

RIVER TRAFFIC ON THE EUPHRATES*

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Abstract

In two articles representing his journey by the Upper Euphrates E. Huntington, well-known US geographer, describes the river transportation on sheepskin rafts which was practiced by the local population, mostly Armenians. The description of kellek (sheepskin raft) by E. Huntington leaves no doubt that they are similar with the raft which was used by the people of Mesopotamia according to Herodotus.

Keywords: *E. Huntington, sheepskin raft, Euphrates, river traffic, Herodotus.*

E. Huntington, the well-known American geographer (1876-1947)¹ describes his journey on *kellek* on the Upper Euphrates in the Spring 1901, accompanied by Th. H. Norton, US consul in Harput (Arm. Kharberd). According to the author, such means of transportation was practiced by local population, mostly Armenians. Besides navigation the author makes some useful remarks on localities along the course of the river and archaeological sites which he met during his journey.

Below we shall bring passages from the account of E. Huntington's journey. The first article contains some remarks on the rafts popular among the population of the Euphrates and its tributaries. The second article deals with extensive account of his journey of which we present only those regarding *kelleks* (Turkish word which means raft made of sheepskin). By E.

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¹ E. Huntington was professor of geography at the Yale University (USA) during the early 20th century, and is known for his studies on environmental determinism. He served as President of the Ecological Society of the USA in 1917, the Association of American Geographers in 1923 and President of the Board of Directors of the Society for Bio-demography and Social Biology from 1934 to 1938. E. Huntington participated in several geographical expeditions to Central Asia, Palestine, travelled in different regions of Western Armenia and Asia Minor.

Huntington, until 1901 neither a European nor even local had attempted to travel on such rafts from the Upper Euphrates to Northern Syria because of dangerous rapids. He refers to well-known German general H.von Moltke who tried to do it twice in 1838-1839 but was forced to abandon this idea very soon².

E. Huntington, The Valley of the Upper Euphrates River and Its People, Bulletin of the American Geographical Society, Vol. 34, No. 5, 1902, 384-393, Chapter "Primitive Modes of Travel on the Rivers", pp. 89-90.

"On Assyrian monuments of 1000 B. C., or older, there are representations of rafts made of inflated sheepskins, and of men crossing the water on single inflated skins, with which they supported their bodies, while they swam with their feet. At the present time such rafts are the only means of navigation on the Euphrates River and its branches, except at some of the larger ferries. No attempt is made to go up stream, although in summer the current is very slow in many places. For thousands of years the habits of the people have remained unaltered. When they wish to cross the river to market a raft of skins is sufficient for the men, and the animals can swim alongside. If the river is high and dangerous, business can wait a week or two. In 1901 I floated two hundred and fifty miles on such rafts and saw no other means of locomotion, with the exception already noted. To be sure, I saw a raft of logs, on which sat almost naked Kurds, with strings of dried gourds around their waists for life-preservers and wooden tridents for paddles. But this was not a means of transportation; it was merely the easiest way of getting the logs to the place where they were to be used. At the main ferries there is what I suppose to be a relatively modern innovation in the shape of exceedingly clumsy, square-cornered wooden boats. They are low in front, in order that animals and, in the few cases where wagon roads have been built, wagons

² **Von Moltke** 1876: 289-291, 360-363. In July, 1838 Von Moltke started his journey from Palu but succeeded to reach only modern Kömurhan where he was forced to quit his undertaking because of rapids. His second journey (spring 1839) also failed because of rapids at Tilek.

may enter. The stern is high and overhanging, with a high platform, on which stands the steersman, who manipulates the mighty rudder, which is as long as the boat. Two rough planks, with rounded handles, are tied to pins close to the front of the boat, and serve as oars. Of course, these boats are carried far down stream before they can reach the opposite side, and have to be towed up stream along the bank - a very long and tedious process. Occasionally they are carried several miles down stream, or get stuck on sand bars in the middle of the swollen river."

Through the Great Canon of the Euphrates River, The Geographical Journal Including the Proceedings of the Royal Geographical Society XX. - July to December, 1902, pp. 175-200.

"Starting from that place, we rode to Akhor, on the bank of the Euphrates, at the eastern end of the Harput plain. The people of this village, Armenians, make a business during the winter of floating down the river to Kemur Khan on rafts of skins, fishing as they go. These rafts are known as *kelleks*, and the raftsmen are *kellekjis*. As there are no equivalent English words, I shall employ the Turkish terms. At Kemur Khan the *kelleks* are taken to pieces, and together with the fish loaded on donkeys sent by land across the neck of the river's bend to meet them. The fish are sold at Harput, and the rafts are taken back to the village, whence they start again. We had engaged two of these fishermen to take us down the river as far as we should choose to go, with the condition, imposed by them that they should be allowed to make a portage around one dangerous rapid, of which they had heard, in the lower gorge below Kemur Khan.

The making of the *kellek* took some time, although in the evening a number of entire sheepskins had been well soaked and left wet so that they might be pliable and ready for immediate use. In the morning they were inflated by blowing through the necks, the legs being securely tied so that no air could escape. At first the mouths of the blowers were at a distance of 8 or 10 inches from the necks of the skins, but as the later became fuller and more difficult to inflate, the men's mouths were brought nearer until they touched the skins. When a hole was discovered, it was quickly mended by putting a

piece of wood like a checker against the inside of the hole and tying the skin firmly around it. A light frame of saplings was tied together with ropes, and under this were tied the skins, about thirty in number, with the legs up. They were packed together so closely as to make the *kellek* water-tight. Thirty skins seemed to us very few for five people, but the fishermen's rafts consist of only six, and two men sit on one such *kellek*. The *kelleks* always go in pairs on long-fishing trips.

As the spring of 1901 in Turkey was unusually dry, the river was comparatively low, being about halfway between the extremes of flood and low water. As it was, the current seemed very swift even in the plain at Akhor. As soon as we began to float, we concluded that a *kellek* moves in the easiest, most delightful way that can be imagined. There is no jar or shake. The buoyant skins and pliant saplings adapt themselves to every movement of the waves. Half an hour after starting, we stopped for some time while the *kellekjis* gathered a great quantity of weeds, which they spread over the raft, partly to protect the skins from injury by our feet, but still more to prevent them from drying in the hot sun and cracking. Every hour or two they threw water over all exposed portions of the skins.”

In regard to the *kellek* seen by E. Huntington, one can speculate whether the raft used by the population of the Upper Euphrates area is similar to that reported by the Greek historian Herodotus where he describes the river traffic between Armenia and Babylon. According to the account, Mesopotamians use for navigation skins of animals.

Herodotus I.194³

“I will now show what seems to me to be the most marvellous thing in the country, next to the city itself. Their boats which ply on the river and go to Babylon are all of skins, and round. They make these in Armenia, higher up the stream than Assyria. First, they cut frames of willow, then they stretch hides over these for a covering, making as it were a hold; they neither broaden the stern nor narrow the prow, but the boat is round, like a shield.

³ Herodotus 1975: 244-245.

They then fill it with reeds and send it floating down the river with a cargo; and it is for the most part palm wood casks of wine that they carry down. Two men standing upright steer the boat, each with a paddle, one drawing it to him, the other thrusting it from him. These boats are of all sizes, some small, some very great; the greatest of them are even of five thousand talents burden. There is a live ass in each boat, or more than one in the larger. So, when they have floated down to Babylon and disposed of their cargo, they sell the framework of the boat and all the reeds; the hides are set on the backs of asses, which are then driven back to Armenia, for it is not by any means possible to go up stream by water, by reason of the swiftness of the current; it is for this reason that they make their boats of hides and not of wood. When they have driven their asses back into Armenia, they make more boats in the same way”.

The description of this navigation was discussed by several Armenologists. Unlike early Armenian historians like A. Garagashyan, G.A. Khalatyanc, J. Sandalgyan, K. Aslan who identify the tradesmen referred to by Herodotus with Armenians⁴, H. Manandyan in a small note shows that the Greek historian describes the activities of Assyrians who were mediators of river traffic between the Armenian Highland and Babylonia⁵. We shall agree with H. Manandyan in that indeed Assyrian tradesmen (i.e., Aramaeans since in the V century BC hardly Assyrians could have survived after late VII century BC) were operating in the south-western part of the Armenian Highland. But this proposal does not contradict the idea that the sheepskin rafts could have originated in Armenia.

The comparison of E. Huntington's description of *kellek* with that of Herodotus could force one to conclude that they are different, although the Neo-Assyrian reliefs leave no doubt that the Mesopotamian rafts were similar

⁴ **Garagashyan** 1895: 69; **Aslan** 1909: 75; **Khalatyants** 1910: 98; **Sandalgyan** 1917: 392. Later in the XX century this idea has been widely accepted by later Armenian authors.

⁵ **Manandyan** 1985: 410ff.

to the modern rafts made of sheepskin⁶. Probably, Herodotus's account was not full and the description of these rafts lacks some details.

The description of sheepskin raft by E. Huntington allows us to arrive to some conclusions.

- The procedure of making such rafts was simple and fast; it takes about one day.

- The rafts varied in size. For the fishing purposes two fishermen use a raft made of six sheepskins. As to the raft on which travelled E. Huntington and his companions (5 people) was constructed of 30 skins.

- The raft floats easily, without swinging.

- The traffic was practiced only down the river but not up.

In regard to vessels/rafts used by the population of the Armenian Highland it seems worth to mention a cuneiform Hittite text dated with the XV century BC which deals with the shipment of food for the Kaska workers by river⁷. Although the text does not specify the nature of the vessel, it could be speculated that the vessel under discussion was made of skins. Unfortunately, we do not know which river is meant in the text⁸. But it is certain that the Hittites used to have different types of such vessels, since here is mentioned "small vessel" (GİŞMÁ TUR).

Addenda

It goes without saying that rafts or boats made of animal skins were widely used in different parts of the world, and continue to be used until today. Nice illustration to this is China where such vessels are popular still from the III

⁶ See, for example, the photo on a relief from Nineveh (**Parpola** 1987: 39, Fig.13 where are depicted two types of boats, one regular, and on the left a raft made of skins). On another relief we see a fisherman sitting on a single skin, near regular boat (**Parpola** 1987: 53, Fig. 17b). See also Rawlinson 1880, Pl. LXII, Fig.2. See also the chapter in the study of R. Rollinger dealing with the navigation in the ancient Near East (**Rollinger** 2013: 33-44).

⁷ The text has been published by several scholars (**Garstang and Gurney** 1959: 33f.; **Hagenbuchner** 1989: 136ff.; **Hoffner** 2009: 81ff.; **Kosyan et al.** 2018: 75-78 etc.).

⁸ Euphrates (**Houwink ten Cate** 1970: 62 n. 31; **Ünal** 1974: 209f. etc.), Halys (**Garstang and Gurney** 1959: 33f.; **Forlanini** 1979: 184, n.105 etc.).

century AD. In ancient times the biggest sheepskin raft was composed of over 600 sheepskin bags and measured 22 meters long and 7 meters wide. There were three oars in the front and at the back. Each oar was controlled by two people. With a carrying capacity of 20 to 30 tons of goods, it could run over 200 kilometers per day⁹.

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⁹ <http://traditions.cultural-china.com/en/16Traditions2720.html>

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ԳԵՏԱՅԻՆ ՆԱՎԱՐԿՈՒԹՅՈՒՆ ԵՓՐԱՏԻ ՎՐԱ

Արամ Քոսյան

Քանալի բառեր՝ Է. Հանթինգթոն, ոչխարի մորթի, Եփրատ, գետային նավարկություն, Հերոդոտոս:

1901 թ. ամերիկացի հայտնի աշխարհագրագետ Է. Հանթինգթոնը իր ուղեկիցների հետ միասին նավարկեց Եփրատի հոսանքով ներքև՝ տեղական բնակչության կողմից ավանդաբար օգտագործվող փչովի լաստանավով (ոչխարի ամբողջական տիկերից պատրաստված փոխադրամիջոց): Հեղինակի երկու հոդվածներում ներկայացվում է այդ լաստանավի պատրաստման եղանակը և նավիգացիոն առանձնահատկությունները:

Ըստ հեղինակի, այդպիսի լաստանավերի պատրաստումը շատ կարճ ժամանակ է պահանջում, դրանք տարբեր չափերի են հասնում, լողում են հանդարտ՝ առանց ցնցումների: Ընդ որում այդ լաստերով նավարկում են բացառապես հոսանքի ուղղությամբ, բայց ոչ դեպի վեր: Վերոհիշյալ լաստանավերը տեղական բնակչությունը (հիմնականում հայերը) օգտագործում է ինչպես ձկնորսական նպատակներով, այնպես էլ որպես փոխադրամիջոց ապրանքները Եփրատի երկայնքով ընկած բնակավայրեր տեղափոխելու համար:

Է. Հանթինգթոնի նկարագրած լաստանավը հիշեցնում է Հերոդոտոսի կողմից հիշատակվող փոխադրամիջոցը, որով Միջագետքի բնակիչները առևտրական գործունեություն էին իրականացնում Հայկական լեռնաշխարհի հետ: Սակայն Հերոդոտոսի աշխատության համապատասխան հատվածը թերի է այն առումով, որ նկարագրության մեջ պակասում են նման լաստերի պատրաստման տեխնիկայի որոշ մանրամասներ: Ակնհայտ է, որ երկու դեպքում էլ գործ ունենք միևնույն փոխադրամիջոցի հետ:

Փչովի լաստանավերը առ այսօր օգտագործվում են երկրագնդի տարբեր շրջաններում, մասնավորապես դրանք լայն տարածում ունեն

Չինաստանում, որտեղ դրանք վկայված են դեռևս մ.թ.ա. առաջին դարերում: Ըստ չինական աղբյուրների, Հան դինաստիայի օրոք հիշատակվում է մինչև 600 ոչխարների տիկերից պատրաստված լաստանավ (երկարությունը 22 մետր, լայնությունը 7 մետր), որոնք կարող էին տեղափոխել 20-30 տոննա բեռ: