THE EMERGENCE OF THE CONSTELLATION SIGNS

by

Kai Helge Wirth

Summary

With this publication the author will reveal a fascinating prehistoric system of orientation that has existed over thousands of years, a system that has constantly been visible but could no longer be identified or decoded. It opens surprising insight into the wide range of prehistoric knowledge and the communication horizon of ancient mankind. It demonstrates their immense experience and knowledge about the shape and the course of frontier zones, coast lines of continents, seas and routes for sea faring. Simultaneously, it unveils a navigation system providing a unified network both as a whole and in detail. It is based along a common axis of orientation on two fixed points, one being the northward direction in the Northern sky and the other being the geographic North Pole.

This could be illustrated and integrated in an abstract type of "punched card system" over the countless lights of the nocturnal sky. The origin of so-called star constellations whose enigmatic, mythological meaning has fascinated us until this day, could be proven in a surprising yet plausible manner by uncovering the technique used by prehistoric mankind and shedding light on their pragmatic purpose. The accuracy and meticulous methodology of the projection in a prehistoric "light-point-system" is astonishing; it is exposed as a major orientation and communication system. We are overwhelmed by the early accomplishment, which obliges us to reconsider the entire chapter of the early history of mankind.

Introduction

PROJECTION of the North Atlantic hemisphere in the sky Historical research to date has been very fragmentary with regards to projections of early star constellations. The names of star constellations were construed from their origins in mythology. religious beliefs or reconstructed conditions Certain questions, of a certain era. 1) however, such as the interconnected structure of these constellations in relation to each other have been totally disregarded. Attempts to interpret the star signs for Leo, Aries or Snake as simplified outlines of each animal have proven unsatisfactory and unconvincing.

On the basis of the rationale previously used. the interconnected stellar network inexplicable. With regards to this aspect, it ought to be considered that the identification of a certain star constellation is based on a selection process. The stars belonging to each constellation need to be abstracted from the multitude of lights of the firmament. In this process, a star configuration is observed that consists of brighter and dimmer stars, in which stars are configured in a complex that is not optically consistent. The transgression from one light point to the next has to be performed in a certain manner to be able to visualise the shape of the intended star constellation. In the multitude of stars in the sky only very bright stars 2) or dense light points are useful as principal coordinates. However, these are not identical with the constellations of stars in question. In order to identify a complex star configuration, it is often necessary to include dimmer stars that are not conspicuous as such. That means that a distinct conceptional image (similar to a "mental map") has to be identified from the sky, and one has to construe the image in question and apply the right key for It is apparent that the identification. spectator is confronted with apparently arbitrary emphases and interconnections. We are dealing with the so-called "star

constellations" as projections, rather than a priori existing, fixed groups of stars that are only interpretable in one way. They exist only when we apply our conceptions to the great, infinite starry heaven as in a punched card system.

Until recently, it was accepted that this had the quality of an arbitrary game with options developed over millenia into a catalogue of star constellations devised on roots of tradition and repetition, neglecting the possibility that other than mythological origins may have played a role. Many, if not all, arguments contradict such a hypothesis, if one seriously considers the groups of stars or configurations of light-points, which have found recognition in our culture. They are irreversible and so far from cogent in their connection, that the mere fact of their selection from the sea of light

points leaves us puzzled. This fact in particular often makes it difficult for the layman to easily identify the well-documented star constellations.

NEVERTHELESS, the fact that there is an incredible continuity of the ancient so-called "star configurations" in the tradition of astronomy calls for further analysis. Using the physiology and psychology of human perception does not provide an easy explanation.

Nowadays we distinguish between reversible and irreversible formations of super constellations 3). The former are more concrete owing to their obvious unity and reversibility. The latter can only be characterised as constructs, which become accessible to the viewer as a result of repetition. The luxations the observer has to perform to make the light points correspond to a classical star configuration, contradicts one's natural sense of perception.

Moreover, it is impossible to combine it with our aesthetic perceptional behaviour. Fechners theory of a stimulus threshold for aesthetic perception 4), which clarifies the concept of what appears appropriate using a certain proportional reference frame, contradicts this, similar to Plato's hypothesis 5) on the correlation of heterogeneous facts by using proportions. Even if one considers early constellations, known since the Stone Ages, such as the sign for water in the form of a regular zigzag line, it is striking that the same cannot be found for the "Great Hydra" constellation. This is despite the fact that the visualisation of such a configuration would have been straightforward at this particular point of the firmament.

The "Great Hydra" presents a completely irreversible form, which resembles a watercourse more closely than the symbol for water or for serpent. These findings are comparable to the only existing constellation of a river course, the Eridanus. In this case, one would have expected a serpent-like or meandering shape if dealing with the configuration representing a river as such. Yet again, this star constellation is also an irreversible one because it is not compatible with the corresponding symbol. If one stipulates that a real connection may be established, for example between a strait, coast or riverbed with a star constellation.

and one commences to search for congruence, an astonishing picture emerges, which holds the key to reveal a phenomenon, which previously could not be explained.

Preview of the results to be presented in the publication

AS INCREDIBLE as it may sound: With the present work it could be shown that practically every ancient star constellation was established in terms of geomorphological aspects and may well have been exploited for nautical purposes. The Baltic, the Atlantic and the Mediterranean could thus be depicted in full.

The earliest star configurations represent a multitude of sea routes, coast and tidal courses on our planet! They hence encircle exactly the area of the European Atlantic with a high degree of accuracy. The coastal and the sea routes between the North Cape, Iceland and North Africa are projected without exception in the sky. The origin of the early star constellations has so far been dated between 7500-3000 B.C. after considering the conditions of marine geography after the Ice Age. The most detailed area is the projection of Atlantic



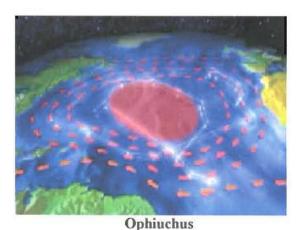
Great Hydra

Europe, including the Baltic Sea and Greenland.

A PRECISE MAP or the illustration of the coastline projection can be discovered on the firmament as a projection. The Atlantic coastline from the Bay of Gibraltar to North Scandinavia, in other words the whole European coast, barring the Mediterranean, was represented. The illustrated area corresponds precisely to the area of expansion of the Megalith culture (including Middle America).

It is well-known that the Sumerians termed a large part of the sky as "The Sea" 7). Star constellations amidst the system identified here such as Eridanus and the Ophiuchus 8), which were already familiar to the Sumerians, were positioned within The Sea.





With reference to Sumerian astronomers, "The ancient Sesti writes: Sumerian astronomers termed a large part of the sky "The Sea". The waves of the sea washed the beach, named Sirius, which was home to the Dog Star. A large river flows into the ocean of stars, which has its source at the foot of the Orion figure. It is called Eridanus.... 9). It has been conjectured that Cheiron (a member of the crew of the ship Argo) installed the star constellations in the sky (after the Flood) to enable easier navigation of his fleet (refer to Newton, Isaac). It is important to note that there is definite analogy of Argo and Noah's Arc and the older Sumerian "Arc of Utnapischtim"; similar findings have been reported in Egypt 10). Isaac Newton writes in his "Chronologica", with reference to Gigantomachy that Cheiron, a centaur, designed the star constellations during the voyage of the Argonauts. With his guidance the Argonaut Musaeus, the son of Orpheus, designed a heavenly sphere with 48 constellations, comparable to the knowledge bequeathed to us by Eudoxos much later on. Newton took his interpretation even further. He documented that Cheiron and Musaeus made the sphere to enable better orientation

Argumentation and research methodology

for the passage of the Argonauts.

Besides reviewing and analysing historical sources with a methodological approach, the systematically author compares morphological features. This complemented with the analysis of formation as such, the conditions of formation in general as well as in particular human factors and their interpretation. For this purpose the object of investigation - the nocturnal sky strewn with stars - is initially viewed as a mere abstract. It does not exhibit any alien significance, and is on the one hand completely open for arbitrary connection and association patterns of the imagination, on the other hand it appears bulky and refractory. Variations in light intensity, density of light points and differences in distance tend to impede on vision.

THE METHODOLOGICAL basis of the text comprises the following aspects: The age of the star constellations within the stellar system is correct, as far as can be substantiated with research methods to date (they are all of the same age).

The forms of images have been handed down by the Greeks from the Babylonians and Sumerians and were known to the Egyptians.

The shape of the landmass has not changed significantly since 5000 B.C. (the transgressions of Flanders have been taken into account). Changes that occurred during the Ice Age had no great influence after 8000 B.C.

THE AUTHOR has compared the cartographic shape of the astronomical chart to the geomorphology of the earth. During the comparison it was discovered that the stars could only function as a means for orientation, as proposed by Newton, when employing the cartographic projection that is in this detailed book. Neither Mediterranean, the Red or Black Sea, the Indian Ocean, the Pacific nor any other part of the continent, exhibit even the slightest congruence with the firmament cartography of the "Stone Age Internet".

The shapes of the images installed in the sky correspond to the proposed areas on the land in terms of geomorphology, as precisely as could possibly be projected in the sky, in other words, a more exact resemblance is impossible due to the lack of stars.

The sequence of the stellar images has a sensational resemblance with the order in which the coastal regions appear. There are only two apparent exceptions, both of which can be adequately explained. Perhaps with good will a separate star configuration such as the Eridanus can be approximated to a

river, which could flow through Australia, but with the theory of combinations in mind this possibility is more than unlikely.

The form or shape of the stellar images is one aspect, however it needs to be considered whether they can be rotated arbitrarily and superimposed on the coastal regions of the world. With regards to this point, it can be shown beyond doubt that all configurations have the exact same northward direction as the regions they represent. All constellations are oriented in their positions to a fixed sky pole just like the projected regions are to the geographic North Pole.

To give one example: The star constellation Hydra is positioned in horizontal direction, which is the same orientation as the English Channel. Similar trends are apparent for the other star constellations. Existing mythological sources dealing with the constellations were investigated. It was found that the ancient Sumerian, Babylonian and Phoenician, Greek and Roman texts clearly indicate that a relation exists between star constellations and geography.

THE POSSIBILITY of seafaring in the Stone Age, which constitutes a premise for the utilisation of such a star map, was investigated with positive results. The investigation furthermore showed that the Megalith cultures originating from the coastal lines of the North Atlantic and the Mediterranean as well as the Caribbean qualify as possible representatives of civilisation. Supporting evidence is provided by the age of the constellations (dating back to pre-Sumerian times) and the capability of the Megalith cultures at sea as well as in astronomy, and the discovery of buildings from the Megaliths in the entire cartographic area.

Individual star constellations

Eridanus: The star constellation of "Eridanus" shows remarkable resemblance in

terms of shape with the river Eider, which used to function as a trade route to the Baltic sea and played an important role in terms of transport economics because amber and ore commerce were marketing commodities on this route. Via Eider and Schlei, the Baltic Sea and the Atlantic were connected with a barge route until Viking times 12). Only the development of the Kiel Canal made this route superfluous.

IN THE ANCIENT world the expression Eridanus is documented for a river which has been sought in various parts of Europe and Southeast Asia in later periods.

The evidence of ancient geographers indicates that Eridanus and Eider may be identical. On the topic of the location of Eridanus, Herodotus did not imagine it to be so far to the north; he writes:

"On the farthest countries in Europe, that is to the west, I cannot make any precise comments. I do not believe in the Eridanus, as the barbarians were said to have named a river, which flows into the North Sea (probably not the Northern Arctic Ocean but the North Sea, NB of author), where amber originates. I also know nothing about tin islands where tin originates (tin deposits on the British Isles)." 13) We have learnt that the Scilly Isles are located around Britain. It may thus be concluded that placement of the river Eridanus so far north may not be as implausible as Herodotus reported. Pausanias (2nd century A.D.) writes:

"The Eridanus flows into the large sea in the farthest north of Europe. The sea has tidal currents and is unnavigable in the parts farthest away from Britain. Amber can be found in the sand of the Eridanus." 14)

THE FACT that almost all ancient amber routes across the continent commenced in the Dithmarsch area, i.e. close to the Eider, is no longer surprising but gives further evidence

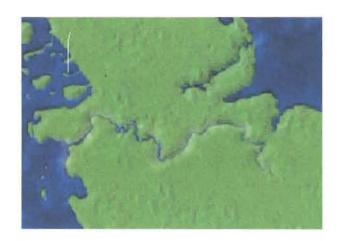
to support our findings 15). In this context an extract of Pliny is of interest 16): "Timaeus reports of an (island) named Bauroria 17), which is located beyond Scythia and is one day's journey off the coast, where in spring amber drifts to the shore with the tide."

Since the geographic location of the river Eider corresponds to the one where the ancient writers situate Eridanus, and fits the cartographic representation now discovered, there is additional proof of their identity. Not only the structural bends of the riverbed, the distances between the hubs and the northward direction of the star constellation with the one of the river are identical in cartographic terms; the combination of every single surrounding star constellation belonging to the aqueous star constellations in the surrounding area is identical!

THE PART of the configuration of Eridanus, which cannot be directly related with the course of the Eider (that part is not shown here) was added by Arab astronomers in the Middle Ages who apparently were not aware of the original meaning of the stellar constellation. 18) It can therefore be concluded that only the original (i.e. at least 5000-year-old) part of the configuration can be integrated with our system.

The whale (Cetus / sea monster): In the astronomic vicinity of Eridanus the stellar constellation of the Whale is located to the east, which was originally termed "sea monster" (Cetus) 19). The name implies that – just like the river "Eridanus" or the star cluster Hydra - we are dealing with a symbol representing a body of water. In direct comparison it can be shown that as with Eridanus a remarkable congruence exists between star constellation and geomorphology. Cetus, the sea monster in the sky, resembles the sea area of the Baltic Sea in its shape.

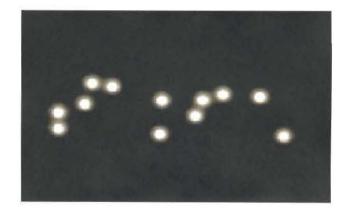
This time, however, a decisive circumstance must be added to the morphological



Eider



Eridanus



Eristars



Kethos



Orion



Virgo - Leo

congruence. Both star constellations Eridanus and Cetus/sea monster fit both separate regions exactly, but the location of both signs as a pair fits the location of both regions in relation to one another on the planet even more precisely.

HENCE ANOTHER criterion of evidence and a touchstone for the concordance of our cartographic system is evident, which underlines the accuracy of the theory of combinations between certain star constellations and fixed points of the landmass in relation to each other. On the firmament Eridanus and Cetus/sea monster are adjacent. Cetus/sea monster is situated exactly to the east of the Eridanus. Similarly the Baltic Sea and the Eider relate to each other on the Earth. The Eider (Eridanus) and the Baltic Sea lie next to each other: the Baltic Sea is directly to the east of the Eider.

History and Mythology

"In the region of the sky, which is also termed "Sea", an enormous whale swims that consists of a multitude of stars. ... It is remarkable that its front legs are dipped into the river Eridanus... The star constellation Cetus (Kethus, NB of author) was known to the Sumerians who apparently identified it with Tiamat, i.e. with the monster that relates to the constellations of Draco, Hydro and the Snake of the Ophiuchus." 20)

Tiamat, just like Hydra, is a hungry serpent that devours land.

IN THE MYTHOLOGY of the Hebrews the legendary Leviathan originated from the star configuration Cetus.

In the myth, he is portrayed as the ruler over the other inhabitants of the sea. "In another legend it is said that God saved Leviathan's life, being one of his own creations. (...) The sea monster drank from a tributary of the Jordan at an area where it flows into the ocean via a secret channel. When it was hungry it breathed a thick fog from its nostrils, that darkened the surface of the water, 21) Cetus is, however, not a river (like Eridanus, NB of author) but flows according to the legend - via a secret passage into the ocean (that referred to the Atlantic Ocean, NB of author)". The Baltic Sea also flows into the North Sea via a secret channel from the Eider, which is part of an ocean. Even until the Middle Ages, ships were transported via this unconventional land passage from the Eider to the Schlei estuary. 22) The reference to the mist produced by Leviathan may be viewed as a characteristic feature of the Baltic Sea. 23) Other names of the star constellations are dragon, sea animal, large fish, Pristix, Canis Tritonis or Ursus Marinus 24), which also support its waterrelated character.

Orion: In our system when projected onto Earth Orion represents Jutland (Denmark and Schleswig-Holstein), the country between the North and the Baltic Sea. Since it is a peninsula of huge proportions the shape of the entire region could be represented by the projection of the coastline in the west, north and east. In this context, it is interesting to note that prehistoric astronomy refers to with regards seafaring to the constellation of Orion and Sirius (at the foot Both Sirius and Orion were of Orion). portrayed on ships in ancient Egypt.25)

ORION EXHIBITS a peculiarity as it is situated with direct connection to the star constellation Eridanus. If we assume that Eridanus represents the river Eider, we are confronted with the problem that Eridanus is not located on Orion (just like the Eider is located in Jutland). At the point, where it should appear on the map, i.e. approximately in the middle of Orion, the three so-called belt stars are situated. The belt stars correspond to the regional location of the Eider, but the star constellation Eridanus shows the river's bed in magnification. The dual representation of the same object may indicate the high significance of the river both in terms of mystic as well as transport geography (see Chapter on Eridanus).

The Great Bear: The star configuration of the Great Bear can be found in the far North. According to our hypothesis it should represent a coastal region in the far north of the Earth, since as another criterion we have reasoned that a star constellation - by means of its relative location - is linked to a given region on the earth. The region in question could hence only be the Norway-Bear Island-Arctic Ocean. If shape, relative location and northward direction which have been given to the Great Bear by the architects of star constellations are compared with the regional surroundings of this very region we find exact congruence.

History and Mythology

One of the best known legends of the star constellation of the Great Bear deals with a female bear, "an animal which has always been associated with Nordic cold in the human imagination" 26). The term "arctic" originates from "artos", the Greek word for bear. The star constellation hence goes back to the Greek myth of the nymph Kallisto, that was turned into a bear.

The name Kallisto in turn appears to have developed from "Kalitsah", the Phoenician term of the constellation which is translated as "security" 26).

Ovid mentioned the female bear in the story of Phaethon in his Metamorphoses. Here the father advises his son: "Do not choose the path that cuts across the five zones! The path runs diagonally across in a large curve; it runs through a mere three zones and avoids the south pole and the Great Bear with its northerly winds." 27) Fasching writes with regards to the star constellation Great Bear: "Interestingly the star constellation "Okuari" (=Bear) was already known to the North American Indians before they came into

contact with the white race." 28) We will return to this very interesting circumstance which can be explained on the basis of our hypothesis.

Draco: The star constellation "Draco" is projected to the west of the Great Bear. We must hence look for a region west of the Arctic Ocean Iceland and Norwegian Sea. The only land area, which is located in this part of the Atlantic Ocean, is Greenland. The cartographic equivalence of the coastal frame of Greenland with the star configuration Draco is evident. An exact representation of the sea route can be found from the easterly current off Greenland to the Labrador Current.

History and mythology

Sesti supported the explanation of this star constellation in the text of Edda: "The dragon lives at the foot of the Tree of Life Yggdrasil" 29). It was its purpose to guard the Tree of Life that was supporting the sky. So why is this an apparent indication of the accuracy of the system?

THE TREE OF LIFE cult underlying the story goes back to an ancient, prehistoric sky cult. 30) The conception may have originated from elementary experience of the observation of the apparent rotational movement of the sky. It appears as though there is one point in the firmament (which is now close to the star Polaris), at which the sky does not rotate 31).

From an astronomic viewpoint we are dealing with the fact of the rotational movement of the earth around its own axis (Right ascension and the precession do not play a role in this case). If the Earth's axis is elongated to infinity, it reaches from the geographic North Pole to the "North Pole" of the sky, and it appears as though the sky rotates around its own axis between the North Pole and the Northern Star. According to this reasoning, the Tree of Life was always placed in the north as well, because it owes



Ursa Major



Draco



Hercules

its existence to the myths of the physical sky and earth axis we have described.

ON THE SCHAMASCH relief (British Museum in London) there is an inscription that the pillar can be found on the other side of the ocean.

H. W. Wirth reasons that the Tree of Life is identical to the Earth axis.

The base of the axis and the base of the Tree of Life hence need to be identical as well.

Draco is thus situated at the North Pole of the sky and Greenland is apparently located at the base of the geographic North Pole. There is no land in the Atlantic Ocean nearer to the North Pole. Both are almost identical in their appearance to the other star constellations and to corresponding land areas, part from the Greek expression for Dragon, other expressions such as "Anguis, Coluber, Phyton, and Serpens, which all mean serpent or Dragon. The expression Custos Hesperidum is a reminder of the guarding of the tree with the golden apples of the Hesperides," 32)

Hercules: Hercules is located slightly below the area, which is occupied by the Great Bear and Draco.

Transferring it to our geoastrographic map it can be clearly assigned to Iceland. Iceland is located between Norway and Greenland and corresponds to the star constellation in terms of contours and dimensions. The "offshoots" could portray the pathways to the surrounding currents.

History and mythology

"This stellar constellation may well be counted among the most ancient figures. Analogies can be found with ancient myths from the Euphrates region, which narrate how the God of the Sun defeated a dragon. There is an illustration from around 3500

B.C., which shows a hero kneeling down. There is a theory that this mythological image was taken over by the Greeks (...) A very early Phoenician name for this star constellation was Melkarth. Melkarth or Melquart was the principal god of Tyrus in Phoenicia and was worshipped as god of the sea and the extremely important seafaring. 33) According to Jewish tradition there is an identification with Nimrod, a figure from the Old Testament, ... viewed as a great hunter; the founding of Babylon and Assyria has been traced back to him.34)

Boötes and Corona: Boötes (the Herdsman) and Corona are located in proximity to Hercules in the firmament, a central combination of star constellations of the "Stone Age Internet". The two constellations used to be regarded as a single image in earlier times. They are located exactly at the point where the British Isles are situated on planet Earth. It is interesting to note that Ireland and England were once connected to each other. Inundation of the area of the Irish Sea may be reflected in the fact that Boötes and Corona once used to be linked.

History and mythology

Ovid's Metamorphoses link Ariadne's crown (Ariadne's thread as a symbol of orientation) with Theseus, a child of the sea god Poseidon. Minos catapulted the crown far away into the sea. "Theseus appears from the sea, triumphantly holding the ring in his hand and wearing the glistening crown on his dripping wet curls. Theseus then presented Ariadne the crown, which can still be seen on the firmament."35)

JUST LIKE both the stellar constellations, which used to be one but were later separated, both countries that are represented in the constellation were once one but were separated by the sea after the Würm Ice Age. 36)



Bootes - Corona



Euro - Star

The Southern Regions of the Atlantic Ocean

Scorpio: It is remarkable that the Ancient Egyptians equated the term for Ocean with the name of the star constellation Sin Wur (large circle of water, i.e. the sea surrounding the world). It is an exact match of the names of the geographic region and the stellar constellation, hardly surprising considering the discoveries outlined in this book. In our region the Egyptian stellar constellation Sin Wur is termed Hydra. The Egyptians located Hydra exactly where it can be found today, in direct connection with the star constellation Scorpio. In this respect it is interesting to note that the Egyptians explicitly insisted that the constellation Scorpio should be regarded as a water scorpion.

THE WATER scorpion is situated in more southern parts of the firmament, whereas Hydra can be found in more northern areas. If we comply with the Egyptian term of the star constellation (see above), we have to look for a geographic counterpart mirroring the two water star constellations in coastal region outside the Mediterranean that corresponds to Scorpio in the southern part, but matching Hydra in the northern part. This condition can be met precisely when the combination of both constellations is superimposed on the Atlantic coast from Gibraltar to Helgoland. The exact match is

found in the coastal region between Biscay and Gibraltar and the English Channel from Brest to Helgoland.

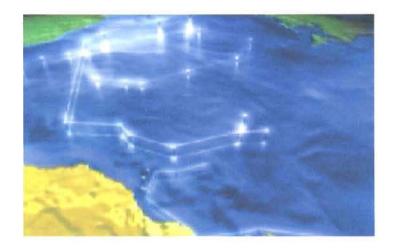
History and mythology

The stellar constellation Scorpio has its origins in the earliest (Sumerian) period. A drawing from around 3000 B.C. has also been found in the Caucasus which shows the stellar constellations of Scorpio Sagittarius with typical the stellar arrangement. The stars were represented using circles of different diameter depending on their brightness. The depiction of Scorpio as a water creature was common even along the Atlantic coast of South America. Indians resident in the river basin of the Rio Negro in Northern Brazil consider Scorpio as the Great Hydra.

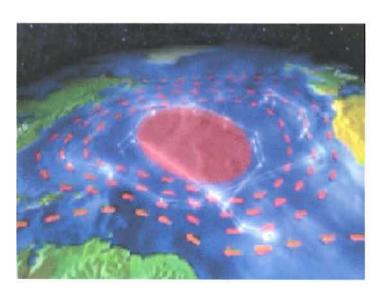
Ophiuchus - The Serpent Bearer: Ophiuchus is directly connected to the star constellation Scorpio (bearing in mind that the Serpent has always served as a symbol for water). This star constellation is the biggest one prehistoric astronomers projected onto the firmament. The analysis of its location, northern direction and its position in relation to the other star constellations reveals that it consequentially represents the largest area of the system: the territory between the Canary Islands and the Gulf of Mexico.



Scorpio







Opiuchus

History and mythology

"When describing Ophiuchus, one should refer to the mysterious order of star constellations linking surrounding star configurations, but we do not know the legend that sheds informative light on the connections. Just like an opera where the lyrics have been lost, we are without the connection between Ophiuchus and the surrounding constellations."37) The "lost lyrics" of this mysterious "opera" are, however, perhaps rediscovered in this book:

Star constellations portraying the coastal regions of the Atlantic on the planet Earth are located all around Ophiuchus, e.g.:

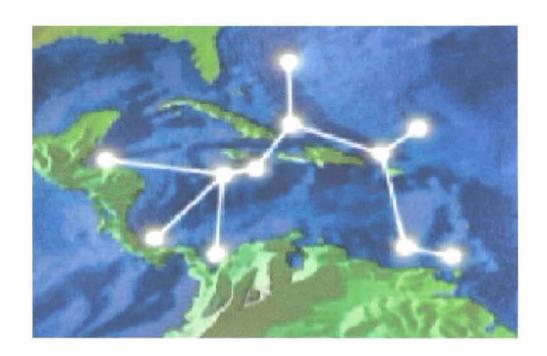
IN THE NORTH Hercules, Draco, Corona, Bootes and the Great Bear are located. To the right of them are Hydra and Scorpio, and to the left we find Capricorn and Sagittarius. If we identify Ophiuchus with the Mid Atlantic (Sargasso Sea) we find Iceland, Greenland, Newfoundland, Ireland, England and Norway to the North. In the east: the coast of the English Channel, Bay of Biscay, North Africa and the Canary Islands. In the West: the Gulf of Mexico and the Caribbean. That covers all regions projected as maps in the sky. Braem associates precisely these regions with the Megalith culture. He does not find any clear indication of the Megalith culture to the south of the above-named regions.38) That is why there are no star constellations because until more recent times there was a "gap" in the stellar constellation firmament. The reason for this gap is that sea faring in these regions was hardly possible because of the ocean currents.39) There is further evidence supporting our hypothesis that the star cartography represents the region of the North Atlantic and the Mediterranean, i.e. the area of expansion of the Megalith culture, precisely in this missing gap of stellar images over the Southern Atlantic.

Sagittarius and Capricorn: To the East of Ophiuchus the two systems "Sagittarius" and Capricorn" were located as the two ultimate constellations. Sagittarius is depicted with a fish tail in the oldest Sumerian illustrations. that creates the impression that that there is an ocean on one side and land on the other, which would symbolically complete the star cluster system. This indicates that we are entire transatlantic dealing with an cartography. This in turn strongly indicates that the Megalith cultures of ancient Europe knew the sea route to America. This would explain the numerous correlations in terms of cultural achievements between the two ancient cultures of the continents. would also explain the fact that the North American Indians (Algonquins, Iroquois) 41) use the term "Okuari" for the star constellation Great Bear (see also the chapter on the Great Bear). Other examples include ship building technology, numerous buildings of large stone, as well as cult and cosmic conceptions such as the firmament serpent and connected volute symbols, pillar cults and sacral architecture.42) The two star constellations represent the Caribbean and Mexico.

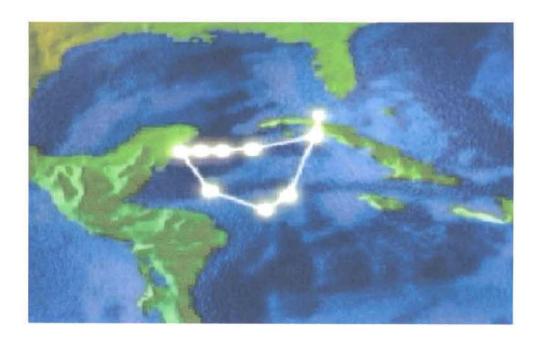
History and mythology

Greek culture identified Sagittarius with the Centaur "Cheiron". Centaurs are creatures inhabiting hilly forests. Chiron is deemed the inventor of bow and arrow. The divided body of Sagittarius can be found in the oldest Sumerian illustration, although not as half horse but as half fish. We have already indicated that the divided embodiment reflects that the system of representing the Atlantic is finalised. Thus at this point land is reached in the west.

THE IDENTIFICATION with the hilly forest dweller, whose special attributes are bow and arrow, may recall the inhabitants of the tropical rainforest in North Brazil and the



Sagitharius



Capricorn

Caribbean, who were actually resident in the region represented in the stellar image.

Prehistoric sea faring and technology in Europe (cf. Höckmann)

Before turning to nautical science and the use of star constellations for navigational purposes, it should be pointed out that ship building and navigation were remarkably developed in prehistoric times. Contrary to popular opinion, there were no dug-out canoes but constructed boats available in some cultures 10.000 years ago. coastal regions of the earth we find first indications of boats using filigree construction techniques which were very efficient as early as 10.000 years ago"43) ... from the late Palaeolithic age (before 8000) B.C.), archaeological evidence has been found that mankind was capable of building sea worthy vehicles. The rib of a boat dating back to these times has been discovered. Other findings indicate that sea trade and sea faring occurred in the Mediterranean region between 7000-6000 B.C. In this context, Höckmann states: " It has become apparent that mankind later regularly ventured out into the Aegean Sea. (...) In the 6th century B.C., the Greek islands Cyprus and Crete were colonised (NB of author: through sea faring) by Neolithic farmers." 44)

MOST PEOPLE have an obsolete view regarding the astronomic, artistic. geographic, technical and seafaring abilities of the early cultures. The development of seaworthy boats just mentioned makes a substantial contribution towards the ability of sea faring. The efficiency of the oldest boat constructions (e.g. fur boats or coracles) is comparable to the boats available to the Eskimos. We know that the latter were able to cover over 1000 miles in subpolar conditions in coastal regions. Höckmann writes on the subject: "The findings made in Husum and Scandinavian drawings on the rock faces prove that the oldest vessels in

Europe were fur boats. These efficient and surprisingly seaworthy boats are still used in some parts of Ireland for inshore fishing to this day, and a reconstruction of St. Brendan's leather coracle has recently crossed the Atlantic." 45) Moreover the historical overview also states: "There is evidence of prehistoric sea faring to be concluded when analysing findings from Japan, Taiwan, Portugal and Norway, Providing the archaeologist is not being deceived by a mere coincidence, Japanese fishermen, cast up by ocean currents, may have reached the coast of Ecuador alive on oceanic currents as early as Neolithic times. These examples demonstrate that the ocean was no longer an insurmountable obstacle to Neolithic man."46) There were, however, different types and forms of boats and ships available in later times. "One distinguishes rafts, pelt boats, dug-out canoes and plank ships (ibid.)." Sailing boats have been around at least since the 3rd century B.C., perhaps even earlier. The myths of ancient cultures preserved in written form indicate a much earlier point in time (Utnapischtim, Noah's Ark etc.). If the efficiency of the boats described in the earliest myths are representative of the boats then existent, they must have been of relatively dimensions. Various important findings of boats have been made over the years. Ships from the Bronze Age have been dug up all over Europe and the Mediterranean, such as recently in Scotland and on the south coast of England. In Scandinavia, one can find the oldest stone settings in the form of boats. Although not entirely relevant for our work, since they were not suitable for the oceans, prehistoric ships for river traffic on the Nile were discovered in Egypt and in the Mediterranean. Unfortunately findings of nature exceptions. are Sadly archaeological findings of this age are very rare, since the building materials are prone to decomposition. We hence need to rely on sources such as rock carvings, clay models of ships or other kinds of representations.

Information on the size of the seaworthy ships may be provided by eve-witnesses of later times. We know from rock carvings and findings that the kinds of ships in Europe from the Bronze Ages had many similarities to Viking ships. They had an average size of 20-25 metres. This size provided protection against storms on the Atlantic Ocean. This factor depends on the size of ocean waves and the stability of the elastic wood construction of the boats. The technical requirements in the Bronze Ages were not much less than at 700 B.C. We are for example aware of depictions of large seaworthy square sailboats from the Bronze Age, such as in Bohuslaen/Sweden and Medinet Habu/Egypt. The results presented in this geoastronomic research work rely on the availability of seaworthy ships at the time of creation. In order to consider the technical feasibility of a transatlantic crossing in the Stone Age we must be aware of following aspect:

THE ATLANTIC and even the Pacific Ocean can be shipped on and even crossed with a relatively small boat. On this fact Beck states: "From that the rash conclusion may be drawn that the vessels of the antiquity were not seaworthy, could not overcome oceans and were at best adequate for inshore sea fare. But this statement compels us to face another question: How could the Polynesians conquer the Pacific Ocean with their rigged canoes? (NB of author; 4000 nautical miles) "The risky ventures of T. Heyendahl speak a different language. He used a float and a reed boat to travel the Pacific, the Atlantic and even the Indian Ocean," 48) Heyderdahl's expeditions proved the contacts between Europe and America beyond reasonable doubt as discussed in his latest publication ("Lasst sie endlich sprechen" -"Let them finally speak"). Heinke Sudhoff has made similarly successful and remarkable findings. The technical feasibility of prehistoric deep-sea shipping (even transatlantic) has been proven by various expeditions with boats and floats, 49)

ALTHOUGH supported by many findings, the hypothesis that transatlantic contacts between cultures by sea fare has been rejected up till now, because prehistoric nautical science and ship building technology have been widely underestimated.

This text helps to fill in the gaps in this respect and highlight the theory that prehistoric sea fare did exist.

Ocean-going shipping

Certain requirements are essential for a ship suitable for ocean-going shipping. The conditions could earlier be best fulfilled using smaller ships. The seaworthy ships have to permit journeys, which cover long distances and cross the open sea. "Typical of such journeys are their long duration - and associated probable periods of bad weather, involving strong wind and rough swell". The specific conditions for ocean-going shipping may be summed up: "Floatability, weight-bearing capacity, speed, manoeuvrability, and last but not least, stability." 50)

Floatability

The building materials of the ship or boat are tough enough to survive the duration of a sea journey (e.g. estimated journey time to cross the Atlantic presumably one month). Organic materials such as wood should not absorb too much water nor decay, the canvas of the sail should not rot and the joints between the individual planks must be strong.

Weight-bearing capacity

This property involves "the fulfilment of the transport task" 51), ensuring sea worthiness too. Transported goods may have been passengers or the crew but also goods for trade as can be deduced from the boats of the Vikings.

Speed

This parameter is of prime importance "as it influences the duration of the journey. As the

duration of the journey increases so does the amount of food supplies required." 52)

It is hence important to know and use the ocean currents, particularly for boats without sails. The Polynesians from Pacific regions for example are extremely familiar with the ocean currents and in some parts even test the water temperature by dipping their hands in order to determine the exact location of the fairway.

UP TO NOW we could not be certain that early cultures were aware of the currents. Lacking the knowledge of these currents would have prohibited or at least severely impeded sea fare between continents and islands. Although it is generally possible to hop between islands in regions close to the coast, a route for sea fare between the Canaries and the Antilles seems implausible at first sight. In order to cover this distance the currents prevailing in the area need to be taken into account. For navigating across the Atlantic the star constellation Ophiuchus (the serpent bearer) was designed that is clearly visible during the crossing of the Atlantic from the Bay of Biscay to the Caribbean. If positioned more to the north, one can identify the northern part of the system in the firmament, whereas the southern part of the star constellation may be used for nautical purposes if the ship is situated in a more southern location (Equatorial Current). This is true of all other star constellations identified in this book. If positioned close to the shore of Greenland. the relevant star cluster Draco can be identified on the firmament. In the region of the north equatorial current Draco can not be made out, in other words can not be employed for navigational purposes in this area. The stellar constellations can only be employed in the very region that they portray in the nocturnal sky.

THIS ENABLES orientation using the major currents of the North Atlantic Ocean. By means of the geoastrographic star constellation "Ophiuchus" it was possible to choose the ideal route for the journey. Without knowledge of this nautical system in the firmament, ocean-going seafaring was difficult, as was shown by Christopher Columbus. Being unaware of the stellar navigation map he sailed directly into the "Calms", the so-called Horse Latitudes, an area extremely prone to calms. As a result of his mistake his expedition was considerably prolonged, to the extent that it was nearly abandoned altogether. The Megaliths with their knowledge of the stellar constellations were one step ahead of him in this respect.

The situation over the Atlantic Ocean is projected on the firmament: Ophiuchus mirrors in position and shape approximately the Calms and characteristically holds two serpents (which symbolise water) in its hands. One leads the seafarer from the North African coast to the currents around the Canaries, whereas the other is positioned exactly where the current of the Antilles is located on Earth. The latter hence guides the seafarer on their return journey. They are connected and adapted at an exact angle. located beneath the middle of Ophiuchus. This distance is the equivalent of the fast, northern Equatorial Current. The fastest journey is hence accomplished if the seafarer uses the course proposed in the star constellation and translates it into the course of his ship.

IF WE ADDITIONALLY consider that ships from the earliest times of sea fare had rudders and sails (Rah sails such as the sea faring nations in the Bronze Age), it becomes apparent that ocean-going shipping from the Antilles to the Canaries was significantly easier than has previously been estimated.

The report stating that Columbus and his crew received a friendly welcome by the Indians because they believed them to be the descendents of early seafarers, can now be viewed in a new light. 53) This is furthermore reflected in the theories of

Heyerdahl and Sudhoff. The Indians recounted that white bearded creatures had arrived at the same location a long time before who then returned home to come back at a later point. If this account is regarded as credible it indicates that the bearded creatures thought it feasible to repeat their journey without going off course. It was further reported that they arrived with flying ships across the ocean from the east.

A POSSIBLE connection between the civilised cultures on either side of the Atlantic that was suspected by some researchers can no longer be rejected. The advanced civilisations were the Megalith As mentioned earlier, many cultures. archaeological findings such as pyramids, artefacts, symbols, mythology etc. indicate intercultural relations. For our work it is relevant that astronomical observatories were set up on both sides of the Atlantic. The prehistoric relations with America are a prerequisite for the cartographic depiction (as is given in our stellar system). relevance of the astronomy and mathematics in the buildings of the Megaliths Müller writes: "This book reports of admirable astronomic and mathematical knowledge of the populations of the Stone Age, who made use of the events in the sky for the arrangement of the Megalith buildings with surprising precision for their purposes." 54) The Megaliths of Europe were the only culture in a position to contribute considerably in astronomy, sea fare and cartography of Europe and Middle America. Using the observatories it was possible to determine the ascent of the stars. The knowledge of the time of ascent of the stars enables the use of the stellar map as a means of navigation.

AS INHABITANTS of the coastal regions of the Atlantic, the Megaliths had considerable experience in terms of sea fare. Cartography of the Megalithian coastal regions was of major importance for the Megaliths. Their navigation method separated ocean areas into different regions. This was dependent on the area of one's position, for example in north Africa navigation was performed by the star constellation identifiable from there. To travel from Iceland to Gibraltar via the British Isles. the most northern star constellation Draco initially serves as orientation, then following the star constellation couple Boötes-Corona which is located south of Draco, and then one follows Scorpio located further south. This functions in the opposite direction in the same way.

Outside the area cartographed by the Megalith cultures, no cartographic survey of the sky was undertaken.

REFERENCES

- 1) cf. DTV Atlas of Astronomy
- 2) up to 2nd class, s. Kosmos Verlag, Map: northern starry sky
- 3) compare Daucher/Seitz, p. 14
- 4) Compare Fechner
- 5) Compare Plato, Timaios, c. 7-9, 31C-37C

- 6) To expansion of the Megalith culture compare Forte, p. 137 and Brehm, p. 72
- 7) Compare Sesti, p. 299
- 8) Ebd.
- 9) Cited after Sesti, p. 341
- 10) Compare Sesti, p. 379
- 11) Ibid.
- 12) See the pulling trail of the Antique, Wolf, p. 59
- 13) Herodotus, History, 3, 115
- 14) Pausanias, 1.4.1.
- 15) Compare Henning, p. 58-59
- 16) Cited from Teutons and Teutonia from Roman sources, A. Heine, p. 42
- 17) The author of the book "Germanen und Germanien in römischen Quellen" elucidates his opinion that "Bauroria" refers to Helgoland or possibly Bornholm.
- 18) Cf. Sesti, p.342
- 19) Cf. Fasching, p. 191
- 20) Cited from Sesti, p.327
- 21) Cited from ebd. P.299
- 22) History of the river Eider: Brochure of the Landesmuseum Schleswig Holstein
- 23) Note: One should not be irritated by the term "Jordan". In Hebrew this term refers to rivers in general, so that it appears legitimate to assume that another term was used in an earlier version. This view is supported by the fact that neither the Jordan nor any tributaries have any connection to the Okeanos.
- 24) Cf. Fasching, p. 191
- 25) Sesti, p. 393
- 26) ebd., p. 403
- 27) Ovid in Metamorphoses, II, V. 129-132
- 28) Fasching, p. 102
- 29) Sesti, p. 327
- 30) Cf. Wirth, W., "Kultischer Ursprung und Werden der Volute"
- 31) Cf. Wirth, W., "Die Volute, Symbol einer kultischen Weltordnungsidee"
- 32) Fasching, p. 89
- 33) Ebd.
- 34) Ebd. P.152
- 35) Ebd., p. 149
- 36) Cf. Putzger, p.3
- 37) Cf. Sesti, p. 391
- 38) Cf. Braem
- 39) Only a sailor with the potential of the Phoenician Himilko succeeded, who was commissioned by the Egyptian Pharaohs to circumnavigate Africa.
- 40) Cf. Sesti, p. 408
- 41) Cf. Wirth W., "Kult. Ursprung und Werden der Volute"
- 42) Cf. Sesti, p. 408
- 43) Cf. Höckmann, p. 9
- 44) Ebd.
- 45) Ebd. p. 37
- 46) Ebd. p. 9
- 47) Cf. Wiebeck /Lübeck, p. 11
- 48) Ebd.
- 49) Ebd., p. 10

- 50) Ebd.
- 51) Ebd., p. 12
- 52) Ebd., p. 12
- 53) Sudhoff, p. 178
- 54) Müller, p. 7

Zusammenfassung

Mit dieser Veröffentlichung zieht der Autor für uns einen Schleier hoch, der Jahrtausende lang über einem vorgeschichtlichen Orientierungssystem lag, das sich uns vor Augen stehend darbot, aber nicht mehr als solches erkannt und entschlüsselt werden konnte.

Überraschend zeigt sich nun ein prähistorischer Kenntnis- und Kommunikationshorizont des frühen Menschen. Er weist weit reichende Erfahrung und Wissen über Gestalt und Verlaufsrichtungen von Grenzzonen, Küstenlinien von Kontinenten, Meeren und Schiffsrouten auf. Zugleich erschließt sich ein Ortungssystem, das im Detail wie im Ganzen ein gemeinsames Bezugsnetz bildet. Es basiert auf der Nordausrichtung im Himmelsnorden und dem geographischen Nordpol als ruhenden Punkten einer Orientierungsachse.

Dies alles konnte im quasi abstrakten "Lochkartensystem" der unzähligen Lichtpunkte des nächtlichen Sternenhimmels dargestellt und eingebracht werden. Die Herkunft der so genannten "Sternbilder", deren rätselhafte mythologische Bedeutung uns bis heute beschäftigt, konnte nun mit dem hier aufgedeckten Verfahren des vorgeschichtlichen Menschen und seinem pragmatischen Zweckbezug gleicherweise plausibel wie überraschend nachgewiesen werden. Frappierend ist zugleich die Genauigkeit sowie die probate Methodik der Projektion in ein prähistorischen "Lichtpunktesystem", das sich allgegenwärtig vor Augen stehend, als ein Orientierungs- und Kommunikationssystem erster Ordnung darstellt. Wir sehen verblüfft und staunend eine frühe Geistesleistung, die uns zwingt, den ganzen Komplex der Vorgeschichte des Menschen neu zu sehen und zu bedenken.

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