

## Opinions on the Academic Archaeological Structure concerning the Vital Importance of Water throughout Antiquity

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### Abstract

There is a close connection between water and civilizations. All the archaic civilizations which played a key role in the history of humankind ever since the Bronze Age, were, indeed, founded along the great aquatic sources, notably, Egyptian Civilization, along the Nile River, Mesopotamian, along the Euphrates and the Tigris Rivers, Indian, along the Indus and Ganges Rivers, as for the Chinese, along the Yellow River. Minoan Civilization is, primarily, a maritime civilization. Anatolia is a great “water land”. Each of the Ancient Anatolian Civilizations dating from the Bronze and Iron Ages had owed their ability to survive to the rivers, the brooks, the creeks, the springs along which they were founded. Such a circumstance has arguably its most idyllic echo in *The Iliad* even though it is an epic. Besides, Anatolia is a peninsula. Most of the ancient city states were, first of all, harbors, which are nowadays landlocked by alluvial silt that the rivers brought forth. The fact that concerns water and civilization does not seem to have acquired the value it deserves at the archaeology departments of universities. Notwithstanding, archaeological studies are permanently subjected to transformation with the new possibilities offered by science and technology. Establishment of new academic subordinate branches in the discipline of Underwater Archaeology such as Marine Archaeology, Maritime Archaeology, River Archaeology, Harbour Archaeology and Nautical Archaeology could be mentioned as the new achievements, in this domain, that would enable us to overcome contemporary difficulties. Such an academic structuring may be worthwhile in clarifying the issues upon which neither Ancient History nor Literature could have shed light to date.

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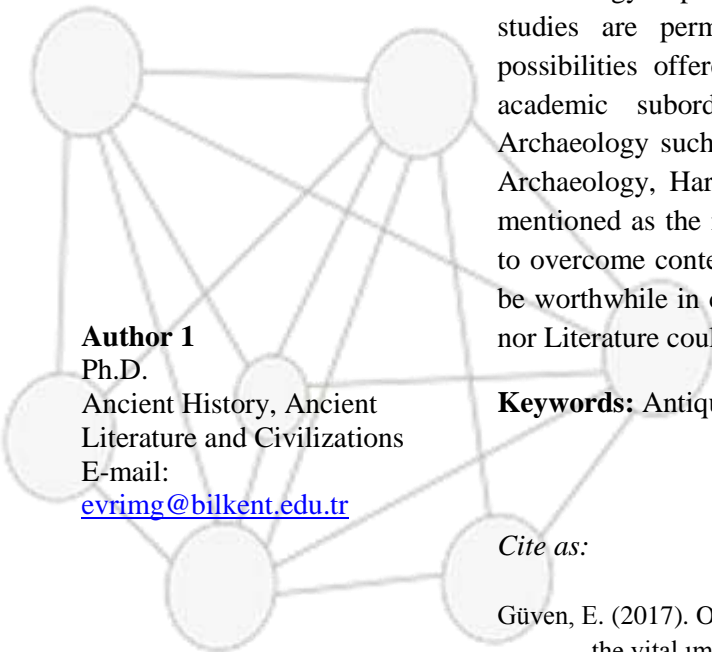
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## INTRODUCTION

The complex network of political, social, economic, cultural and religious relations that have linked the continents of Asia, Africa and Europe ever since the Bronze Age cannot be understood thoroughly without taking into account the issues concerning seafaring, sea trade, sea transport, sea warfare, as well as rivers, lakes, natural or artificial pools, watery caves and even landlocked territories far from coast.

Archaeologists find architectural, sculptural, pictorial -be they mural or vase paintings, frescoes or mosaics-, epigraphic and numismatic evidence for desires of mankind to master water, for their maritime or fluvial life. If we listen carefully what all these artefacts tell, we would soon understand that hidden protagonist of life on earth, therefore human civilization is after all water, besides sun.

Nonetheless, such a self-evident aspect of truth does not seem to have acquired the value it deserved at archaeology departments of universities. In this article, we will emphasize how vital water was to mankind as it reveals itself on some *alibi* that archaeology, chiefly, rely upon. Then, we will indicate what would the challenges be in case we rearrange academic archaeological structure by giving examples of pioneering initiatives which had been undertaken so far both on national and supranational scales.

### Water and ancient primary sources

Trojan war starts in *Iphigenia at Aulis*, in the tragedy by Euripides, with the sacrifice of the daughter of Agamemnon, king of Achaia, for allied fleet to sail through Aegean Sea and to disembark into coastal Anatolia with favorable winds.<sup>1</sup> Inasmuch as the battle is cruel, Homeros depicts in *Iliad* so fabulous, picturesque and pastoral scene not only with springs of Ida Mountain yet rivers, brooks, creeks within the whole territory that the Trojan kingdom penetrates.<sup>2</sup> *Odysseia* is a journey through the Mediterranean Sea.<sup>3</sup>

Hesiodos explains in *Theogony*, the origin of aquatic sources on earth.<sup>4</sup> He gives in *Days and Works* a series of instructions concerning equally maritime occupations.<sup>5</sup> Poet, himself being the son of a mariner who left his homeland in Anatolia, witnesses implicitly the phenomenon of migration from Asia through the Aegean Sea. Virgilius displays, in *Aeneid*, Aeneas and his fellow Trojans, deprived of their motherland too after the crushing defeat, weighing anchor for a *terra incognita*, going through hardships, perils, travelling under storms as do, in a way, Odysseus and his comrades.<sup>6</sup>

### Water and archaeological material

Temples consecrated to Apollo cannot be understood without the element of water. Before becoming a massive building which humbles worshippers despite its own pomposity, the site of the Temple of Apollo in Didyma hosted a modest spring. Nymphaion is a temple as well, which is

<sup>1</sup> EURIPIDE, 1965.

<sup>2</sup> HOMÈRE, 1965a, XIV, 307 ; XXI, 311 sq. ; XXII, 148 sq.

<sup>3</sup> HOMÈRE, 1965b.

<sup>4</sup> HESIODOS, *Theogonia*, 2016, 130-135 ; 233 sq. ; 345-370 ; 775-806.

<sup>5</sup> *Ibid.*, *İşler ve Günler*, 617-695.

<sup>6</sup> VERGILIUS, 1998.



dedicated to water spirits in the pantheist worldview. Only few sources are adored with such conspicuous architectural features.

Although nowadays an inland lake, the ancient gulf of Latmos is the key, indeed, to understand transportation of massive stones from the holy Latmos Mountain to the Temple of Apollo in Didyma. The entire plain known, nowadays, as Söke was, once, actually, sea that alluvial silt, Maiandros River brought forth, landlocked.<sup>7</sup> All the coastal ancient cities nearby, notably Priene and Miletos, were, primarily, harbours which gradually lost their supremacy along with their ports. None of these cities can be thoroughly understood if we do not take into account this fundamental aspect of theirs which is their harbours be they natural fishing port, charging, commercial or wartime secondary ports.

If we fail to consider the echoing memory of Port of Theodosius, we may not interpret thoroughly current dynamism of Istanbul Atatürk Airport either.<sup>8</sup> Excavation project yields, in fact, the most important collection of medieval shipwrecks which has ever been discovered to date. Ancient port seems to bequeath its function, progressively, to modern airport. Ships seem to have handed down nowadays their importance to airplanes each of which are ships too. The jargon of informatics contain, already, terms related to maritime terminology such as navigation, port. Accordingly, we are all navigators. Spaceships and space stations begin replacing, indeed, fundamental role that ships and ports played throughout the Antiquity although they are still not democratized enough. United Nations apply, actually, overseas maritime law for the use of space.<sup>9</sup>

Just as Rome cannot be thoroughly grasped without her harbour city Ostia and Tiberis River which links them together nor Athens without her harbour city Peiraeus along with the Cephisos and Ilisos Rivers which surround them, Troy cannot be conceived without Thymbrios and Simoeis Rivers.<sup>10</sup> Its lighthouse is thought to be greater than that of Alexandria, one of seven antique wonders.<sup>11</sup> Equal, thus, in strategic importance to the Pillars of Hercules in ancient times.

Inasmuch as fire plays central role in the philosophy of Herakleitos, Ephesos owes her archaic civilization to water. The city is a place, *par excellence*, of baths, fountains, aqueducts and water supplies. Midway between Caystros and Maiandros Rivers which rush into the Mediterranean Sea, her soil is most fertile with alluvial silt that these mighty watercourses bring forth.

Sculptures parade pride that the ancient world takes in teaming waters. We may, in particular, mention mighty sculptures such as *Victory of Samothracia* on the bow of a ship,<sup>12</sup> depiction of predilection on Macedonian coins too<sup>13</sup> and *Tyche of Antioch* with Orontes River, today known as Asi, which means rebel in Turkish, under her feet.<sup>14</sup> Wall paintings of Thera, notably, *Ship Procession Fresco* witness, maybe, a seasonal maritime festival or even a scene from a lost epic poem.<sup>15</sup>

*Enuma Eliş*, in other words *Once upon a time on heavens*, Babylonian creation myth which narrates the domination of Tiamat by Marduk, underlie a mighty turning point in the history of

<sup>7</sup> Unpublished field trip notes on Ancient Caria.

<sup>8</sup> "Yenikapı", 2007, p. 164-305 ; KOCABAŞ, 2014, p. 78-85.

<sup>9</sup> *United Nations* ... 2002.

<sup>10</sup> ZANGGER, 2016.

<sup>11</sup> Unpublished field trip notes of Lighthouses Tour.

<sup>12</sup> Louvre Museum, Department of Greek, Etruscan and Roman Antiquities, [www.louvre.fr/en/oeuvre-notices/winged-victory-samothrace](http://www.louvre.fr/en/oeuvre-notices/winged-victory-samothrace)

<sup>13</sup> "La Victoire de Samothrace ...", p. 9, 16.

<sup>14</sup> POLLITT, 1986, p. 3.

<sup>15</sup> RABAN, 1984.

mankind.<sup>16</sup> Conceptions seems to have changed, by far, since the Sumerian Deluge myth.<sup>17</sup> Henceforth, humankind appears to be less fatalistic. His coastal navigation by stars, his predicting rise in water level on rivers, seasons, meteorological events make him master of his own destiny.

## Discussion

Our modern society lives together Revolutions of Agriculture, Industry and Cybernetics. Developing a synthesis between traditions and modernity to solve the identity crisis that these transformations involve, is, itself, an intimidating challenge unless we assume being condemned, categorically, to be obscurantist or technocrat.

Distribution of labor, in particular, even though it origins in the Neolithic Period, has been accelerated more than ever since the 17th century when tiny ingenuity of integrating vapour or stream into machines, notably, trains and ships produced such an impact around the world that even the Turkicized word *vapur* is used as metonymy to signify vessel. Such department of labor has, as a corollary, compartmentalization of knowledge compelling academicians to specialize in their respective studies according to departments to which they belonged in universities.

Once upon a time, science was sacred. Privilege of an elite. The Turkish word *ilim* comes from a forgotten archaic word *ilum*, which signified god in Ancient Babylonia.<sup>18</sup> One was called to excel in science. One should have been born for this particular vocation. It was a tradition so precious as a treasure that the disciple inherited from his master to transmit it across subsequent generations. It was almost a craftsmanship descending from father to son.<sup>19</sup>

At the expense of most tragic conflicts, science is, nowadays, secular, even, public. There are universities available, almost, for anyone, even, at remotest lands. Such a “progress” has no match in the history of mankind. Nonetheless, we do not seem to appreciate its value. Bureaucratic needs rather prevail scientific necessities. Objectives that should have been supreme concerns, became tools destitute of their supremacy.

Instead of that, universities appear to be as average professional high schools at the service of earliest conveniences of business world. Rather than helping future generations fulfil their full potential, they mold them according to most fluctuating expectations. They seem severely subject to caprices of latest trends of this fiercely competitive world devoid of any moral value.

Against such a background arises, also, the necessity of integration of latest technology into the archaeological academic structure so that neither academic staff and students have recourse to invest their own limited budgetary resources as well as time elsewhere than academic community. Oxford University had been a pioneer in anticipating such an interdisciplinary approach for having established under the roof of a scientific institution in the discipline of Archaeometry in 1958, as a leading technical university in Turkey, Middle East Technical University followed this model in 1990, then, Çukurova University offered postgraduate master degree program in 1994.<sup>20</sup>

Debate whether such an undertaking which segregates Archaeometry from Archaeology is, indeed, effective, would introduce us into futile controversies missing the heart of the matter.

<sup>16</sup> HOOK, 1995, p. 43-47.

<sup>17</sup> KRAMER, 1999, p. 187-193.

<sup>18</sup> BLACK-GEORGE-POSTGATE, 2000, p. 127.

<sup>19</sup> ECO, 2001.

<sup>20</sup> ÖNİZ, 2009, p. XIV.

Discovery, study, cataloging, electronic database management and visualization by drawing, photography, virtual graphic design, mapping of archaeological material involve, certainly, being technically equipped and proficient. Archaeology requires, however, even more advanced and expensive technical equipment and expertise for its subdomain, Underwater Archaeology.

Underwater investigations, admittedly, started in Turkey with private enterprises in the 1950s and were performed between 1960 and 1980 upon informal denunciations by local fishermen.<sup>21</sup> They were non systematic. Their outcome was not inventoried. It was necessary that field studies were institutionalized not only to avoid vandalism both physical and scientific yet also for the record of investigations to be verifiable later according to objective criteria which would be established beforehand. Accordingly, scientific underwater archaeological activities have been accelerated since 2000s, in particular, with Selçuk University that offers both undergraduate and graduate programmes.

Departmental Museum of Arles is an example for underwater research in the Rhône River which played a role similar to aforementioned rivers.<sup>22</sup> Relation between Antioch on the Orontes River and its harbour city Seleucia cannot be thoroughly grasped without considering the river as well. Their connection was that vital.

The study which had been carried out on the harbours of Myndos by Uludağ University offers an applied research model for the different types of maritime ports with methods and materials.<sup>23</sup> Department of Protohistory in Ankara University performs underwater excavations in Limantepe under scientific direction of professor Hayat Erkanal.<sup>24</sup> 360° Research Group conducts several experimental projects.<sup>25</sup> They reconstruct ancient ships according to ancient ship building technics and they travel with them across the Mediterranean Sea. They, notably, went to Marseille, ancient city Massalia. Their near-term destination is legendary Alexandria.

A temporary exhibition in 2013 entitled *Du Nil à Alexandrie, Histoires d'eaux (From Nil to Alexandria, Histories of Waters)* that Royal Museum of Mariemont hosted, emphasized importance of water in this city of cisterns. Underwater excavations were carried out in Alexandria, in 1990s, by Hellenist Jean-Yves Empereur in order to clarify the famous lighthouse inspiring many archaeologists to come.<sup>26</sup> *Centre d'Études Alexandrines* that he founded in 1990 has been the milestone in the institutionalization process.

However, the Institute of Nautical Archaeology which was founded in 1972, based on Texas A&M University, is one of the oldest institution which offers graduate programme too.<sup>27</sup> It cooperates several projects in Turkey, with Bodrum Underwater Archaeology Museum which is unique of its kind.<sup>28</sup> Among these, we may, notably, remind about Yenikapı Byzantine Shipwreck Projects. Under the supervision of Cemal Pulak, associate professor at the Department of Anthropology of the same university since 2004, these projects are, equally, allocated to Conservation Department of Marine

<sup>21</sup> *Ibid.*, p. 2.

<sup>22</sup> MARLIER, 2014.

<sup>23</sup> GÜNDÜZ, 2008.

<sup>24</sup> Liman Tepe Kazı Alanı, [http://www.mekan360.com/360fx\\_limantepekazialani-izmir-urla.html](http://www.mekan360.com/360fx_limantepekazialani-izmir-urla.html)

<sup>25</sup> 360° Tarih Araştırmaları Derneği, [www.360derece.info](http://www.360derece.info)

<sup>26</sup> EMPEREUR, 1997.

<sup>27</sup> Institute of Nautical Archaeology, [www.nauticalarch.org](http://www.nauticalarch.org)

<sup>28</sup> The Bodrum Museum of Underwater Archaeology, [www.kultur.gov.tr/EN,120300/the-bodrum-museum-of-underwater-archaeology.html](http://www.kultur.gov.tr/EN,120300/the-bodrum-museum-of-underwater-archaeology.html)

Archaeological Objects in Istanbul University.<sup>29</sup> Among the other projects performed by Institute of Nautical Archaeology, we may mention Uluburun Shipwreck which was uncovered in 1982.<sup>30</sup> The oldest known shipwreck is thought to have sunk around 14th century BC. These excavations lasted over 11 seasons between 1884 and 1994.

## Conclusion

Archaeology is used to be commonly underestimated as an auxiliary science of History. However, Ancient History and Ancient Literature often need evidence that only Archaeology may provide. Ancient texts are primary sources of historians and philologists. Nonetheless, they might have been manipulated or wrongly copied through centuries. They may, equally, be written with ideological purposes. Virgilius,<sup>31</sup> Ovidius<sup>32</sup> and Vitruvius<sup>33</sup> show themselves, notably, doing of the sort. Underwater Archaeology may bring missing pieces so that we may, all together, complete this immense puzzle of Antiquity, in many important ways, that it has been impossible to date.

If humans left Africa two millions years ago to populate Asia and Europe and they arrived in America no later than 40.000 years ago, they must, somehow, have been acquainted with seafaring although within primitive conditions for far longer than Ancient History suggests.<sup>34</sup> Some assumptions which starts navigation with Athenian Maritime Empire of the 5th century, luring science from truth, may, thus, be easily left behind. Despite the fact that nautical activities are considered to be prerogatives of Greeks, the oldest known sailing vessel is thought to have belonged to the country of Pount and it dates back to 4th millennium. Intensive fluvial navigation activities on Nile River in the 3th millennium shift, then gradually, to Eastern Mediterranean Sea and Mesopotamia from the 2nd millennium onwards. If at least five vessels sank each year throughout the Antiquity, this fact means that there must be, not less than, 25.000 shipwrecks waiting to be uncovered on our coasts.<sup>35</sup> When tempest broke out mariners invoked *Fortuna*, goddess of destiny. Theirs had been such an echoing clamour that even Turkish word *firtına*, which means tempest, sounds quite similar to their invocation.<sup>36</sup> No matter how far we are away from them in time and space, we inherit their legacy.

Archaeological studies are permanently subjected to transformation with new possibilities offered by science and technology. Establishment of new academic subordinate branches in the discipline of Underwater Archaeology such as Marine Archaeology, Maritime Archaeology, River Archaeology, Harbour Archaeology and Nautical Archaeology would enable us to overcome contemporary difficulties. Such an academic restructuring may be worthwhile in clarifying issues upon which neither Ancient History nor Literature could have shed light to date.

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<sup>31</sup> VERGILIUS, *op. cit.*

<sup>32</sup> ÖZAKTÜRK, 1999.

<sup>33</sup> VITRIVIUS, 2013.

<sup>34</sup> ÖNİZ, *op. cit.*, p. 5.

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