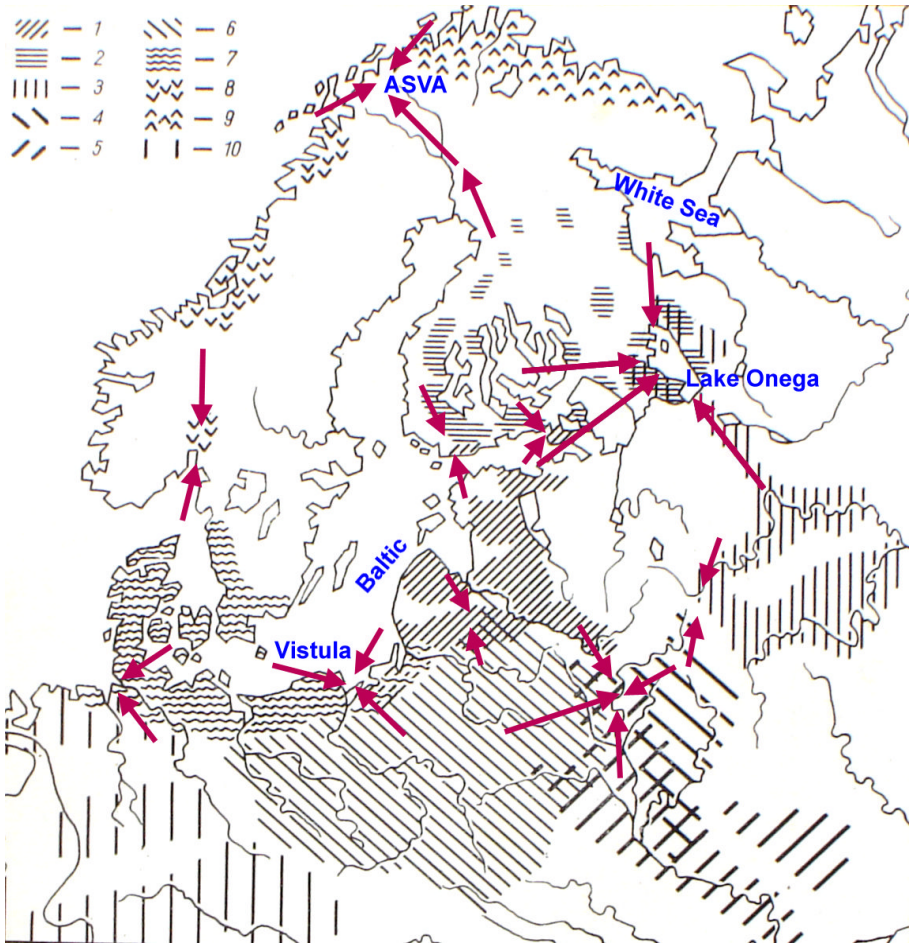
The “Maglemose” culture was a bogland culture, and the dugouts were small and portable, as required in the interior where often a boat had to be portaged. There was no obstacle, and if the tribe remained within water systems, it would be from convenience; but if a tribe grew too large, a breakaway could portage into another water system, and certainly northern hunters reach the Danube. When not yet inhabited, there was nobody there to give them grief for intruding on claimed hunting territory.

Let’s refer to Figure 1.3.3 for the evidence of southward expansion. Note the hatched regions south of the Maglemose and Kunda zones along the Baltic south and east coast. It suggests an inland boat people tribe established themselves in the upper reaches of the Oder, Vistula and Nemen rivers. These peoples were obviously kin to the Maglemose and Kunda cultures. They made contact near the mouth of the Vistula (see the red arrows I have added). I believe that the Oder-Vistula tribes eventually became the “Venedi” if history that carried trade from the Baltic both towards the Black Sea and the Danube. Perhaps such trade promoted a Dneiper boat-people (thick hatching slanted northeast) Note how this Dneiper culture meets the Kunda culture in the north at the upper reaches of the Daugava River (formerly called Dvina, in Latin Duna, in Livonian Vaina) This river was down through time a major access route for trade going south on the Dneiper. The upper Vaina and Dneiper shared a vast marsh. The Finnic word for ‘wetland’ employed the stem *niis-* (as in Est. *niiske* ‘wet’) and *-ra* was the universal word for ‘route’, and thus the original name for the Dneiper was *Niistra*. ‘route arising from the wetland’. This map seems to suggest that there was some trade going on between the Kunda culture and the Dneiper, and that goods were going to the Black Sea via the Dneiper as well.

In general those “Maglemose” culture expansions that went southward became to prime candidates for evolving their boat-oriented nomadism into long distance trade as sedentary farmer cultures developed and produced an interest in such a service.

Fig. 1.3.3

ARCHEOLOGICAL MAPPING OF PREHISTORIC BOAT-USING HUNTER-GATHERERS (with added red and blue overlay information)



black base map from fig 18 of *Eesti Esiajalugu* Jaanits et al

This map determined from archeology shows the different areas covered by material cultures of boat-using hunter-gatherers. Significant areas are 1 – Kunda, 2 – Finnish lakes, 3 – Upper Volga, 4, 5 – Dneiper, 6 – Oder, Vistula water systems; 7 – Maglemose, 8,9 - arctic boat people (Komsa, Fosna) 10- Elbe, Rhine, boat people.

UIRALA: The Human Expansion by Boats

Looking now west of the “Maglemose” culture. We have to recognize that originally the boat-using hunters were not interested in challenging the seas. The west side of the Jutland Peninsula received the prevailing winds, and that would have discouraged anyone developing a seagoing life from the Jutland situation. Furthermore, there would have to be sea life to harvest to promote going out into the sea. It thus seems to me that the next most interesting location for descendants of the boat culture would have been the coastal regions around the Rhine mouth. We can easily imagine that boat peoples ventured up the Rhine and made a good life of hunting and fishing in the Rhine water system. Soon farming peoples arrived and since farming peoples pursued a different way of life there would have been no conflict between the arriving farmers (who it is believed came up the Danube valley) and the indigenous boat-oriented hunter-gatherers. They would have supported each other’s existence, and even exploited what each produced economically in trade. The Rhine boat-oriented hunters being mobile would have become the active part of trade activities, and out of that could have arisen very early professional traders, about which we will speak more later.

Recently an international group of scientists (*Bramanti et al. 2009*) has looked at remains of farmers versus hunter-gatherers in Europe, and this truth was very evident. The group investigated archaeological findings of human bones in Central Europe (in Germany, Austria, Hungary, Poland, Lithuania and Russia. The age of the bones has already been determined by various techniques. But now scientists looked at mitochondrial DNA (which is passed down via female descent) from 4,000–15,000 years old bones of hunters-gatherers as well as those of first farmers who had arrived in Central Europe 7,000–7,500 years ago. Then they compared the ancient mtDNA to that of contemporary Europeans. The result was that the genetics of the females of the ancient farmer, the ancient hunter-gatherer and the contemporary European was that the distribution of genetic characteristics between the three were different. In over 80% of cases, the maternal DNA lineage of hunters-gatherers belonged to such a type which is rare among contemporary European women (only about 10%, only 20% among Northern Europeans) This suggests the ancient hunter maternal DNA did not enter the farmer communities. Hunter-gatherer males, in

other words did not mate with farmer females. The study found this to be peculiar; but as I said, when two peoples follow a different way of life, there is no motive to merge, and in fact an advantage in reinforcing each other's different way of life, and then to trade for what one lacked.

It is presumptuous to think that the farmer way of life was so wonderful that hunter-gatherers would have envied the farmer and wanted to become farmers too. But early farming was very difficult, and in the north, with swamps and cold climate, the hunter-gatherer way of life, harmonizing with the land, was actually better (which is why the hunter-gatherer genetics would be higher in the north)

This, however, looked only at the maternal lineage. I believe that when paternal lineage is studied, the results will be different. In another study, "*Signature of recent historical events in the European Y-chromosomal STR haplotype distribution*" **Human Genetics** 116(4):279-91, Jan 2005) (**Lutz Roewer, et al** 2005).the paternal lineages appear –from my interpretation of the results – to descend from the northern boat people. We will look at my interpretation of the results of that study, later.

But in the early stages as the world climate was rapidly warming, the northern boat-using hunter-gatherers of northern Europe had a way of life using boats that was so successful, that I believe they spread not just eastward all the way to the Urals, but also down into Europe as far south as was easily reached by northward flowing rivers like the Rhine – in particular the Rhine. And where there were southward flowing rivers, they went even further perhaps introducing boat use, and later trade, to southern Europe.

But let us depart from considerations of hunter-gatherers moving south via various rivers like the Rhine, Oder, Vistula, Danube, Dneiper, etc and continue to follow the evolution of these boat peoples further east to the Volga, Kama, and Ob; and at the same time into the arctic ocean.

1.3.4 Expansions into eastern Rivers (Volga, Kama, Ob)

We will talk about this expansion to the extreme east via the Volga in more detail later, but this is a brief mention of it. We are referring to F, G, H, of figure 1.3.2 which lies outside of the area of the map of figure 1.3.3 Although they represent a departure from the Baltic Sea Basin they are still an extension of the “Maglemose” branch because they are river-peoples with small portable dugouts. In fact the making of such small dugouts has endured in the remote Ob River to this day (see adjacent image, derived from a frame of a Lennart Meri 1980’s film about the Hanti there.)



The extreme eastern leg of the expansion from the “Maglemose” origins is one needing special attention, because when they went up the Kama River into the north, and then into the Ob River, they came into contact with the reindeer hunters, cousins they had not seen now for some 5000 years, and that resulted in some intermingling of genes and language, while the starkly different ways of life remained intact (for the same reasons discussed above in the last section 1.3.3 where European farmers and hunter-gatherers remained apart) There was an advantage to all if there was specialization of economic activity with trade, instead of one group trying to follow all economic activities possible.

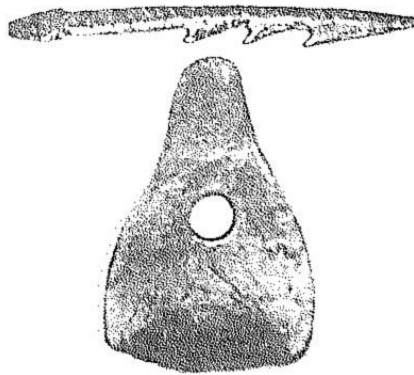
1.3.5 Expansions into the Seas

The maps presented so far already suggests there was an expansion of the original “Maglemose” culture into sea-harvesting in the Baltic. As the “Maglemose” water-people expanded eastward as described in the map of figure 1.3.2, some breakaway tribes investigated the shores of the seas, and were very interested in the wildlife there, and in particular seals and probably whales like Beluga whales further out in the pre-Baltic sea. On the east Baltic coast (location C in figure 1.3.2) because of the prevailing winds, every time they came to water

that was open towards the northwest, they would often find waves quite high – impossible to travel with the original one-person canoes. I think that it was purely because of the exposure to prevailing winds that this breakaway group made dugouts out of larger trees – longer, deeper, capable of carrying more people. Both the higher sides and the additional people to paddle, made them able to cope with prevailing winds and higher waves better – no need to wind their way through sheltered inland waters. At this time, the entire east Baltic coast was considerably more depressed than it is now, and much of the coast as we see it today was under water.

Having mastered open water, these people were now also able to hunt animals inhabiting open water such as seals. Archeology has found quite large harpoon heads which could only have been used to hunt seals in the open sea.

This culture, owing to its adaptation to the predecessor of the Baltic Sea, has been called the “Kunda” culture after the location in northeast Estonia where it was first identified. This would have occurred about 7000 BC.



A large harpoon head for hunting seals, and an adze head for making the seagoing dugouts, from the “Kunda” culture

We may wonder if sea-going boat-peoples appeared elsewhere than the “Kunda” culture at that early time? To determine that, archeology really needs to find tools for harvesting animals of the seas such as harpoon heads elsewhere. There would also need to be evidence of the people

UIRALA: The Human Expansion by Boats

camping on islands beside the seas, and not just on river banks. (The original “Kunda” site was an ancient island, today due to rising of the land, it is a hill) . If possible we want to also look for large boats, capable of withstanding the high waves of the seas.

People who had developed skills navigating on the sea and harvesting sea life would tend to want to remain in that way of life rather than go back to the swamp-oriented “Maglemose” way of life. And for that reason, the expansion of the boat-peoples eastwards, as described in the map of Figure 1.3.2, would not have included “Kunda” descendants. The “Kunda” sea-harvesting culture was more likely to be the origins for the Lake Lagoda, Lake Onega, White Sea and generally arctic ocean sea-peoples who arose next. But while we can follow the seagoing culture north into the arctic, we must remember that the original “Kunda” culture continued too, and the seagoing skills would have expanded into the Baltic and perhaps North Seas too in due course. For example there was an archeological find about a decade ago of a large seaworthy dugout fitted for holding a torch, obviously used for catching eels showing that large dugouts and sea-harvesting was developing more locally out of the “Maglemose” small-boat culture as well.

1.3.6 Expansions into the Arctic from the Baltic

A tribe in the northern context, from North American information, is about 5-7 extended families or clans, who roam independently through the year, but all congregate now and then, usually annually, at a location equally accessible to all, and which will support them all together for a month or so. The climate was still warming and birth rates exceeded death rates among the water peoples, and every few generations another full tribe developed who, because their parent tribe occupied a large territory of a water system, has to travel a considerable distance to find virgin territory they could entirely call their own. And the breakaway group forming a new group of clans forming a tribe, would be inclined to follow the same way of life to which their tribe had adapted. What I mean is that breakaways from peoples with small dugouts moving around marshes, would want to find new marshes, and continue this way of life, while breakaways from peoples who had now

entered the sea and were throwing harpoons at seals, would want to find new uninhabited seas with similar sea-life.

It should be obvious – no need for concrete evidence – that if the Kunda culture split, the breakaway group, now well developed in the harvesting of sea life, would be more interested in moving to another large body of water or the sea, rather than re-acquaint themselves with the original Maglemosian swampland life. Thus the arctic seagoing culture must have come from the Kunda culture!

Breakaways from the “Kunda” culture probably began their seeking of their own territory by exploring elsewhere in the ancient Baltic, and in doing so those who found success adding seagoing boats to the west Baltic, where the boat people had up till now only had small boats and kept off the sea. But it was important that the sea life was there. While seals and whales were not everywhere, fish was, and certainly seagoing fishermen evolved in the Baltic.

But there were other directions the breakaways could go: east into the Gulf of Finland, even further to the early flooded regions of Lake Lagoda and Lake Onega, but notably northward through the flooded landscape of Finland and northern Scandinavia, to the White Sea and the arctic coast of Norway.

Thus the descendants of the Kunda culture, already knowing how to hunt seals and Beluga whales, sought out new sea locations with large mammals like seals and whales to hunt. They would initially have headed towards Lake Lagoda and Onega and then north to the White Sea. There they would have encountered reindeer people (represented by dots in the map) there. But being very different in way of life they did not interfere with each other.

Figure 1.3.6 A&B

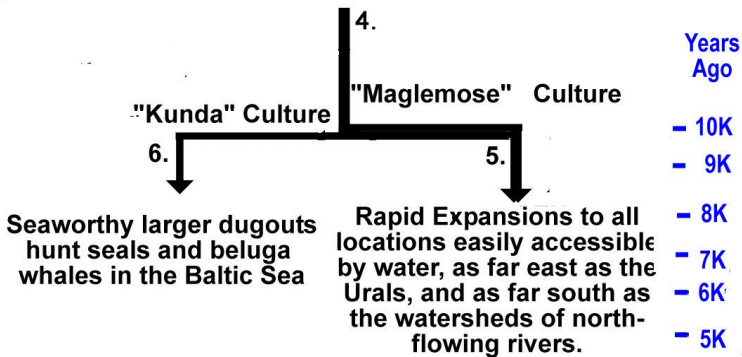
THE DIVISION IN THE WATER PEOPLES –MARSHLAND vs SEAGOING



9,000- 7,000 years ago

This map shows just how easy it was, in the flooded landscape, to reach the White Sea. People already with a way of life harvesting the open sea for seals and whales found themselves at home, and left behind plenty of evidence of their activity in rock carvings.

NORTHERN EUROPE WATER-PEOPLES



The chart above, which continues from #4 on the previous tree chart, follows the descent of the Water Peoples. The thicker lines 4. to 5. show the continuation of the traditional original small canoe interior swampland culture that carried on to the south from the Rhine, in the Jutland Peninsula, in Scandinavia (part not covered with glacier), in the Oder and Vistula water systems, in the interior east of the Baltic, in Finnish lakelands, eastward into the Volga and on as far as the Urals. The offshoot is depicted in branching labeled 6. that appears to have seen the original canoe peoples developing large seaworthy dugouts and hunting whales and seals in the east Baltic. Archeologists called this the "Kunda" culture.

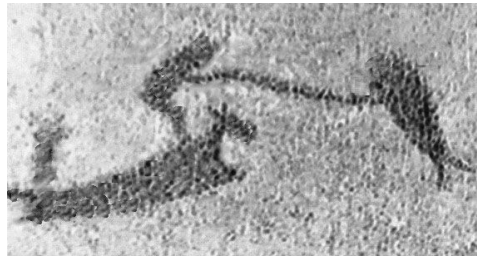
But as time went on, breakaways from the "Kunda" culture, accustomed to hunting seals and whales, set out to find new seas to continue this way of life, and found it at the White Sea, and generally the arctic Sea. The next chart will show the divisions of the seagoing culture.

The most dramatic development from the Baltic Sea seagoing people going into the arctic was that the further north you went the smaller trees became, so that the dugouts became smaller and smaller. But to handle the open sea the large seagoing dugouts made from large oaks in the Baltic were needed. Thus while those inhabiting the Lake Onega area but seeking to go into the White Sea to hunt seals and whales, embarked on making high walled, sea-worthy, boats from the skin of moose. That began an entirely new development since with skin boats it was no longer necessary to descend south to the Baltic to find materials to make a boat. It was enough to go as far as moose country.

A dead moose would be opened up on the back, and the insides removed, but leaving the ribs. Adding some wood to shape it into a boat, the whole thing would be smoke-dried. The head was kept attached probably for spiritual reasons. This is my belief, from studying rock carvings at Lake Onega which showed the size of the head relative to men in the boats and the size of the basic boat itself, comparable to the boat having been made from a single moose.

Fig. 1.3.6 C

An image from the Lake Onega carvings. Those carvings could represent activity in the arctic in summer, and not at Lake Onega.



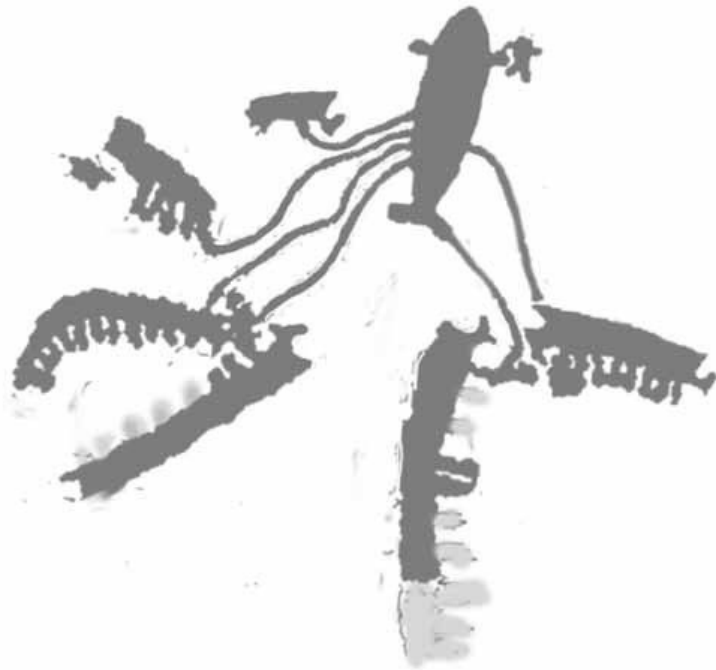
The presence of the seagoing boat peoples in the north, is documented mostly by the rock carvings the people made. Such rock carvings are found at Lake Onega and around the White Sea.. The following shows a large more developed seagoing boat recorded at the Lake Onega rock carvings. This too shows a moosehead prow but here obviously many skins are sewn together but the head representation, perhaps now carved of wood, honoured the animal from which the skin was obtained..

Figure 1.3.6 D



But now, note the following rock carving, this one from the shores of the White Sea. The same long boats are shown, but here they are capturing a whale, using methods that were still used by Greenland Inuit in the 19th century.

Figure 1.3.6 E



As we will discuss in more detail later, the evidence is strong that originally people from the more southerly seas, traveled into the arctic in summer – we have to bear in mind that in winter the land was dark – and returned in fall.

Thus nobody originally stayed in the Scandinavian arctic in the winter. (Aside from reindeer people, but they migrated south with the reindeer) The next stage saw the seagoing tribes not even returning south to moose country, but staying in the north, perhaps imitating the reindeer people. This meant, however that they would have to make their skin boats from something other than moose. The carvings at Alta Norways show images of boats with animal heads on prows that, with the square nose, are clearly reindeer.

1.3.7 Expansions into Arctic Norway

The fact that these moosehead boats appear made from moosehide is the proof that these people wintered towards the south where there were moose, but note the images in 1.3.7 that suggest we are talking about a single people covering a large distance of movements.

The fact that the moosehead boat image is found both at the Lake Onega carvings and arctic Norway carvings, including at Alta, means there may have been one tribe that made annual journeys into the arctic perhaps from as far as Lake Onega, but possibly also from what is now northern Finland. Beyond the fact that identical images of moosehead boats have been found in the rock carvings both at Lake Onega and arctic Norway, we note that the moose images of the rock carvings do not show them with antlers. Since the male moose grows antlers through the summer, and drops them in the fall, the people who made boats from moose hide never saw them in summer – further proof that they summered in the arctic seas and wintered in the southern regions in moose country. Since the arctic was dark in the winter, it was wise not to stay there.

Figure 1.3.7 A
**THE ORIGINS OF OCEANIC HUNTING PROBABLY FROM BALTIC SEA-
HUNTING (KUNDA) VIA LAKE ONEGA AND WHITE SEA**



Figure A. A representation of an image found at the rock carvings at Russia's Lake Onega. There are larger boats depicted but we are interested in the smaller version that appears to be able to hold a maximum of three men, and the moose head size relative to the humans suggests a real moose head.



Figure C. A representation of a similar image found on Norway's arctic island of Sørøya where ancient visitors appeared to have been hunting the sea-life of the warm waters of the North Atlantic Drift. The carvings (see below) also depict a rather small and thin dugout. Both suggest that the people came from a place with moose (Brit. "elk", Est. "pöder") and at least small trees for the small dugout..



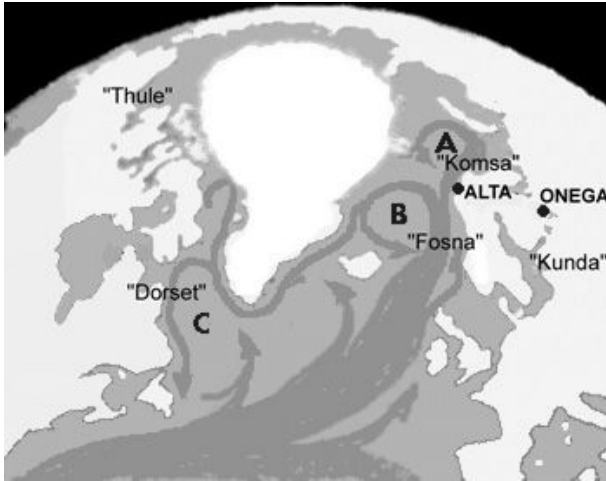
Figure B. The photo from which the above illustration is made. It is taken from a frame of the film "**Kalevala**" by Lennart Meri, made in the 1980's



Figure D The photo of Sørøya rock from which moosehead boat image above was taken. Note also the one-man dugout canoe which could still be made from smaller trees in the subarctic.

Why did these people go as far as arctic Norway? Was it worth the extra weeks journey? This area from the Lofoten Islands northward was rich with sea life on account of the North Atlantic Drift ending at that location. The following map shows the North Atlantic drift path.

Figure 1.3.7 B



The map also suggests why Atlantic Ocean boat-peoples developed in arctic Norway and not further south in the North Sea. The bounty of sea life was found where the North Atlantic drift came close to shallow waters. You can see that it brushes past the British Isles north end, with a branch going through the northern isles past the Orkneys towards the Norwegian coast.

While all visitors to the arctic waters inially came only for the summer, eventually some stayed through the winter, identifiable as the archeological “Komsa” culture. Once there were boat people who were permanent in the north, northern Norway became a staging area for further expansions, south to the northern isles of Britain, and the Faeroes, and westward towards Iceland, Greenland and arctic North America where a culture known as the “Dorset” culture developed.

UIRALA: The Human Expansion by Boats

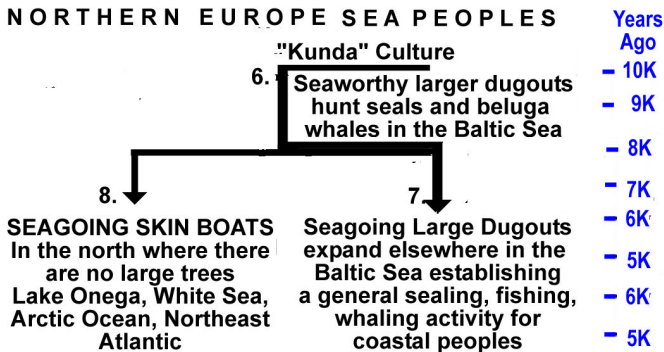
Figure 1.3.7 B
THE 2nd DIVISION IN THE SEAGOING WATER PEOPLES THAT CREATED
THE OCEANIC SKIN BOAT PEOPLES



7000- 5000 years ago

This map continues to follow the voyages of the seagoing hunters over the top of Scandinavia to arctic Norway where the rich waters of the North Atlantic Drift arrived filled with sea life.

Arrows suggest further expansions toward northern Britain and towards Iceland. The original cultures with the dugouts continued of course as well (7=seagoing; 5=swampland). The dots, representing reindeer peoples, are there too, of course, and there would be trade and other interaction between the two leading to the Saami of today.



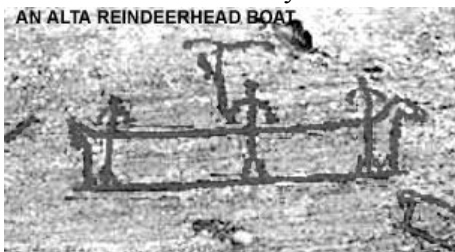
The chart above, which continues from #6 on the previous tree chart, marking the expansion of the original boat peoples into sea harvesting. The thicker lines 6. to 7. show the continuation of the large seagoing boat (carrying about seven men) and the harvesting of seals, beluga whales and fish, from the Baltic. Meanwhile, #8 reflects breakaways from the Baltic sea harvesting reaching the White Sea and Arctic Ocean and having to develop large sea-worthy boats from animal skins. The seagoing skin boats thus began long roving journeys to find sea life, and found plenty at arctic Norway. Meanwhile back in the Baltic and presumably North Seas, wooden boats continued their development, soon also being exploited for long distance trade.

1.3.8 Staying in the Arctic

We have to bear in mind that while all this was happening, the Ice Age was melting, the climate was warming rapidly, and wildlife populations growing. Humans hunting the wildlife in the northern lands freed from the grip of the Ice Age, obviously prospered as well. If every couple had three children, tribes would outgrow a natural size and there would be breakaways. A breakaway group of tribes, not wishing to return south into the territories of their parental tribe, could decide to remain in the north. Archeology has found a coastal site at the very top of Norway, where a tribe remained through the dark winter, and it has been called the “Komsa” culture.

Obviously the “Komsa” culture had dealings with the reindeer peoples up river, and perhaps got into conflict with them if anyone killed any of their reindeer. For a reindeer people, their territory was a wild reindeer herd that they followed. As

discussed earlier, for co-existence, two groups had to be quite distinct in way of life not to be in territorial conflict. If there was intermarriage,



the wife from one side had to join the culture from the other side. As long as separate cultures were followed, there would be happy relations as they met each other trading for what each other lacked.

As evidence that people began to stay, we can point to carvings at the impressive rock carving site at Alta, Norway, where we find skin boats now made from reindeer hide, as we see blunt nosed heads on the boats, indicative of reindeer skin being used. Reindeer, inhabiting the arctic, meant it was no longer necessary to winter further south. But the Alta carvings show such a variety in the style of carvings, that it was clear a congregating site for a number of tribes, including those visiting from the interior.

UIRALA: The Human Expansion by Boats

Figure 1.3.8 A



Alta rock carvings site, a World Heritage Site. Red coloring has been introduced into the groves to make them more visible to visitors. (photo from internet)

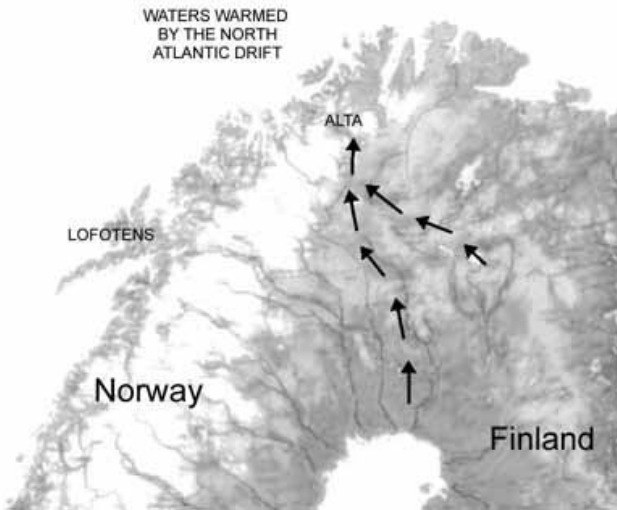
Figure 1.3.8 B



Alta rock carvings site, example region with storytelling images of boats and animals

The map of Figure 1.3.8 C shows how accessible the Alta location was from the interior.

Figure 1.3.8 C



The above image shows how seasonal visitors to the coast could have easily accessed Alta from the interior swamps and waterways, and not just over the top of Norway.

1.3.9 Expansions to Arctic North America

The map of north Atlantic currents (fig 1.3.7.B) shows how it would be possible for an intrepid sea-hunter group to follow currents and end up in the east arctic of North America. Archeologists have found people were in the east arctic of North America as early as about 6000 years ago. This route, from arctic Europe following the Greenland coast always allowed the travelers the opportunity to harvest the sea for food, and to land, even if to land on ice. They need not be out of sight of a landing place more than a few nights in succession.

Those who came were people who had mastered riding high waves in large skin boats, and navigating their way around the North Atlantic Drift to locations with high concentrations of sea life, that inevitably some would explore the fringes of their hunting territories to see what is 'around the corner', mainly in the directions of sea currents. As one can see from the map of North Atlantic sea currents, anyone following with currents

UIRALA: The Human Expansion by Boats

going towards hunting places near Iceland, could end up following the coast of Greenland to the arctic waters of North America, and then possible south along the Labrador coast, the same route that was documented by the Norse around 1000AD. We must not forget that the vessels of the North Atlantic aboriginal seafarers, although made of skins, was no less seaworthy than a Norse vessel, and that the aboriginal seafarers were probably even more knowledgeable in navigation by the stars. (Which is why anyone who imagines the Norse were the 'first' to 'discover' America are either ignorant, or dismissing aboriginal or non-Indo-European people as if they were irrelevant (which is a racist point of view)

It is important to note – and it is apparent when we look at Figure 1.3.7 B which presents a map on a globe – that the distances in the arctic were small, compared to distances at the equator. (This is something we don't realize when looking at maps that stretch the continents in the arctic regions to place it on a flat page). That there were skin boats circumnavigating the arctic ocean is so obvious, that one wonders why there are debates about whether or not there were prehistoric contacts by sea between north Europe and North America. There is no question the contacts began soon after the sea peoples of arctic Scandinavia reached maturity, and would have continued now and then for millennia, the crossing by Norse from Iceland being only a recent one in a long series of boat contacts.

Note that the configurations of currents could permit North American boats to cross to Europe by following the North Atlantic Drift, or equatorial currents, but the issue is whether original North Americans who arrived on foot from the Bering Strait, ever developed a boat-oriented way of life. Although there is plenty of evidence in North America of early humans arriving on foot over the Bering Strait bridge, there is no evidence of boat-culture developing in North America, nor of crossing the open Atlantic from west to east using the prevailing wind and North Atlantic current, until later (ie within the last millennium or two) when there were large seagoing vessels with the travelers prepared for a long journey.

Even if there were early watercraft in North America, there was something else that worked against a west-to-east crossing. The current map (fig 1.3.7.B) also shows a voyage would take many weeks over open ocean. The traveler would not find food

nor fresh water, and unless they were prepared with plenty of food and fresh water on board, would perish before completing the crossing.

Unlike arctic Norway, there are no early rock carvings depicting boats. Yes there are in North America, rock carvings and paintings, but they are all quite young, compared to rock carvings in arctic Scandinavia and rock paintings in Finland. Rock paintings in Finland are so old, most are hard to make out, while in North America rock paintings along waterways, hence made by boat people, cannot be more than 1000-2000 years old. This is additional evidence that the rock carving and rock painting culture, at least those made by boat-peoples along waterways, was imported by people who crossed the north Atlantic from Norway.

The images of animals created by a people tend to have a style to them, a reflection of how a particular views the animals. The Alta rock carvings demonstrate that they were made by a variety of peoples probably congregating, and not by a single people inhabiting that area. One of those people who frequented the Alta area, obviously coming from the interior as they depict the moose, showed an artistic style very similar to the style of art used in rock carvings on cliffs alongside the Great Lakes.

Note the similarity in style of an image of a moose from Alta Norway, compared to that in a rock painting of Lake Superior in Canada.



Left: Image of a moose at Alta Norway Right: Image of a moose at Lake Superior in Lake Superior National Park in North America

It is very interesting that all the images of moose in arctic Scandinavia lack antlers – this might be explained by the fact that visitors to arctic Norway did not see the moose during the summer when they were growing antlers.

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If there were Atlantic crossings, who today represents their descendants? The Algonquian speaking peoples stand out strongly. Their locations when Europeans first saw them some centuries ago, were exactly those locations where they would have gone, if they had traveled up all the rivers flowing to the northeast Atlantic coast. The Algonquians were boat using hunter-gatherers, and towards the north up the Great Lakes water basin, they made skin boats, except using birch bark as the skin, and towards the south up rivers south of the Gulf of Saint Lawrence, where there were no birch trees, they made dugouts.

I investigated the Algonquian languages, and they lacks the core grammatical structure and core words that would directly link them to Finnic language traditions; and yet there are some words that resonate with Finnic – my conclusion is that the Algonquian culture remains at the core, what was there originally, and that then a newcomer people arrived and introduced the boat.

We must not forget that even if there was no boat-oriented way of life in North America initially, there were nomadic hunting peoples with whom any new arrivals by sea had to contend with. For that reason handfuls of arrivals merely mixed their culture and language into the established one of original pedestrian woodland hunters.

This is not true of the arctic boat peoples for example, were we find plenty in the language and culture that suggests a direct cultural link to arctic Europe - which makes sense. While there were woodland peoples towards the south in the forests that immigrants had to deal with, when the North Atlantic skin boat peoples arrived in arctic North America, there were no earlier boat peoples there. That is the reason we find the Inuit language resembles Finnic languages in very basic ways.

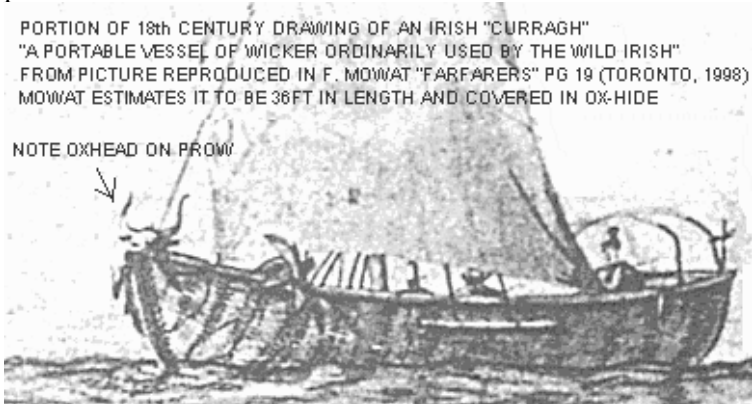
Words for family relations are words not easily removed, and Inuit produces more remarkable coincidences: Inuit *ani* 'brother of woman', compares with *onu* 'uncle' in Estonian, but in Finnish *eno* means exactly as in Inuit, 'mother's brother'!!!. A similar word also exists in Basque (*anaia* = 'brother') since Basque has connections to the ancient Atlantic sea-going peoples as well (Which we will discuss later when we look more closely at seagoing peoples) In addition, Inuit *akka* refers to the 'paternal uncle'. In this case Estonian today uses *onu*

again, but Finnish which distinguishes between maternal and paternal uncles still, says *sekä* 'paternal uncle'. A further and most interesting word of family relations that tends to prove Inuit has a genetic connection to north European Finnic boat-people tradition is the Inuit word is *saki* meaning 'father, mother, uncle or aunt-in-law'. In Estonian and Finnish *sugu/suku* means 'kin, extended family' and is commonly used in for example *sugupuu* 'family tree'.

We will explore the Inuit language coincidences with Finnic more extensively later. Our purpose here is only to demonstrate that the evidence of crossings from arctic Europe to arctic North America is very real.

1.3.10 Expansions to British Isles

The British Isles has always had a legend about seagoing “Picts” with skin boats in the northern isles and around the Atlantic edges. Historical references to them go back to several centuries BC, and the tradition of skin boats – now ox hide stretched over ‘wicker’ is documented in a drawing made in the 18th century of “wild Irish” in one of their boats. The drawing does not look special in any way – a typical plain small boat with sail, until we notice an oxhead, probably a skull on the prow.



Note that the dugout boat tradition in the British Isles was one of the oldest, and that what happened, around 5000 years ago was that the British Isles became an interesting mix of two boat cultures – the descendants of the original one that

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developed into long distance traders, mainly located on the east side of Britain, and the descendants of the skin boat culture that had arrived after making a wide loop through the Baltic, White Sea, and arctic Norway before arriving in the British Isles to inhabit all the outer islands as base camps, to harvest the North Atlantic Drift there.

It follows that there were two different “Picts” – those hardly ever seen at the periphery sailing the seas in skin boats, and those who were very visible to peoples in mainland Britain, as the trader peoples who carried on long distance trade across the seas of northern Europe. Although cousins, they had drifted apart considerable before encountering each other in the same environment of the British Isles.

Perhaps the seagoing skin boat Picts language would have been much like the Inuit language today, just as the trader Picts language would have been much like Estonian is today.

When considering historical references to the “Picts” we have to make sure to distinguish between the two. A good reference to the trader-Picts was made by the Anglo-Saxon monk-scholar Bede, who wrote that the “Picts” had come *from Scythia in longboats*. Since “Scythia” was the region that began with the east Baltic coast, he was obviously speaking of the trader Picts traveling between eastern Britain and the east Baltic coast.

Historical references to the skin-boat aboriginal Picts generally described them using skin boats, and being short people who made underground dwellings (ie dwelling made of rocks arranged like igloos and then sealed with sod). The shortness probably came from shortness of legs. Long distance travel over the sea made legs rather useless, and thus short legs and strong upper arms would have been promoted in the natural selection process.

Since they tended to inhabit the outer coasts of the west and north of the British Isles, there is no question that they were the inspiration for Irish traditions of leprechauns. Indeed, these people eventually evolved into what in the 18th century British knew as the ‘wild Irish’. The illustration shown in fact identifies this skin boat as of the type used by the ‘wild Irish’. Obviously over time the genetic characteristic of shortness disappeared with intermarriage or the short peoples simply died out. Their survival was precarious to begin with.

1.3.11 Expansions Further South on the Atlantic.

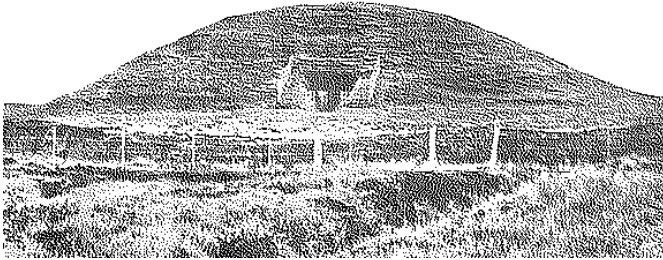
If these seagoing skin boat people came south as far as the British Isles, and in ancient times were seen as far south as the Scilly Islands of the southwest corner of Britain (noted in a Phoenician record), then certainly they would have ventured further south as well, IF there was a reason to do so. The main reason would be whether there was marine life to harvest.

As we have seen so far, the main northern locations frequented by the seagoing skin boat peoples were coasts, islands, shoals brushed by the North Atlantic Drift – the northwest side of the British Isles, the northern British Isles, northwest towards the Faeroes and Iceland, and northeast towards the Lofoten Islands, further north to the coast where Alta is today located, and the Norwegian arctic islands such as the island of Sørøya. But people with ocean-going skin boats would have investigated the seas in all directions in any event, especially if their populations were growing. Being the first oceanic boat peoples they would have found the entire Atlantic coast uninhabited and been able to land and camp without opposition initially.

What is known for certain is that from about 7000 years ago, someone built megalithic constructions along the coast in south Portugal, the coast of Brittany, up the Irish Sea with some constructions there, and eventually about 4000 years ago, in the northern isles of Britain and possibly across to the north end of the Jutland Peninsula. Did these people ultimately originate with the arctic Norwegian seagoing peoples? Did an early southward voyage occur in which the voyagers found the warmer climate attractive and never returned north, and yet were drawn to the north as it was the direction of their roots? Their initial success may have been due to exploiting massive eel migrations crossing the Atlantic from the Sargasso Sea and funneling through the Strait of Gibraltar, English Channel, and the channel at the Jutland Peninsula, all being locations where megalithic constructions have been found. Such people would also eventually know the middle Atlantic well, and even crossed it, giving rise to the pyramid-building cultures of central America lending some real basis for speculations through the ages.

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What suggests north Atlantic origins for the Atlantic megalith builders is that the megaliths celebrate rocks. The megalithic hill tombs are somewhat similar to semi-buried settlements found in the Orkneys. Camping on bleak islands with nothing but rocks and grass, the standard method of settlement construction was to arrange rocks in a dome-like fashion (like igloos) and then cover it with sod.



Megalithic hill tomb:

It's design seems to be on a large scale the kinds of sod covered semi-buried dwellings made by Atlantic seafarers who camped on islands with only rock and sod as building materials

Furthermore, in regards to the stone alignments, seagoing people lacked things to study and contemplate, so they contemplated the sky. They also needed the sky to navigate. They learned about the movements in the sky, and constructed stone alignments by which the yearly cycle could be noted.

The stone alignments of Stonehenge are much more recent but must have been erected by descendants of these Atlantic seafarers, who still paid considerable attention to the sky and may still have traveled in skin boats.

Last but not least, when a people enters a particular way of life, they are likely to stay in it, if it works for them. If we propose a southern origins for peoples who sailed up and down the Atlantic, then we have to ask what were the pressures that forced them into the sea, given humans are by nature land-creatures? In my view the only sustained location where humans were forced to adapt to life in a watery environment was beneath the melting glaciers as we have discussed at length earlier. Nor could the megalithic construction builders have

come directly from the “Maglemose” culture, because there was nothing to force the dugout peoples out into the open seas. The bounty of sea-life was close to the North Atlantic drift. There were no seals or whales along the Jutland Peninsula coast, and the southwest coast of Norway was still glaciated in the beginning. The only sustained pressure forcing or inviting humans into the sea was in arctic Norway.

The Atlantic coast seagoing peoples of the megalithic culture eventually became traders serving the peoples inland from the coasts. We have to bear in mind that the inland was inhabited from the Ice Age, if not yet by crop farmers, then certainly by semi-settled pastoralists – descendants from the south Europeans who remained after the Ice Age – and attempted to preserve some of the animals of the Ice Age by domestication – mainly cattle and goats. Archeologists say that crop farmers came up the Danube valley from the Black Sea region. There exists a theory, supported by some evidence, that the Black Sea was not originally connected to the Mediterranean, and was lower, and when the land between them was breached, the Mediterranean flowed into the Black Sea, raising its waters and flooding civilizations along the coasts, forcing inhabitants to seek new places to settle and practice agriculture.

The fact that the Atlantic megalith builders became traders can be inferred from the fact that the interior cultures have displayed to archeologists a uniformity that can only come from traders spreading culture up the rivers. There was a distribution of a culture through western Europe that seemed to celebrate (from figurine evidence) a Goddess. It had collective burials and other characteristics of early pre-Indo-European archeology.

1.3.12 Expansions Into the Mediterranean

Obviously, the Atlantic seagoing peoples who reached southern Portugal and the Strait of Gibraltar would not have stopped there, but explored the Mediterranean as well.

We have to realize that other boat peoples used dugouts and were for the most part not accustomed to wide open seas. If there were boats descending the major rivers to the Mediterranean, they would have avoided the open

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Mediterranean or stayed close to the coast. But the descendants of the skin boat peoples would have been fearless, and had no problem navigating the open waters of the Mediterranean. The original tales of Atlantis (from Plato) which ultimately came from Egyptian priests actually said the Atlantians had expanded east as far as the Italic Peninsula. This entry of ships into the Mediterranean would have occurred, all other facts considered, as early as 5000 years ago.

The best evidence for origins in the seagoing skin boat peoples is the appearance of an animal head on the prow. This practice, as we saw originated from honouring the animal from which the skin boat was made, and we saw how it endured even into the modern era with the oxhead on the prow of a skin covered boat of the “wild Irish”. Eventually, when frame boats were sheathed with wood planks, the connection between the skin of the boat and the animal on the prow was broken, but the tradition of the animal head on the prow continued (such as the dragon-boat traditions of both Norway and Japan).

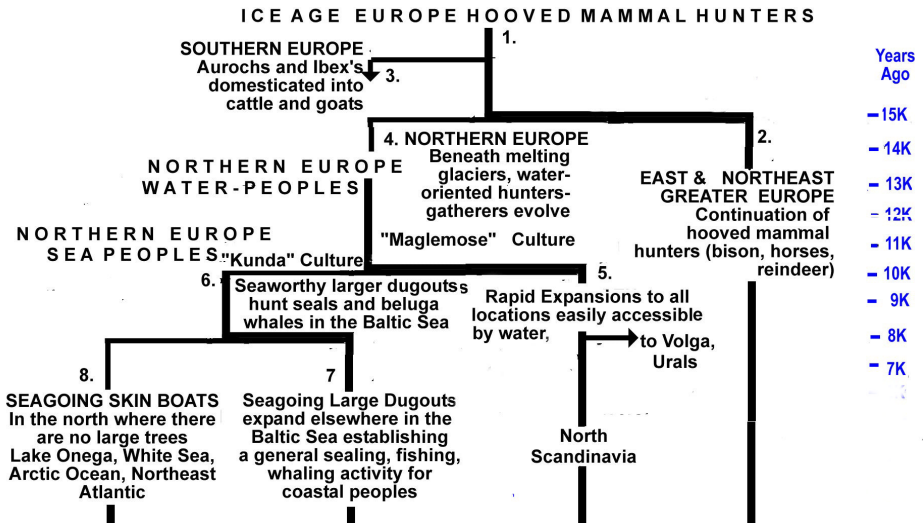
With this in mind, I was very pleasantly surprised to discover an image, I believe on a Greek vase, that showed a ship with a boar’s head carving on the prow. A boat originating from the dugout boat tradition would not have installed a head on the prow: seagoing ships in the Mediterranean, thus had Atlantic origins, and, we can trace it all back to the humble moose head boat.

1. 4 Peoples who left: Reindeer, Bison and Horse Hunters

1.4.1 General: Summary of Charts

In the above sections we have provided tree charts to show the branchings of the various peoples, but with greatest attention to the boat peoples as most of modern Europe is descended from them due to their extensive proliferation. To summarize, we bring all the charts together into one to give the overall picture.

Figure 1.4.1



In the above chart identifies the three divisions of humanity – (3.) those who remained in southern Europe and domesticated cattle and goats, (1.-2.) those who followed plains or tundra hooved animals towards the northeast (if reindeer) or towards continuing dry plains (if bison or horses), and (4.) the third division being the one in which we are interested – those who developed boats and expanded everywhere boats would take them, of which we have three major groups – (5.) the river dugout peoples, (6.-7.) the seagoing dugout peoples, and (8.) the skin boat peoples.

Crop farming was of course developing in Asia Minor, and expanded up the Danube, but those people were probably a subgroup of those who remained in Europe, the branch marked 3. but with in the course of time peoples from among the original boat peoples joining them.

We acknowledge the south Europeans who stayed in section 1.2 without elaborating very much on them, since the purpose of this project is to shine the spotlight on the northern peoples who developed boats and expanded widely by waterways because of it. For completeness we should also acknowledge the third original post-Ice-Age group those who followed the large animal herds as those herds shifted their territories in

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response to advancing forests – namely reindeer herds shifting their territories year by year in the northeast direction (the true north was blocked by seas), and bison and horse herds shifting their territories year by year in the eastern direction where drier land preserves the open grasslands these animals required. (Note that we are speaking here of responses to changes in climate and vegetation as the Ice Age came to an end. There were of course migrations out of Europe during the Ice Age – such as peoples who followed the Woolly Mammoth – which occurred before the time period of this study.)

1.4.2 The Evolution of Humanity Through Domesticating Ice Age Animals.

Earlier in our discussion we presented the view that the modern ancestors of the reindeer hunters were the Samoyeds and reindeer Saami, mainly because they continue to tend to reindeer today. There are crazy theories out there that the domestication of reindeer only occurred in recent times after borrowing the ideas from further south. This is an ignorant notion. The domestication of an animal occurs quite naturally from becoming familiar and dependent on it. Another ignorant notion, already pointed out, is that prehistoric hunter-gatherers wandered around aimlessly at the mercy of Nature. I have attempted to show that this is absolutely false. The prehistoric human was as intelligent and self-serving as any other, and in terms of intrinsic qualities even superior to those of civilization who, deprived of the greater variety of experiences and unpredictable events, were rather narrow by comparison.

Just as peoples of southern Europe found themselves needing to control the lives of the large hoofed animals they once hunted in the wild, and found the aurochs and ibex being most adaptable to human intervention, so too reindeer hunters eventually found themselves needing to control the lives of the reindeer herds which they followed.

We know a little about how reindeer people interacted with reindeer herds in the wild situation, from observations made in North America. There were wild reindeer (“caribou”) hunters still practicing their traditional way of life as late as the mid 1900’s. Clans, extended families, may spend most of their time independent of one another, but at particular times of year,

when the reindeer were migrating, all the clans of a tribe would come together to harvest as many reindeer as possible as they passed. (The reindeer were too fast for the reindeer hunters to pursue them- they had to be intercepted in their migrations)

Needless to say, for reindeer hunters the concept of territory was mobile. It was a particular reindeer herd. Thus there would have been as many tribes as reindeer herds. Century after century a particular tribe would 'own' and patronize a particular wild herd. The tribe would become quite familiar with their herd – even identifying particular individuals, pregnancies, new calves etc. No doubt births and survival of new calves was celebrated. Since the tribes certainly understood that their own success was dependent on the reindeer herd success, purely out of concern and kindness, everyone would act in ways that promoted the success of the herd, even when in the fully wild state. Since some such actions represented additional work for the tribe, such actions tended to be limited in the beginning, but if the human population grew faster than the herd, deliberate calculated actions were increasingly taken, gradually taking the herd towards semi-domestication.

Accordingly the initial stages of domestication would have been very small nearly unconscious actions – things like not taking down pregnant females or even the strongest males to allow that male to breed. But in the last century or two the human control of the herd behaviour has increased. Migrations and pasturing locations semi-controlled, superfluous males sterilized or the first to be consumed, special attention to mating, pregnancies, calves.

Domestication, thus, is not some sort of all or nothing process one applies or does not apply, but it is purely human intelligent self-serving actions being applied to a wild animal. This human involvement now makes the animal seem less wild; but in reality the animal is still the same – humans have simply integrated themselves into the whole process.

Obviously, the modern degree of reindeer domestication exists only because it has only become necessary to increase the domestication in recent centuries. This is partly because of increases in human population, and the fact that reindeer hunters wish to be more settled – they are no longer nomadic hunters. By contrast, in prehistoric Spain it occurred a very

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long time ago. It was necessary for humans to become intimately involved in the life-cycle of aurochs and ibex already as early as 10,000 years ago.

There is nothing magical about “domestication”, and that applies also to agriculture. Many people believe that crop farming was the first form of farming, and that it was a remarkable discovery, but I disagree. I think that it is more natural for humans to interfere in the lives of animals formerly hunted, and thus become pastoralists tending to small herds, than to interfere in the lives of grasses!!! How likely is it for prehistoric people to think “we can plant these grasses and eat the seeds!!!” No!!! It is more likely, more natural for prehistoric people to think “if we help the auroch produce more calves, then we will have more meat.” There is much more to be gained by additional cattle, than ridiculously small seeds!! Clearly humans have to begin eating small seeds before they cultivate it. But what would cause humans to investigate small seeds as a significant food source? Certainly if there were large animals available eating small seeds would be a joke.

I believe agriculture was a byproduct of the domestication of cattle. The more cattle one had, the more they would eat up the natural grasses; thus someone realized that one could foster the growth of those natural grasses the cattle ate. The first grain plants, I believe, were grown to provide fodder for cattle. One threw grass seeds around to foster the growth of more grasses their cattle ate. And then and only then did people discover that humans could eat the seeds of that fodder as a side-dish to their cattle steaks.

Accordingly, the notion that agriculture began in Asia Minor, is false. It probably began in Spain as a byproduct of growing fodder for cattle and goats, and was carried eastward along with cattle/goats among these peoples identifiable with the worshippers of the Goddess, Bull, and Ram. But how did Asia Minor come to be associated with agriculture? I think that what happened was that Asia Minor was so dry, natural grasses were rare and the growing of fodder became a major preoccupation. They explored every innovation that would make it possible to grow fodder in a dry land – even employing irrigation. In due course Asia Minor civilizations devoted to growing fodder developed, where humans extracted whatever they could use, before giving the remains to their domesticated

animals. As proof of this, archeology has found in the earliest civilizations in Asia Minor, the worship of the Goddess, Bull, and Ram.

By this theory, agriculture did not even need to develop in one place and migrate to another. Agriculture could have arisen naturally purely as a consequence of growing fodder for cattle and goats. It could even have evolved independently in the interior of Europe alongside cattle farming. Early European farming techniques, we note, was a “slash and burn” approach, where brush was set on fire and crops planted in the ashes. But the “slash and burn” technique could have originated to serve cattle farming – people would have observed that after a forest fire destroyed a forest, grasses and other plants that aurochs, bison, and horses could eat, sprouted from the ashes. I think that already early in the post-Ice-Age period, humans deliberately set forests on fire to give food and space for the originally wild cattle, bison, horses, and other hooved animals. . You set an area on fire, and then you knew that large hooved animals you hunted would benefit. I believe that many such burned clearings have been interpreted by archeologists as agriculture. Agriculture technically begins when humans actually plant crops for humans to use. If hunters simply set brush on fire and then continued on with their normal hunting that was not yet agriculture. It was, like the origins of domestication, natural nearly subconscious influences of humans on the lives of the animals on which they depended.

That brings us to the fate of the bison. We know that reindeer survived in the arctic, eventually, as the populations of humans grew, in the last centuries, to be increasingly domesticated; but what happened to the bison?

Obviously domestication of bison did not occur in early times. Humans domesticated those animals easiest to domesticate. The aurochs, wild cattle, were easier to domesticate than bison, and humans in regions that could support bison, were wiser to assume an interest in wild cattle over bison. The European bison, thus, remained wild, and today only a small number survive in a preserve in Poland.

Horses present another story. The fate of the horse herds is obvious. The horse hunters obviously eventually domesticated horses they pursued, and learned to exploit them not just for food, but transportation.

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Like the reindeer hunters, it is likely an entire horse-hunter tribe would view a horse herd as their territory, their possession, even when in the wild state; and there would be as many tribes of horse-hunters as there were wild horse herds. But unlike reindeer, horses did not have systematic migration patterns. It was difficult to intercept them. But they were too fast for humans to pursue. Hunting them was difficult – they had to be stalked. But how do you stalk something in an open environment? Perhaps the answer was to tame a few horses, and ride on their backs into the midst of the wild horses. This is an innovation adopted by the Plains Indians of North America shortly after horses were introduced in the 17th century to the North American Plains by Spaniards. Europeans witnessed Plains Indians hunting bison from horseback. It is easy to imagine that the early horse hunters too hunter horses from horseback. The tame horse was not intelligent enough to understand that it was participating in injury to its own wild counterpart.

When we asked ourselves what happened to the reindeer hunters, the answer was easy since today we find reindeer under the care of Samoyed peoples of the Tamir Peninsula and the reindeer Saami of arctic Scandinavia. But when we ask ourselves what happened to the horse hunters, the answer is not as clear, since the domesticated horse spread all over the world already in ancient times. But we can make an educated guess – Since wild horses need grassy plains, the horse herds would have originally ended up in the steppes north of the Black Sea.

Domesticating the horse in order to ride it to hunt horses, was obviously the first step. Full domestication followed, and the domesticated horse was put into the service of humanity, mainly for transportation, everywhere it was introduced.

Who were the descendants of these horse-hunters? History speaks of Indo-European invasions of Asia Minor on horseback. Archeology also finds evidence of Indo-European cultures worshipping the horse. These people had no interest in the Goddess, Bull, and Ram. Conversely the earliest civilizations of Europe who were concerned with the Goddess, Bull, and Ram; who later added the Boar to the Goddess' male animals, never added the Stallion to the Goddess's male animals!

Two completely different traditions.

This is quite significant in explaining the very different character of Indo-European peoples, compared to the original Atlanto-Europeans. While the Atlanto-European traditions worshipped the Goddess through male cattle, goats or swine, the Indo-Europeans, People of the Horse, cultivated a male-oriented culture, and celebrated male deities, in particular the warrior-God, which to Greeks was called Aries, but which had assorted other names accompanying the spread of the male-worshipping mentality that marked Indo-European expansions. Needless to say these male-oriented peoples were viciously against the worship of a female Birther. We note that, according to Herodotus, the Scyths who were as extremely male oriented as was possible, strove to crush all Goddess worshipping religion everywhere they found it.

How is it that domestication of aurochs and ibex would lead to a Goddess religion and traditions, while the domestication of horses would lead to a male oriented religion and traditions?

The answer is simple. The domesticators of wild cattle (aurochs) and wild goats (ibex), were concerned about births – the more births, the more calves, the more humans would benefit. Thus the early domesticators of cattle and goats, and later pigs, were very attentive to the mysteries of birth, and since birth was the domain of the female, their Goddess had to be a fertility goddess. All ceremonies were such as to pray to the Goddess that their female animals would produce strong healthy offspring, and in large quantity.

But, if my analysis of horse domestication is correct, horse-hunters were not concerned with birth success. They originally domesticated horses to ride them, and facilitate the male activity of hunting herd animals from horseback. The objective of horse domestication was originally not to promote their birth rate, but to facilitate hunting!!! Since hunting was from earliest times, the male domain, the male role of hunter was thus sustained. The horse was tamed not for producing births, but for rapid transportation to facilitate hunting horse herds (and possibly bison herds too). This tradition has endured for millennia, and still the idea prevails in humanity that horses have been raised for riding and pulling wagons, and not for meat.

Having then mastered the art of taming horses to hunt wild horses, soon the horse-hunters, the original Indo-Europeans,

found themselves pre-adapted to hunt other animals, including their own kind. They used their horses to “hunt” sedentary peoples in Asia Minor. Since the earlier Goddess cultures did not embrace the “hunter” philosophy of life, they either became victims, or the male component in Goddess cultures had to quickly adapt and retaliate in kind. Everyone now had to procure horses and add a cavalry to their army. This retaliation propagated the male-oriented war-loving way of life through civilizations that had formerly been quite feminine and peaceful. An Indo-European predatory mentality now spread through human civilization, starting in Asia Minor and proceeding westward. It culminated in the Roman Empire.

1.5 Subsequent Reunions Among the Various Peoples

1.5.1 General

We have already discussed the interaction between the male oriented traditions fostered by descendants of the Warrior God -Horse peoples, and the descendants of the Goddess-Bull-Ram-Boar peoples. In the end, this did not represent any genetic migrations, but rather a domino-effect of a change in culture in retaliation to the original invasions by predatory God people who made the Goddess people their victims. As a result when it reached its peak in the Roman Empire, very few who carried it out had any genes connecting them with origins in horse peoples of the steppes. Then after the Roman Empire had been established and the original Europeans still rooted in the old Goddess traditions had been converted to the new mentality, certainly there was no evidence in the genetics. Changing attitudes leaves no mark on one’s genes. Language too is not genetic, and that too can change within a few generations. The only way we can tell there was another NON-Indo-European language or culture in an area earlier are remnants of it.

Other reunions would include the Goddess people with Water people, and Water people with Reindeer people. A brief look at these reunions is important as they brought about

hybrid cultures that have had their impacts down to present time.

1.5.2 Horse (God)- People Interact with Goddess People > WAR & POLITICS

We have already discussed this above, and it is one of the most dramatic developments in humanity. Essentially it can be characterized as a change from a Female Civilization to a Male Civilization. It is a subject of great interest today, as women are getting more favour today, and possibly there is now a new reversal back to a female civilization.

Evolution has developed different characteristics in the human male and female largely based on the female role giving birth and tending to young. It isn't necessary to go into great detail about this, because it is evident in human's closest species relatives, the chimpanzees. In general in the natural setting, the female's role in reproduction has been optimized by her remaining more rooted, more concerned with the local environment, the cleanliness and order of infants' environment, etc. Thus, taking the natural human as the primitive hunter in the wild, the female tended to tend to campsites, making food, tending the children, collecting nuts and berries, etc. The male tended to be involved in the larger realm, defend the band against enemies or intruders on their sense of territory, and generally hunt or gather in the larger environment more distant from the camp.

The issue lies in how these natural male vs females roles are altered when humans increasingly design their own economies and environments.

If human society moves in the direction of domesticated plants and animals, that reinforces the female role not just in terms of the involvement in the reproductive process, but in the development of that primitive campsite into a permanent village. With that development, the original campsite develops into permanent urban environments, which, under female rule tend to be neat clean and orderly. The female characteristics, especially the female role of giving birth and raising young, are celebrated in religion. That is the origins of the female goddess represented in the archeology of early Europe as plump, fertile, mother figurines. At first she may have been celebrated while

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the animals humans were dependent on were still in a semi-wild state, but as humans took more and more control over the animal's reproductive process – in particular choosing the males and females who should mate – the male animal role in the reproductive process grew in importance, and that is why as animal breeding developed the male aspect of the animal reproductive process was represented symbolically in sculpture and images by the bull, ram, and later boar. As I said above, the male horse was never included, and horse domestication arrived later with the Indo-Europeans through an evolution that favoured the male role.

Farming and sedentary life, thus, is intrinsically female in nature, and archeology even reveals that early civilizations in Europe, generally prior to the Indo-European expansions, were quite female in character. We know for example that Egypt was originally ruled by queens, and then Egypt adapted to the pressures later exerted by Indo-European warlike invasions.

As I described, the way Indo-Europeans would foster male roles would be if domestication of horses was not done to actually eat the domesticated horses, but to use the domesticated horses only to facilitate hunting, starting with hunting down wild horses or perhaps too wild bison. That reinforced the male role as hunter. The hunting of wild horses also preserved the nomadic way of life, where it was not possible to settle down in a permanent village hence foster female characteristics in their society. As I said above, this hunting on horseback preadapted these people to hunting the sedentary female civilizations of Asia Minor, enabling them to swoop down initially unresisted.

The question you may have is why did human society remain male oriented when the two societies clashed? The reason lies in the fact that defending one's society was a male role that became very important when Indo-European armies began invading. The males of the female-oriented civilizations were called on to learn to defend themselves. Metals were now made into armour and weapons. Horses too were tamed for war purposes.

Add to this the success of human civilizations that made unused lands scarce, and the subject of endless territorial wars. What we today call "history" is not a complete picture of the human past, but the story of territorial wars over real estate

valued by agricultural and pastoral peoples. As we will see later, “history” is extremely one-sided. It especially excludes the territorial competition in the world of trade.

The fact is that today there are far too many humans relative to the original natural environment for which human nature developed.

Meanwhile original human societies continued in northern wilderness landscapes – especially in those regions that were poor for either agriculture or pastoral uses. The marshes, deserts, sea coasts, tundra, retained humans in their original balance between male and female roles. Of course depending on local conditions, the male or female roles could be strengthened or weakened. For example where the male hunter was very important, the male had more power. The nomadic hunters of the northern forests and up into the arctic, strongly valued the male leader. These societies were patrilineal insofar as it passed down the all-important hunting territory from father to male offspring. In the Algonquian peoples of northeastern North America, this was the case. At the same time there were in southern Ontario and further south the Iroquoian farming peoples who established villages, and the entire tribe of several clans lead by matriarchs ‘camped’ permanently, while tending to surrounding fields of corn/maize. History demonstrates that upon the arrival of Europeans, the male role grew in importance (to defend against the male-oriented European societies), thus pushing the inherent female-orientation of the Iroquoians into the background. (Exactly what occurred when Indo-European male societies first expanded into the original female-oriented civilizations.)

What I describe is so obvious when one studies the information from history and archeology, that there really is nothing to argue. Human society WILL lend more power to the gender whose intrinsic, evolution-generated, characteristics are favoured in the society’s circumstances both natural and artificially developed.

When the female civilizations that worshipped the reproductive goddess and male symbol, encountered the male hunter-warrior societies, the result would be a compromise that favoured the male or female side according to what forces and circumstances prevailed. For example the preservation of

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aesthetic urban environments, peaceful democratic process, etc were the consequence of the female component, while the pursuit of war and politics was the consequence of the male component. Ultimately, however the overall character of a civilization leaned one way or another. Today we are closer to a balance than every before, in Western Civilization; however we can look at different parts of the world to find remnants of intensely male societies that permit women no power.

1.5.3 Goddess People Interact with Water (Boat) People > TRADE

The Horse (God) People encounters with the Goddess People was quite vicious and dramatic – a male societies raping female societies – because the philosophical difference was as basic as male vs female. The basis of differences between other combinations of people were not as intense, and not as violent – such as between Goddess People (original animal breeders) and Water People (boat-using northern nomadic hunter-gatherers).

Water people began to interact with Goddess people very early in European history. Not being competitive in their ways of life, meetings between the two groups was easy. Each side found the other curious too, and were naturally interested in trading the specialized items each way of life produced. As the recent North American experience demonstrates, the mobile hunter people would annually show up at the sites of sedentary peoples relatively immobilized by the need to tend to their goats or cattle. If a band of them visited several villages far apart they would discover they could also be an agent for moving goods obtained at one village to another village far away. If there was a different valuing of the same item in different places, they could deliberately move goods inexpensive in one location to another location where they were highly valued, and extract a profit in the difference. Thus trade as a way of life in itself gradually was born. When there emerged water/boat people clans dedicated to doing this all the time, professional traders were born. Being highly nomadic boat-users, they exploited their skills to carry specialized goods great distances. If wares were unique to a region, moving them somewhere else where they were unknown, made them

valuable in those other locations. This was in particular the case with amber. Needless to say, long distance trade had no motive to move things that were common everywhere.

But for a system of long distance professional trade to develop in the realms of the water/boat peoples, there had to be relatively sedentary people – people who had neither the traditions to travel for weeks on end in boat, nor could they afford to free up men to do so. There would always be local markets for sedentary peoples, but long distance trade tended to fall into the hands of the water/boat peoples – which is the reason the *lingua franca* of the large scale tended to be the language of the northern peoples ultimately derived from the “Maglemose” culture.

A professional long distance trade system that gave early Europe its first sense of unity, was the result. When in the course of time as the original female Goddess civilization of Europe was changed to the male warrior-God civilization, the only change to trade was as dictated by the new male-oriented powers enforcing various rules and laws from on high. But evidence shows that trade was by then so important to the economy, that merchants were always given special respect. There are many examples, such as Hittites allowing the Assyrian language of the Assyrian trade system to prevail in Asia Minor, or Romans allowing certain merchant people free unfettered movement through Europe (For example, *Hermonduri*, mentioned by Tacitus in his *Germania*)

The interaction between the Water People and Goddess People or later God People, also had other impacts. Notably the boat peoples who became involved with the sedentary peoples via trade, tended to be less nomadic, and try out some of the practices of the sedentary peoples, such as keeping some cattle, goats and/or pigs behind their trade or fishing settlement. Those who became most involved in trade and interactions with civilizations, became the most like the latter, even as they maintained the traditions that gave them their strength – their mastery of boat use and long distance travel so important for long distance trade.

We will not discuss this further here, as we will pursue the expansion of trade by the Water (Boat) people extensively later.

1.5.3 Water Peoples Interact with Reindeer People > Issues in Genetics and Linguistics!!

As we have seen earlier, there was interaction between Water Peoples and the Reindeer Peoples at a later time at two circumstances – when the seagoing boat peoples headed to the White Sea and arctic Norway to harvest the seas there, and when the original small dugout river boat peoples headed north from the Volga, up the Kama and tributaries.

Although these encounters and their consequences are far less important than major developments in the interactions between Horse (God) Peoples and Goddess Peoples, or Goddess Peoples and Water Peoples, it is important for both completeness and to address current debates as to the relationship between speakers of Finno-Ugric (boat people) and Samoyed (reindeer people) languages.

It is obvious that the Samoyeds/Saami and the Finno-Ugric cultures have different origins – the former live in the tundra and tend to reindeer, while the latter (Finno-Ugric) possess in their folklore, language, archeology, and history, all the elements that link them to the ancient boat peoples.

My theory, as given at the start, is that the separation between the reindeer people and those who became boat peoples already occurred about 15,000 years ago, in the North European Plain. But linguists have found a closeness between the languages of the two groups suggesting a more recent common parent. To be specific, over a century ago, linguists decided that there was an original “Uralic” language near the Ural Mountains, that then split into Samoyed and Finno-Ugric branches, and did so quite recently. Indeed it certainly did not look like the split occurred 15,000 years ago. Does this undermine the theory presented here? Not really, because the original expansion of boat peoples could have been complete as early as 8,000 years ago, and the illusion of an “Uralic” expansion backward by the same rivers (Kama and Volga) to the Baltic is certainly possible, perhaps this time propelled by trade activity. While possible, is this the only answer to why Samoyed and Finno-Ugric languages seem not to have diverged too much?

The major problem, as I see it, is that linguistics assumes languages are always diverging – that populations are

constantly growing and child groups break away from parent groups, with the languages of the child groups, because of separation, diverging from the parent language and each other. But we know that languages also converge back towards one another, when languages ultimately of the same roots, diverged from lack of contact, meet once again.

Just as divergence is caused by two groups from the same linguistic origins losing contact with one another, so too convergence occurs when two groups come into contact with one another, or are steadily coming in frequent contact so that the divergence impulses are constantly contradicted by convergence impulses. Thus the amount two groups are similar or different to one another is dependent on their entire history of contact or lack of contact.

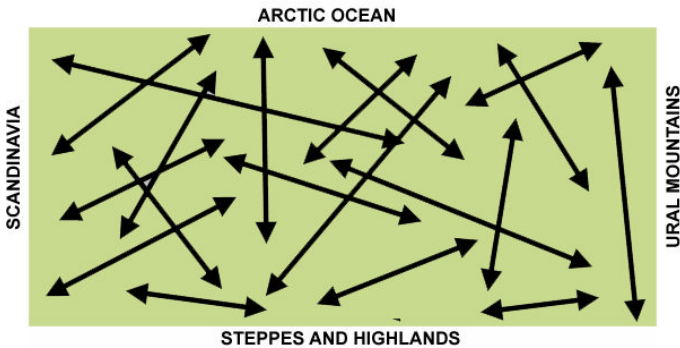
In the situation of far ranging nomadic hunter-gatherers, the closeness of languages over a region would depend on how frequently the clans and tribes of these people encounter one another, by chance, or by deliberate congregating from time to time. If these people travel great distances in boats, a linguistic uniformity will develop over quite a large area. Conversely if clans and tribes settle down and become more localized and sedentary, the linguistic uniformity contracts accordingly. This is demonstrated by Figure 1.5.3 A&B below.

These diagrams depict the region between Scandinavia, Ural Mountains, Arctic Ocean and southern steppes north of the Black Sea, as a rectangle, and the two-ended arrows depict in a very generalized graphic way, the amounts of movement of the boat peoples within that large region.

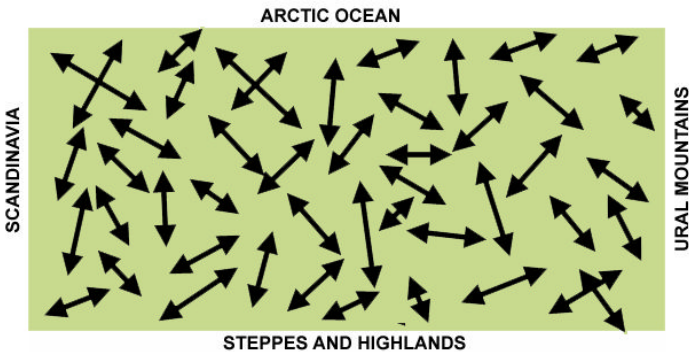
The message in these diagrams is that in determining the time frame of linguistic divergence, we are not talking about a one way process but a two way process. If convergence due to contact acts against divergence due to lack of contact, the whole process of linguistic change is slowed down, and the region over which it is slowed down depends on the scale of contacts. That scale among highly mobile boat people was large.

Figure 1.5.3 A&B

LINGUISTIC UNIFORMITY RELATIVE TO NOMADISM AND DISTANCES COVERED IN THE FINNO-UGRIC WORLD



a) EARLY HUNTER STAGE: The top graphic represents the distances the hunters traveled in their annual nomadism, illustrating that there would have been plenty of contact between everyone, enough to maintain a rough uniformity in the languages of the whole region.



b) LATER TRADER-FARMER VILLAGE LIFE STAGES: The bottom graphic represents the reduction of nomadism and distances arising from the disappearance of the original way of life that came with trading, farming, and village life. The short distances now make it more difficult to maintain uniformity of languages over a large area and the original dialects develop into languages then into language families, with previous dialects becoming languages, according to patterns of influence from civilization.

The above descriptions can explain how the divergence between the tribes of boat people was slowed down due to frequent and long distance contacts between the nomadic hunting peoples (and the traditional models based on migrations of farming peoples with only divergence at play is absolutely childish from modern perspectives). Obviously, things were a little different between the boat peoples and reindeer peoples since they encountered one another less frequently and had different ways of life. Yes, there would have been convergence there too – if boat-using hunters encountered reindeer people, perhaps they discovered a few similar patterns in their words and grammar and enhanced those common features. Most often such encounters between boat peoples and reindeer peoples were rare because the former occupied more southerly forested regions, while the latter were north of the tree line in the tundra. There were, as we have already pointed out earlier, two locations where the boat people came into contact with reindeer people significantly enough as to impact on each other's language and genetics – northern Scandinavia in the west and the Tamir Peninsula in the east.

In my view, when boat peoples came into contact with reindeer peoples once again in arctic Scandinavia and in the regions south of the Tamir Peninsula, there was such a pressure to be able to communicate with one another that the two languages in those locations converged towards one another as much as was possible. Because the languages had already diverged for some time, convergence was fitful. It would be analogous to how today we might find, for example, French Canadians using many words and expressions from English Canadian culture. Or, to go back a couple thousand years, the way in which European languages embraced Latin. French, for example, is considered a Romance language, and yet it is far less Latin-like than, say, Spanish. English, is considered a Germanic language, but it contains much more Latin than other Germanic languages. Obviously the Latin in English came from the Roman occupation of the British Isles in the first four centuries AD.

I propose, therefore, that the languages of the reindeer people were strongly influenced by the contact with the boat peoples who arrived in arctic Scandinavia and the northern reaches of the Kama and Ob Rivers. And, in the opposite

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direction, the original Samoyed language influenced the Finnic of the boat people.

Linguistics finds that the “Ugric” languages (notably the Ob-Ugrians in the Ob River) which are found closest to the Samoyeds are closest to the Samoyed language. Genetics too puts a great deal of Samoyed genetics into the Permian and Ob River peoples.

The consequence is that the “Ugric” component of “Finno-Ugric” languages is close to the Samoyed languages, and that as we travel south to the Volga and then west towards the Baltic, these similarities decline. But the traditional simplistic way of explaining this via a family tree with migrations and linguistic divergence from a “Uralic” origins, is childishly unrealistic. What we are looking at is an original distribution of hunting peoples throughout northeast Eurasia, where peoples close to one another were more similar than peoples further away, purely as a result of convergence offsetting divergence. Pure one sided divergence in language only occurs with population explosion, a one way process, and that divergence began only in the Ice Age, before the rapid warming that began about 12,000 years ago, and caused an explosion of the populations of wildlife and humans that depended on them.

The issue linguistics must address is how does one determine whether similarities between two languages is because of divergence from an original common language, as opposed to convergence from original more dissimilar languages?

Were the reindeer hunters in and near the Tamir Peninsula for many millenia before they encountered the first boat peoples coming into their vicinity, perhaps arriving via the Ob River? Did they discover that their languages were at their core similar, and worth looking for convergence points? Picturing it realistically, it is clear that they would have developed some very simple “pidgin” language for rough communication, that employed word stems and grammatical patterns that were still in effect in spite of the long separation between the two since the Ice Age. With some similarities, and a pidgin language, it was now possible for convergence to continue to develop over the centuries of intermittent contact (such as for trade or mating). This convergence now pulled the Ugric and Samoyed languages closer together, and that has given the illusion – if

we only think in terms of divergence – of more recent common roots.

But note: the convergence would only have been in terms of language and even genetics. The two different ways of life could not be tampered with.

Investigation into central Europe's prehistory (Bramanti et al. 2009) found that the indigenous hunter-gatherers did not mix with the immigrant farmers, and to Bramati et al, the reason is inexplicable. No, this should not be a mystery. If two peoples have completely different ways of life, there is no competition, no wars, no desire of one to conquer the other. Each has a different sense of 'territory' and therefore there is no territorial conflict. Neither seems to be an intruder on the other's territory. They get along, trade, and wave to each other in passing. Most importantly, once the contacts are occurring, each side is encouraged to remain in their different way of life purely to avoid the acrimony that would arise if each treads on the other's sense of 'territory'. It is counterintuitive – useful contact between peoples with different ways of life actually encourages that separateness. Specialization prevents conflict – this is most evident in the way tropical jungles promote great diversity of species. If each species occupies its own niche, it minimizes conflict with other species.

It is important in the long run that the differences are useful and not merely arbitrary. Different ways of life produce different foods and products, and because of it, there is a motivation to trade with one another. Benefiting from trade, it then becomes in both their interest to preserve each other's way of life, instead of one or the other treading on the other's territory and provoking animosity and war, and worst of all reducing the diversity of products.

This truth applied especially strongly to the reindeer hunter way of life versus the boat-people way of life. Each lived in such completely different ways that it is valuable to have both, and so, even if there was convergence in every other way, the way of life remained immutable. It was impossible to merge reindeer hunting and fishing and hunting on rivers, and it wasn't a good idea for everyone to become either one or the other, because the way of life abandoned would represent a collective loss. Therefore the best course was for each one's way of life to be strongly supported, to remain strong. Even if

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there was plenty of intermarriage one had to belong to the one or the other. Since the common principle was that a woman lives with her husband, many an Ur-Samoyed woman became an Ur-Finno-Ugrian from an Ur-Finno-Ugrian man taking her for his wife.

Even 6000 years of associating would still preserve the way of life of the reindeer hunter and the boat-oriented hunter, even as the two blended together genetically and in aspects of life that did not impact on how they made their living.

And that has resulted in the Ob-Ugrians being genetically very much like Samoyeds, and the Permians less so, according to distance, as we would expect.

Genetics affirms the fact that the boat peoples and reindeer peoples merged in proportion to proximity to the origins of the Samoyeds in the Tamir Peninsula. The following genetic map that maps the occurrence of the genetic group N1b in parental lineage, shows how Samoyed and Finnic peoples merged, at least genetically, in proportion to amount of contact, which was proportion to distance from the Samoyed origins in the Tamir Peninsula (black area)

This map reflects too what linguistics has found. The main region of noticeable linguistic convergence would be the darker grey, which covered Permian and Ob-Ugrian branches of Finno-Ugric languages – precisely those peoples who were most in contact with the Samoyeds. It reflects the Ob River, which flows north, orienting its boat peoples towards the Samoyed.

The light grey area on the map reflect secondary effects - ie among peoples who did not directly make contact with Samoyed but inherited genes from male ancestors who were originally closer to the Samoyeds (Black).

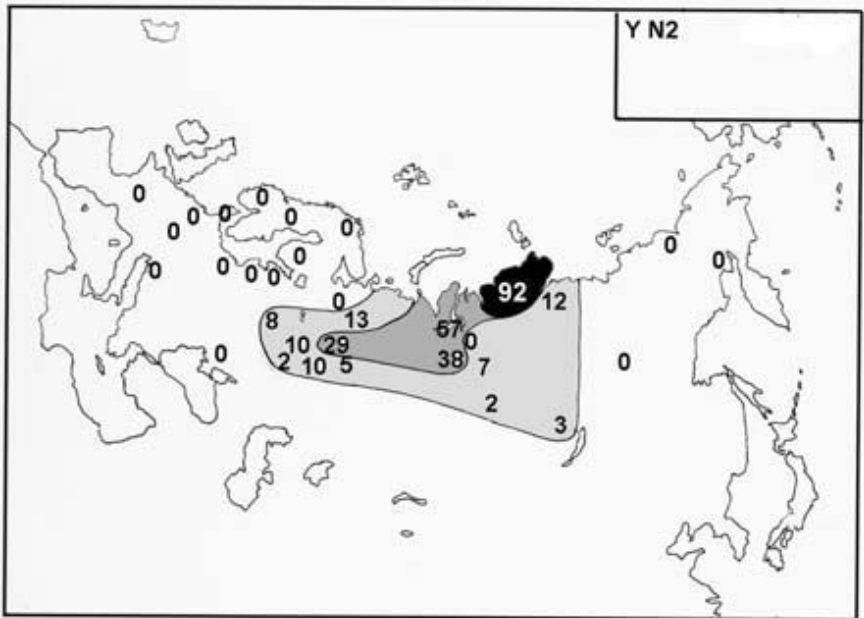
The Tamir Peninsula represented a large homeland for the reindeer people to which no other people cared to go. That promoted the development of the abovementioned genetic marker. Such a genetic marker development was not possibly towards the west, where boat peoples poured into arctic seas north of Scandinavia because it was rich with sea life promoted by the warm waters of the North Atlantic Drift arriving at arctic Norway. The north Scandinavian reindeer hunters were so strongly impacted by boat peoples harvesting the northern seas, that it is possible their (boat people) population success

eventually diluted the original reindeer hunter genes, even as the reindeer hunting way of life endured where possible, for the same reasons we have already given – the benefits of specialization and diversity.

Figure 1.5.3.C

Area of occurrence of the genetic group N1b of paternal lineage (marked as more or less darkening against the white background) (From Manuscript Wiik 2006, published in a slightly changed version Wiik 2007b: 58)

(The highest density: 92 % – Nganasans, 57 % – Nenetses, 38 % – Hants, 29 % – Udmurts, 13 % – Komis.) (from *Ago Künnap*, 2010)



1.6 Surprising Parallelism with Y-Chromosome Charts

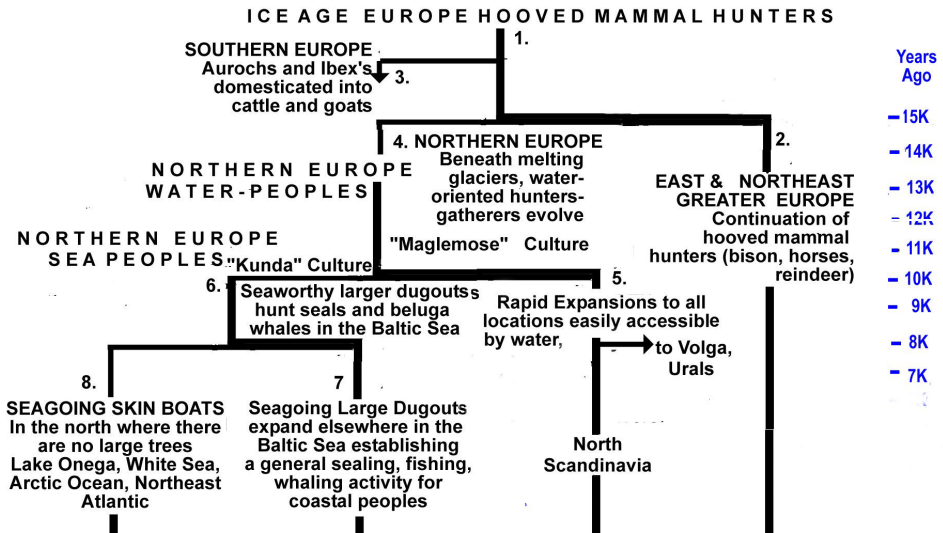
1.6.1 General

In the previous sections I presented some branching tree charts that showed the divisions as the various groups went

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their separate ways. In section 1.4, I summarized these charts with the following larger chart that brought all developments together.

Figure 1.6.1 (= Fig. 1.4.1)



It is important to note that the events I have presented were determined from patterns observable in the archeology, and many other sciences – from geography to geology to historical documents, to folkloric traditions, to linguistics, etc. The story that the evidence reveals comes together from identifying with the ancient peoples described, understanding human social and practical behaviour, and applying logic and common sense. As a person very interested in the ancient past of northern Europe, I absorbed everything I could find in all these sciences as a side pursuit since around 1976, originally only accumulating a great amount of knowledge and wisdom, which originally was quite fragmented. Synthesizing all the information into one whole began in the late 1990's, and I began writing it out on my website by about 2002, inventing the heading "Ui-ra-la". This current text is an even tighter synthesis of all the data science has gathered, this time I include also population genetics discovery.

In the course of presenting the theory I have made reference, as needed, to the evidence supporting the ideas I presented. The need to be general and cover much information has prevented me going into much detail. Much evidence has been left out of this presentation to make the theory as concise as possible. But it produces a framework into which more evidence and discussion can be added at future times. Most important is the basic theory.

The synthesis, as you have seen, draws on logic and common sense, and often the reader will find ideas obvious once presented. For example, if the “Maglemose” boat people of marshes and rivers move out into the open sea, common sense says they had to make larger boats and as they hunted larger water animals like seals, had to alter their tools and way of life. It is when there is a dramatic change in way of life that there are branchings in the human family tree. We can take the common sense right back to the beginning, back to the first branching – those who followed the herds as they moved with shifting vegetation, and those who stayed in southwest Europe and ended up needing to domesticate the aurochs and ibexes. This represents the first branching. Then, of those who migrated northward, and eventually populated the North European Plain while it was still tundra, migrated again, and among those, another group remained behind. In this instance, the north Europeans who remained behind had to adapt to hunting other animals than reindeer (or horses or bison) while those who remained with the herds migrated off once again. Here then was another branching.

Next, as the climate warmed and became wet, those who remained behind in northern Europe had to adapt to ever wetter environments, and they developed dugout canoes to move around. Eventually there were divisions among the boat people too. It is logical that when the “Maglemose” culture (4 in the chart) developed seaworthy boats on the east Baltic coast, and became the “Kunda” culture, that their changed way of life represented another branching of the descent tree (5. and 6.) It is logical that the original small-dugout hunters culture would continue unchanged, expanding where it could, surviving relatively unchanged up to the historic aboriginal “Finns” (or *Fenni* described by the Romans) as represented by the thick line from 5. with minor branchings related to expansions.

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Meanwhile, it is logical that the seagoing branch would divide further (7. and 8.) as one branch went into the arctic and adapted to conditions there. These new conditions included the need to develop their seagoing skin boats because all the trees there are too small for Baltic-style seagoing dugouts.

All these divisions are so logical, so appealing to common sense, that they hardly need debate. But with such dramatic branchings, we should expect it also to show up in population genetic data. When there is a dramatic branching, that means the two groups lose contact with one another, and that begins a new line of chromosomes. If the social structures of hunting people are such that brides are taken into the clans and tribes of the grooms, that means the branchings should show up in the male lineage, that is, in the markers of the y-chromosome. That too ought to be common sense and obvious. We will discuss this shortly.

1.6.2 Dates from Traditional Evidence

The charts we have presented, and then combined into one in Figure 1.6.1 also give dates back from the present along the right side. These dates are what traditional science has determined for the events described, as determined by geological, radio-carbon and other dating methods traditional science has used. We need not make wild guesses about dates. Accordingly I have drawn the branchings in my charts and the combined chart to correspond with what traditional dating practices have determined. For example I show the branching between those who remained in northern Europe as it became flooded, and those who migrated away with reindeer, bison or horses, as having begun around 15,000 years ago. When I use the word “begun” I refer to that point where a tribe divides in two, and one ends up taking a dramatically new path. At first, it could be a group, splitting off the parent tribe expecting only to continue the way of life of the parent, but in a new virgin territory. If that is what happens, the branching does not occur – the original parent culture simply multiplies. But if the environmental conditions change for the breakaway and they dramatically change their way of life, a distinct branching that shows up in archeological data, linguistics, and population genetic occurs. This at first the two groups are identical, and

don't know what will befall them in time as a result of the decision. Both groups expect to continue their current way of life, but fate will have it that one of them changes dramatically.

Let us go back to the beginning: the group that remained in southwest Europe originally, would have had no idea that eventually they would tame the aurochs and ibex into cattle and goats. The breakaway group that followed the herds would not have known that the herds would keep shifting their locations northward and eastward according to the shifting plains regions.

Similarly at a later stage, the group that remained in northern Europe while their brother tribe shifted their location little by little northeast with reindeer herd shifts, or east with the shifting habitat of bison or horses, had no idea originally that the land close to the ice sheets would become progressively more flooded and increasingly they would have to develop boats and live on animals of the marshlands and seas.

Decisions are made with the assumption the breakaway group will continue the same way of life, but circumstances sometimes do not allow it. If the circumstances change gradually, then the peoples affected are not even aware the degree they are changing from the way of life of their ancestors. Note in the chart of figure 1.6.1 that I show the passing of 5 millenia for the evolution of the original boat people that result in the final "Maglemose"-style culture. Obviously for perhaps the first 3 millenia of those 5 millenia, up until about 12 millenia before present, this branch that remained in northern Europe was not yet a boat-people. They still hunted land animals, and only gradually took more and more animals from marshy regions, at a rate determined by the general climatic warming trend, and the resulting withdrawal of the glaciers to the mountains of Norway. Thus imperceptibly year by year they adapted to new conditions, and when finally they were traveling with dugout canoes in marshes, they had no idea that many millennia ago they were pursuing reindeer on open plains.

If we were to scan those 5 millenia, we would find that first the reindeer hunters who stayed with the herd on which they depended. While the eastern tribe found the reindeer herd capable of advancing northeast as the climate warmed and the

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landscape changed, the western tribe found their reindeer dwindling as the north European tundra was turning into bogs in which reindeer could not survive in the long run, and the sea and ice blocked further progress northward for the herd. With the western reindeer herd caught between the bogs and the ice, their numbers diminished and the hunters would increasingly transfer their reindeer traditions to another large mammal, this one at home in wetlands – the moose (in British English “elk”) Moose are amazing animals that can live in both dry forests and marshlands. They can feed on vegetation in both places. They can even stand underwater and browse water plants from the bottom, being able to hold their breath for several minutes. They can also swim great distances. As long as they can see the opposite shore they can cross that body of water. It is obvious that the progression from reindeer-hunters to boat using hunters of marshland animals was inspired by attention to the moose. As they chased the moose from forest into marsh, the hunters would be frustrated not to be able to follow it into the water, increasing pressures to develop water craft. This would have begun a trend that ended with a mature “Maglemose” culture, where clans traveled from place to place by boats, ate mostly water life, and flourished in a watery landscape along with all other life forms that blossomed as the climate warmed. Their populations grew and tribes divided and the culture expanded.

What I am saying is that this event took 5 millenia. It was not a sudden one in which someone invented a boat and immediately went to catch fish.

Obviously the “Maglemose” culture has to be mature and to have expanded before the next stage – progressing into the open sea. On the chart I show the “Kunda” culture began from the “Maglemose” culture of southern Baltic marshes at about 10,000 before present (or 8,000 BC). Once again, we are speaking of the beginning of the branching. In practical terms it would have occurred when a seasoned “Maglemose” (marshland hunters) tribe, growing too large for the territory it occupied, broke away and sought its own new territory – something that had occurred often as the culture expanded across the north. But in this one instance, the original way of life did not replicate itself. Very likely originally the coastal regions of the east Baltic were uninhabited by this culture because of strong waves from prevailing winds. This particular

breakaway group says “We will make larger dugouts to manage those high waves, and enable us to get out to those rocks where the seals gather!” The parent tribe replies “Well we will continue our lives harvesting the interior marshes as always. Goodbye.”

In reality, probably the breakaway did not know what the future would hold. The “Maglemose” parent culture probably already sometimes caught a seal, and this breakaway was drawn gradually more and more into going out into the open sea and hunting seals. Once again, the branching occurred gradually, but not as gradually as the evolution from reindeer hunter to marshland hunter which took 5 millenia.

The next major event, according to the evidence of geological and radio-carbon dating, shown on the chart in figure 1.6.1, began around 8,000 years ago, when a breakaway tribe from the “Kunda” culture decided to tackle the arctic ocean. At first bringing their seagoing dugouts north from the Baltic, later they learn how to make boats with high sides using skins from moose. 8,000 years before present is about 6,000 years ago, and indeed scientists have estimated the oldest of the rock carvings of Lake Onega and the White Sea, that show skin boats, to be of that age.

Our chart in Figure 1.6.1 stops at the division between the continued seagoing dugouts in the Baltic (7) and the skin boats of Lake Onega, White Sea, and over top of Scandinavia (8). We will resume the tree in Part 2 later.

As I said earlier, while breakaway groups that simply moved into new virgin territory and continued the original way of life, did not create any branching, when one of those breakaways veered off into a new way of life, that is when the evidence identifies a branching. Such branchings result in the appearance in archeological finds of a new way of life, suggested by new tools and other artifacts. For example the “Kunda” culture produced large harpoon heads that prove they harvested the open sea. It also results in divergence in language, if the new branch loses touch with their ancestral peoples. Obviously it also results in a new genetic path which we can expect would leave its mark in population genetics.

1.6.3 Departures In New Directions Should Show Up In Generic Descent

In my descriptions above, I indicate that the branching BEGINS when a tribe gets too large and a breakaway group, splitting off the parent tribe, embarks on a new journey, new location, new way of life. Such a breakaway that goes in a new direction is different from a normal breakaway, where a tribe grows too large, but the breakaway group simply moves elsewhere within the same environment. For example the “Maglemose” culture would have expanded by breakaway groups simply traveling some distance away, finding vacant territory same as before, and continuing the traditional “Maglemose” way of life. The same would be true in the expansion of seagoing Baltic dugout peoples. The “Kunda” culture when it grew, obviously first produced breakaways that sought out new territories within the Baltic. They would have produced coastal peoples around the Baltic who harvested the sea. If a breakaway group does not proceed dramatically into a new way of life, but remains of the same culture as the parent, then continued contact with the parent tribe will continue more easily – occupying the same environments, following the same way of life, they will encounter one another, socialize, intermarry, congregate in festivals.

But if the breakaway group takes another path, eventually the hunting skills will grow apart. Considering the separation that produced the “Kunda” culture, boys in the seagoing “Kunda” tribe will learn unique skills related to navigating the sea, harpooning seals, etc. Since such skills are developed over a lifetime, men in such a seagoing hunter society would be unable to move back into the traditional marshland hunter way of life.

The same predicament would not be as true for women, though, since women’s roles in hunting society were more universal. If the men brought home a seal to be skinned, instead of a moose, the skills that the women had to apply were not all that different, compared to the great difference between catching a seal versus catching a moose. Thus a young “Kunda” man could take a bride from marshland hunter people in the interior without it compromising his tribe. She would join the grooms mother in women’s activities, and learn what

was required. But the young man himself could not move out of the tribe in which he was raised and in which he had learned highly specialized skills.

This meant that hunter peoples had a tendency to preserve male descent within the tribe, or at least within their particular specialized way of life. This should show up in population genetics related to male descent. At the same time, if brides did not need to be from within the same way of life, population genetics will find female descent in hunting peoples more chaotic.

Because the male activity of hunting, and the specialized skills different types of hunting required, hunting cultures were patrilineal and male-ruled. Hunting territories were passed down from father to son. (Contrast this with early goddess-cultures that pursued animal breeding and then agriculture, which were in all likelihood matrilineal, passing down the domesticated animals and farm fields from matriarch to daughter – as demonstrated recently in the Iroquoian farmer natives of northeast North America)

To summarize, in the mating process among hunting peoples it would be the young male who sought out a female from another tribe. The male would then take his chosen bride home with him to live in his clan. Both from men needing to remain in the tribe where his skills are applicable, and the general patrilineal structure of hunting societies, male genetic descent would become strongly delineated and should show up in y-chromosome genetics. Meanwhile female genes, thus would migrate into the clans of the men according to patterns of male bride-taking. There is the fact that boat-using hunter gatherers traveled great distances, and could take brides from distant peoples. This was especially true in later times when there were professional traders – young men could take brides from anywhere they went as I will mention later.

1.6.4 Amazing Agreement in the Roewer et al Y-Chromosome Tree Chart

Population genetic analysis is based on the fact that there exists random mutation in genes, and that the longer two groups are separated, the greater the amounts of mutation relative to each other. The mutation amount can be correlated

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to the passage of time as well, and it is possible to connect the points of mutation to passage of time.

If hunting societies were patrilineal, and mating always involved a one way movement of brides into the hunting society of the groom, then population genetics should reveal this pattern. Male descent should be quite clearly delineated in the data, while female descent will be unclear, even random (as the grooms can theoretically fetch their brides from anywhere they went, and boat-using hunters sometimes went far!)

This appears to be the case in current work – that analysis of y-chromosome data for ancient hunting peoples appears to produce clearer patterns for male descent than the analysis of female descent chromosome data.

We saw for example the results of the distribution of a particular marker strongest in Samoyed men in figure 1.5.3 C. I guarantee that studies of female descent will not produce a map that is as clear as that map. The map clearly shows that there was a flourishing of Samoyed culture, an expansion of Samoyed tribes. Possibly as the Samoyed tribes expanded as indicated by that map, they took Finno-Ugric women as wives, and the more they did that, the more they acquired Finno-Ugric characteristics, ultimately leading to Ugric peoples possessing a great deal of Samoyed genes and language features.

Several years ago, a study was undertaken to analyse y-chromosome data accumulated from men all over Europe, using a method that was considered to be more sensitive and capture more events. It was published in several places, including as an article in *Human Genetics* 116(4):279-91 in Jan 2005 entitled "***Signature of recent historical events in the European Y-chromosomal STR haplotype distribution***" by Lutz Roewer, Peter J.P Croucher, Sascha Willuweit, Tim T. Lu, Manfred Kayser, Rüdiger Lessig, Peter de Knijff, Mark A. Jobling, Chris Tyler-Smith, and Michael Krawczak. The work done is summarized in the ABSTRACT for the article:

Previous studies of human Y-chromosomal single-nucleotide polymorphisms (Y-SNP's) established a link between extant Y-SNP haplotype distribution and the prehistoric demography of Europe. By contrast our analysis of seven rapidly evolving Y-chromosomal short tandem repeat loci (Y-STRs) in over 12,700 samples from 91 different locations in Europe reveals a signature of more recent historic

events, not previously detected by other genetic markers. Cluster analysis based upon molecular variance yields two clearly identifiable subclusters of Western and Eastern Y-STR haplotypes, and a diverse transition zone in central Europe, where haplotype spectra change more rapidly with longitude than with latitude. This and other observed patterns of Y-STR similarity may plausibly be related to particular historical incidents, including, for example, the expansion of the Franconian and Ottoman Empires. We conclude that Y-STRs may be capable of resolving male genealogies to an unparalleled degree and could therefore provide a useful means to study local population structure and recent democratic history.

I am not very knowledgeable in population genetics methodology and would not have taken note of this paper were it not for a tree chart in the article that appeared to parallel – in its branchings and proportions – what I had determined about the human family tree. The chart that appeared is reproduced on the next page exactly as it was given.

Figure 1.6.4

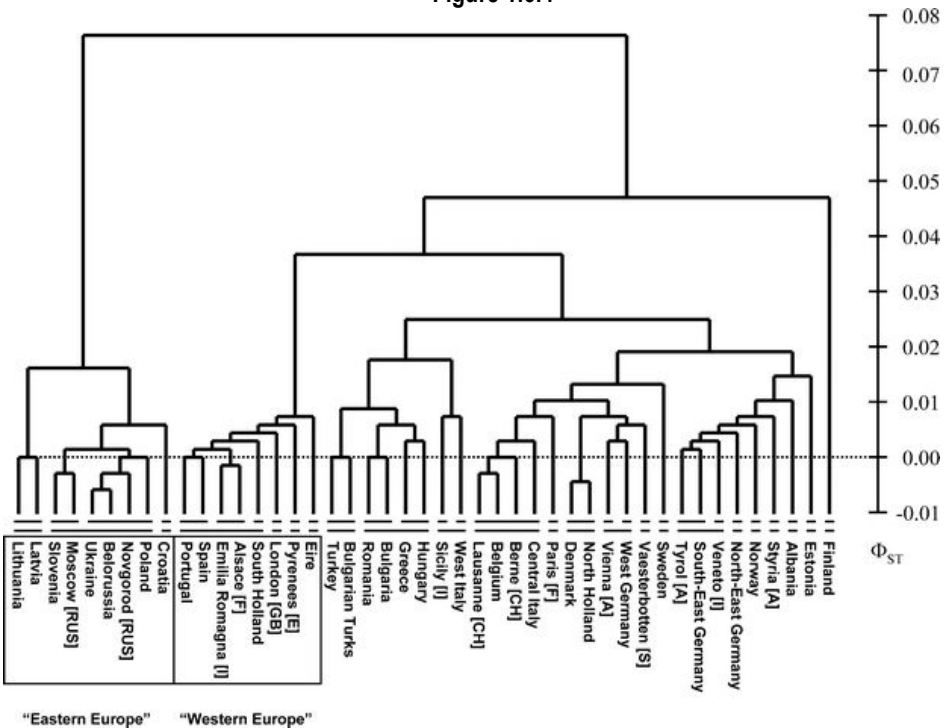


Figure 2 in that article is described as follows. “*Clustering by minimum Y-SYR based Φ ST of 45 male European samples and meta-samples. The significance of individual groupings is indicated by vertical bars below the dendrogram (top line randomization $P < 0.05$, bottom line $P < 0.001$)*”

For now, let us only look at the top part of this chart, above the number 0.03 on the vertical measure of Φ ST. (Note that this chart looks better if you move the “Eastern Europe” cluster to the right side, the proper east side.)

In general population genetic studies take DNA samples from subjects all over a region of interest – in this case from men in the confines of Europe – and then assesses a particular genetic marker. When studying male descent, attention is on the y-chromosome carried by men and passed down from father to son. By comparing characteristics in certain genetic markers in y-chromosome of modern men in different locations, the analyst looks at similarities and differences and determines how closely or distantly they are related. This is gauged by the fact that the genetic markers being looked at naturally mutate over time, and the greater time passes in two paths of descent, from a common father, the more mutations there will be along each path, hence the more they will have diverged from one another. In other words, the greater the difference between these genetic markers, the more ancient the common father.

This allows the analyst to develop a tree chart based on how far back or how recent mutation events took place.

In this case the analysis chose to look at “*the European Y-chromosomal STR haplotype distribution*” in “*over 12,700 samples from 91 different locations in Europe*” As the abstract indicates, this study was different from previous studies of Y-chromosomes by analyzing “*seven rapidly evolving y-chromosomal short tandem repeat loci (Y-STR’s)*” which “*reveals a signature of more recent historic events, not previously detected by other genetic markers*” To be more specific, the article holds that the use of Y-STR’s instead of traditional Y-SNP’s is better because “*With Y-STRs, the rapid mutation process constantly generates new genetic variation that allows genetic structures to change more easily.*”

Furthermore, even with their substantial variation in marker-specific mutation rates, Y-STRs usually manifest so many meiotic mutations in evolutionarily related haplotypes that the actual choice of markers is fairly inconsequential to the inferred nature of the genealogical process. In this respect, Y-STRs represent a much more robust population genetic tool than Y-SNPs, which may have substantially different time-depths and can thus create layers of incongruent maps (Jobling MA, Tyler-Smith C (2003) The human Y chromosome: an evolutionary marker comes of age. Nat Rev Genet 4:598–612)”

The genetic relationship between different populations was assessed by means of ΦST , an analogue of Wright’s FST that takes the evolutionary distance between individual haplotypes into account (Excoffier et al. 1992; Excoffier and Smouse 1994). Estimates of ΦST were obtained using the Arlequin software (Schneider et al. 2000) and tested for statistical significance by means of randomization (1,000 replicates per comparison)..... Population samples were, therefore, recursively clustered into meta-samples, based upon ΦST . In each clustering step, that pair of populations or clusters that yielded the minimum ΦST value was grouped together.

CITED IN THE EXCERPT

Excoffier L, Smouse PE (1994) Using allele frequencies and geographic subdivision to reconstruct gene trees within a species: molecular variance parsimony. Genetics 136:343–359

Excoffier L, Smouse PE, Quattro JM (1992) Analysis of molecular variance inferred from metric distances among mtDNA haplotypes: application to human mitochondrial DNA restriction data. Genetics 131:479–491

Schneider S, Roessli D, Excoffier L (2000) Arlequin: A software for population genetics data analysis, version 2.000. Genetics and Biometry Lab, Dept. of Anthropology, University of Geneva]

The study that developed the chart had no preconceptions, and in fact the analysts made an arbitrary guess that the chart reflected *particular historical incidents, including, for example, the expansion of the Franconian and Ottoman Empires.* Without any preconceptions, the analysts could not even have unconsciously steered the chart in a direction that seems to correlate with the evolution of hunting peoples since the Ice Age.

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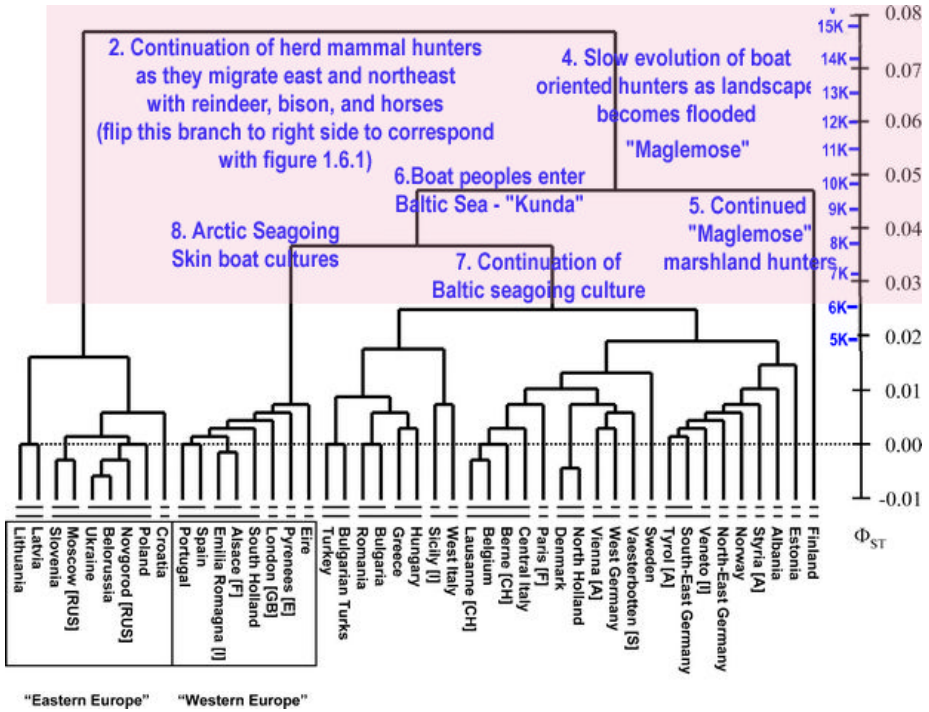
I was curious about the proportions of the chart – would the vertical distances reflect actual passage of time. In the genetic tree chart the Φ ST is a measure of how much mutating has taken place, and correlations to actual passage of time ought to be possible. Thus I began to see if I could find a conversion factor by which the Φ ST values converted to time before present. I assumed that the bottom of the chart, where the place names are found, represent present time. Thus I discovered a formula that would turn the vertical values into a historical time frame. The tentative formula is:

$$(0.01 + \Phi \text{ ST value shown}) \times 170,000 = \text{years back from present time}$$

This gives us values of time before present that fit quite well the dates of the major events that have been determined by archeologists and other scientists using traditional carbon-dating and other means. The accurate paralleling of the male chromosome tree chart with hunter culture developments discussed so far is shown in the following figure 1.6.4.B including our adding the years-before-present numbers corresponding with the Φ ST

The question that arises is – what does the portion of the chromosome tree chart below the pink area represent in terms of events. As we will see as we continue into Part Two, while some of it represents a continuation of the “Maglemose” culture (the vertical line that ends with Finland) and of Atlantic seafarers, which continues some distance until it ends when these people reach the British Isles, most of it represents north south trade activity. Trade activity tends to separate groups because professional trader clans, families, tribes, tended to assume a trade route and dominate and defend it as a new form of ‘territory’. Contrary to what scholars naively assume, trading was not a free-for-all. Those who controlled the better trade routes were more successful. Unfortunately what we call “history” is entirely about politics and war over real estate, and the drama of competition and conflict among trader peoples (not to mention hunter peoples discussed earlier) is entirely absent from “history” and is a gaping hole in our understanding of the human past.

Figure 1.6.4 B



Notable in the continuation of the chart is that the branching below #7 seems to reflect developments in the North Sea west of the Jutland Peninsula versus developments in the Baltic Sea. This is well known from archeology. Trade went down to the civilizations of southeast Europe either by the Danube so easily accessible from the Rhine, or by the Dneiper so easily accessible from the east Baltic coast.

Next the branching in Baltic trade divided between the east Baltic and west Baltic when trade routes were established going up the Vistula and up the Elbe respectively, with the major product being amber. In this case the date of the beginnings of amber trade are quite clear from archeology, and the date produced by the conversion from Φ_{ST} to years-before-present agrees. The date we arrived at from the formula - 5K (3000BC) - agrees with Baltic amber being found in Babylonian tombs dating to a little before 3000BC.

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Obviously, as north south trade developed traditional boat peoples continued in the north, the “Maglemose” type culture continuing in less accessible parts of the Baltic basin, leading to the historical identification of primitive peoples called “Finns” (*Fenni* to Romans). Meanwhile the arctic seahunters continued too, enduring probably as the Greenland “Eskimos” who still hunted whales in the same way as depicted in the White Sea rock carving, before the Basques introduced technology to whaling. These continuing prehistoric cultures would not show up as an “event” in the y-chromosome tree chart, as they did not produce consistent new paths of male descent. But in the world of trade, where families, even tribes (collections of associated families) might dominate a particular trade route, the male descent path might become well delineated insofar as these cultures remained patrilineal, passing down property and trade rights down from father to son, keeping the male chromosome descent well delineated, while bringing brides into the families from outside.

Because the development of the northern boat-oriented hunting peoples into professional traders marks a sharp change from the hunting way of life of the early period, we will investigate the evolution of the boat people into long distance traders in a separate new section, Part 2.

1.6.5 Final Thoughts: Mating Patterns Important in Male vs Female Descent Analysis

Population genetics studies have a tendency to ignore patterns by which genes are perpetuated. Like the 19th century linguistics, currently population genetics pays little attention to mating patterns, even though it is extremely relevant whether a society systematically brings brides into the family of the groom, or whether it is vice versa, or whether it is both. Among sedentary peoples of recent millennia it has probably been both – male chromosomes and female chromosomes migration in both directions. But in hunting peoples, it was always that the bride entered the family of the groom. Indeed this practice, has even dominated Indo-European male-dominated cultures, which, as I described earlier, originated from horse hunter peoples.

Any analysis of population data must begin by carefully studying mating patterns. If female chromosomes always went into the clan and tribe of the groom, those female chromosomes could have come from a great distance, if the groom was a great traveler and fetched her from far away. This would be the case for far ranging boat-using hunters, who could cover some 5 times more territory than humans on foot, and encounter more distant neighbours.

In the course of time, the northern boat people who came into contact with sedentary civilization exploited the fact that they could produce a service of long distance trade. Beginning with engagements in trade part time, while continuing hunting and fishing, soon professional traders emerged, who did it all the time. Their men then made long journeys up and down the Volga, Dneiper, Vistula, Oder, Elbe, Danube etc. These men could have fetched brides from anywhere along the route. It is also possible that many a young men doing the shipping had girlfriends along the route, and produced unplanned male offspring that carried their y-chromosome, everywhere along the routes. When they established colonies their men settled there, taking local wives.

While population genetics may be puzzling to geneticists themselves, the more scholars understand the developments in human societies, their mating practices, their movements, the more sense we can make of the population genetic data. They say that female genetic data gives only coarse results, but the truth may be that female genetic data is somewhat chaotic because early hunter societies, and later male dominated Indo-European societies, were patrilineal, and brides always migrated away from their roots, to the tribe of the grooms (until relatively modern times when sedentary agricultural society ensured that both bride and groom came from the same general area.)

1. 7 Further Expansions of the Early Boat Peoples

1.7.1 General

Before we continue into Part Two, which is focused on the boat people traditions coming to dominate early European trade, we have to acknowledge and make some comments on expansions of boat people in ways not already discussed, just for the sake of completeness.

In the theory as presented in this section 1, we proposed that the boat peoples reached the White Sea, and then went west from there to harvest the seas off arctic Norway. The clear proof of this are the rock carvings showing skin boats with moosehead prows, which appear from Lake Onega to Alta, Norway. Since moose inhabit interior regions, this proves that this expansion came not up the Norwegian coast, but from interior regions where moose thrived – the marshy subarctic regions from the Gulf of Bothnia to Lake Onega. These skin boat peoples reached the waters off arctic Norway, and we described in section 1.3.9 of expansions across the North Atlantic.

But throughout this presentation there has been a question – did some boats head east from the White Sea over top of Asia too, as far as the Bering Strait and further?

In the original expansions, where the travelers really had no idea where they were going did some groups naively journey along the arctic coast of Asia and eventually reach the Bering Strait?

Furthermore, if we consider the dugout canoe peoples, we can also wonder if the interior boat people went further than the Ob River. If they traveled up the Ob River they could reach the Altaic Mountains and what is now western China. There is an entire field of further study possible here. There have been linguists who have found some resonances between the Finno-Ugric languages and Korean, even Chinese.

1.7.2 The Mysterious Pre-Clovis Prehistoric Arrivals on the Pacific Coast of North America (before 12,000 years ago)

Recently archeology of prehistoric humans in North America has been finding the presence of pre-Clovis humans along the Pacific coast before 12,000 years ago and as early as 14,000 years ago. Traditionally it was thought that humans arrived only as mammoth hunters following an ice-free corridor from the Bering Strait, represented by the Clovis culture characterized by large spear heads required for killing mammoths. But it is now thought, from tracing particular artifacts like serrated edge spear or arrow heads, that the earliest humans came down the Pacific coast, and continued on down the Pacific coast of South America as well. This would not have been surprising for a boat people – the seacoast environment would have changed little as they went, thus being able to employ the same technology constantly, and if they used boats, they could move more quickly than people on foot.

The big question is where did these first boat people of the Pacific coast come from? Did they come from the boat peoples we have described? Was there an especially early expansion of boat peoples that predates our account of an emergence from the Maglemose Culture under the European Ice Age glaciers?

One of the central concepts of our theory is that humans do not naturally take to living on water, and in particular the threatening nature of the ocean, and that boat peoples need a long period of environmental pressures forcing them into a way of life involving the sea. This pressure did occur below the glaciers in Europe, and archeology proves that dugout boats did develop, and that boat peoples did expand in all directions. Thus, we are still strongly inclined to look for the origins of the early Pacific boat peoples in the seagoing boat peoples of northern Europe. The problems are created by the proposed date of 12,000 years ago for the Pacific coast pre-Clovis peoples whose rapid descent down the Pacific coast strongly suggested doing so by boat. This early date is when in our theory above, the reindeer hunters are only separating from cousins who will remain in northern Europe and evolve into water-borne peoples. It is possible though, that a first wave of

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boat people could have arisen early, and such a wave reached the Pacific.

Let us assume that the Y-STR population genetics studies does reflect, as I propose, the separations among the male-lead hunter peoples through prehistory, and that our translating the Φ ST values into years before present by our formula is correct. That is, let us assume that the description shown in Figure 1.6.4.B above is correct. Looking at that figure we see that the first division – between the large animal hunters of northern Europe and the peoples who evolved into boat peoples, occurred at 15,000 before present. That gives the latter a thousand years or so to develop boats and reach the Pacific. Such a culture would not have had skin boats. They would have been dugout boat peoples. They may have reached the Pacific by travelling south up the Ob River, reaching the Pacific around Korea and Japan, and then from there crossed the North Pacific with the help of the north Pacific currents that still today carry junk from China to the coasts of Canada. Was the Bering Strait region populated by them even before the expansions of the skin boats across the northern Atlantic? These people, being dugout boat people, hence preferring forested regions, would have had no basis for becoming arctic seafarers, but been keen to travel south.

Does this theory fit the timing?

We note that the split that produced the “Kunda” culture would be dated to around 10,000 before present. But between 15,000 – 10,000 before present, there were dugout boat peoples and there could have been continual migrations, even along the arctic coast of Asia, by naïve people who simply continued to migrate in one direction, constantly looking for the bountiful hunting sites. They had no reason to go back because they already knew what was there. It was the unknown that pulled them along. It isn't hard to come up with rough figures to show how quickly it could have been achieved. If we assume a very determined group who were forever looking for new hunting locations, if they shifted their location 100km per week, they would cover over 5,000 km a year. If we reduce this shift to only 100 km per month, we get 1,200 km per year. In any event, there was plenty of time for early dugout boat peoples to travel great distances if they were nomadic in a one-way manner following a coast.

Although Pacific native peoples of recent history who hunted whales, drew whale eyes onto their cedar dugout canoes, and that could be regarded as being descended from the concept of the animal head on the prow that began with the moosehead boat, it is certainly possible that the first arrivals to the Pacific coast came in dugouts, before the skin boat was invented, and that once they encountered the large cedars of the Pacific coast of North America, they made very large seagoing dugouts that enhanced their culture and propelled them onward down the coast.

Besides the finds of pre-Clovis, before 12000 years ago, spearheads appearing sequentially down the Pacific coast, here is other evidence of north European originating boat peoples along the Pacific coast. In my scanning of Pacific coast Native languages, I discovered those with involvements in whaling offered words with remarkable coincidences with both Inuit and Finnic languages.

There is plenty of room for studies of very old, aboriginal, traditions and languages bordering the north Pacific from the point of view of having linguistic, cultural, and technological connections to the boat peoples of our theory above. However, for the present, we must continue to show the fate of the boat peoples in northern Europe following about 6000 years ago, which is approximately the time when sedentary farming people and mobile boat peoples encountered one another and from among the latter there developed professional trading people who spread their y-chromosomes southward in patterns that can explain the Y-STR chart for the period after about 6K before present.

The foregoing was a draft of part 1 of a book in development. It lacks Contents, Index, references, etc and may need polishing of the text.

Watch for Part 2 and polishing of Part 1 to come.

A.P. Dec 2014.

PART 2

IS IN DEVELOPMENT

6000 Years Ago to Roman Age

BOAT-PEOPLE AND THE DEVELOPMENT OF PROFESSIONAL TRADERS

Academics have a tendency to make sweeping generalizations and simplifications. After learning about the seasonally nomadic hunters-gatherers that made and used dugout canoes and above the tree line skin boats, scholars will assume that these aboriginal peoples of the water-oriented Uralic cultures remained that way until farming peoples arrived and assimilated them. But the reality is that humankind can adapt. We see from many examples – such as the Inuit of arctic North America who quickly adopted snowmobiles and rifles. The aboriginal peoples of northern Greater Europe did go “poof” and vanish the moment they saw farmers arriving, but adopted the new ideas themselves, fitting them into their established way of life. Learning about and adopting farming did have some impacts, such as ceasing to be nomadic, especially along the seacoast. But those who adapted to become professional trades could continue to be nomadic boat people, and I believe the Veneti arose from them.