

The History and Development of Maritime Archaeology

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Introduction to Maritime Archaeology

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As a burgeoning area of study, aided by the development of more commercially available and portable SCUBA equipment, maritime archaeology is still in its infantile state in comparison to other areas of study such as history, politics, physics, and biology. However, what makes maritime archaeology unique is that although it is a newer area of research, it has been built upon many pre-existing and more established academic elements. Since humanity has been able to navigate the waters, people have been intrinsically interested in recovering what was lost beneath the waves. One might argue the initial interest in (what would become) maritime archaeology is rooted in the salvation of lost goods. What once was considered treasure hunting and recovery has slowly morphed into an increasingly respected and exciting new world of academic specialty; the realization of the vested importance of researching and preserving maritime antiquities.

While many scholars have argued the exact definition of maritime archaeology, the most well rounded statement, by Muckelroy, inclusively states maritime archaeology is “the scientific study, through the surviving material evidence, of all aspects of seafaring: ships, boats, and their equipment; cargoes, catches, or passengers in them, and the economic systems within which they were operating; their officers and crew, especially utensils and other possessions reflecting their specialized lifestyle.” (1978, p. 26)

Prior to the academic establishment of maritime archaeology and career maritime archaeologists, salvors utilized elementary tools such as nets, grabs, and grappling hooks as a means of recovering goods and pillaging sites. In addition to the apparatus limitations, salvors,—largely via the method free diving— were only able to access areas in warm, shallow, and clear waters. As salvation was a lucrative industry, wrecks which were accessible were ravaged and countless artifacts were lost and sites destroyed. A “more valuable and accessible a site [enabled] salvage work [to] continue intermittently through the centuries, sometimes...a growing antiquarian curiosity...move[d to] genuine archaeological investigations. (Muckelroy 1978, p. 29) However, due to the technological restrictions, sites

located in the deep sea and off of uninhabited islands were inaccessible to salvors and are now a leading source of research for modern maritime archaeologists.

As with many of the established academic disciplines, the Catholic clergy was one of the initial proponents and pioneers for the study of Maritime Archaeology. The earliest case of documented interest in maritime antiquities—for the purpose of study— originates in 11th century England. Abbot Ealdred of St. Albans requested men to collect cobblestones for his new abbey; upon inspection of the Roman Verulamium, the men found “oak timbers with nails sticking inside and smeared with naval pitch” (Ellmers 1973, p. 178). Several centuries later, 15th century clergyman, Cardinal Collona, sought to satiate his interest in roman ships by urging Leon Battista Alberti to salvage and explore the submerged ships of Lake Neri. In 1536, Francesco Demarchi completed what is historically regarded as the first dive for the purpose of reconnaissance— a rudimentary dive suit was constructed and implemented to conduct the research (Muckelroy 1978, p. 31).

As a broader understanding of the importance of preservation and study permeated Western culture, Charles Lyell’s *Principals of Geology* presented the first scientific argument for the potential of preserving human artifacts. In 1822, the public of London was introduced to a groundbreaking display of maritime archaeology: an ancient boat from Rye (Sussex) was met with much accolades and attendance upon its presentation (Rice, 1824, p. 553-65). The premiere display of— what would become— maritime archaeology had flagged the interest of the public as well as academic scholars.

Slowly, the realization “that a greater number of monuments of the skill and industry of man will, in the course of ages, be collected together in the bed of the ocean than will exist at any one time on the surface of the continents” (Lyell 1822, p. 258). As interest in the importance of maritime antiquities increased, funding for excavations became more commonplace. Scandinavia, with its rich history of viking and naval prestige, gained recognition with the 1863 excavation of 4th century medieval crafts under the leadership of Conrad Engelhardt.

The beginning of the twentieth century would usher in phenomenal innovation, interest, and funding for maritime archaeology. The 1900 discovery of marble and bronze statues, off of Antikythera, Greece, not only brought maritime archaeology into the realm of public discussion, but it also drew attention to the physical limitations of the study. As Saloman Reimach observed “the richest museum of antiquities in the world is still

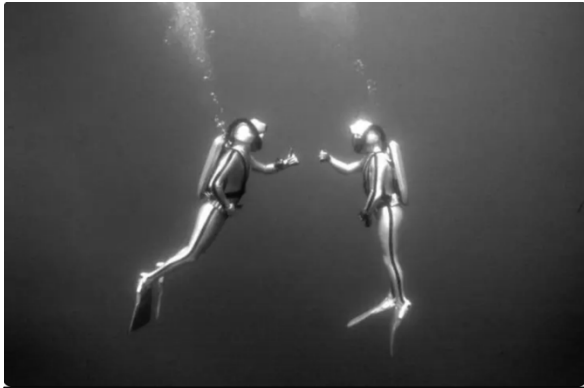


Figure 1. The Aqualung in use

inaccessible...the seabed of the Mediterranean” (Muckelroy 1978, 30).

Prior to Jacque Cousteau’s 1942 creation of the Aqualung, the primary method of discovery and recovery was accidental and by greek sponge divers—the only people capable of reaching the 60 meter depths

where the pile of statues rested. Upon the report of the find, the Greek government recruited Professor George Byzantinos, Director of Antiquities, to head the recovery and research. During this expedition, the famous *Antikythera Ephebe* was recovered as well as an ancient calculator (Weinberg *et al.*, 1965).

At the time, even though archaeology was of increasing relevance and academic interests—exemplified by Schlieman’s excavation of Troy—the technology and daredevil nature necessary for underwater excavation simply did not exist. The typified old man in khakis, scouring the desert with young local boy in tow, was the current reality; when the Society of Antiquaries of London pronounced a discovery of Roman pottery they were unable to find any archaeologists to excavate the underwater site. As a result of the lack of qualified candidates, the Society was forced to hire ‘Certified Diver,’ Hugh Pollard, to inspect the site (Smith, 1909).

However, the Catholic clergy stepped up to the call—a year later amateur archaeologist and Benedict priest, Reverend Odo Blundell, explored a crannog of Loch Ness—sadly, no monster was located. Not only was this the first time an archaeologist immersed himself underwater, but his effective methodology of documentation led to a research project by the British Association (Blundell, 1909).

Following the success of the Anitkythera expedition, the Tunisian government was alerted to a massive trove discovered off the coast of Tunisia in 1907.

For seven years, until 1913, recovery and research was documented and the excavations ensured the archaeological world recognized the importance of underwater sites (Frondeville, 1965). After the events of World War I, not many profound discoveries occurred. In 1934 Jesuit, and well regarded underwater photographer, Father Andre Poidebard, researched and documented the remains of the Palestinian coast. “His criteria for recognizing, and to some extent dating, these huge structures have remained valid into the Aqualung Age” (Poidebard, 1939; Frost 1963: 65-114). Another notable excavation was Mussolini’s orders to drain the lake of Nemi in an attempt to bolster Italian nationalistic pride in its Roman history. The excavation itself was a success and shed a great deal of light onto the construction and sheathing methods, however the ships were ceremonial and ornamental in use rather than commercial (Ucelli, 1950).

As with many aspects of technological advancements, World War II enabled underwater breakthroughs via the necessity of nautical weaponry and defenses. Naval



Figure 2. the oldest surviving diving suit in the world.



Figure 3. The remains of the hull of one of the two ships recovered from Lake Nemi in 1930

officer, Jacques-Yves Cousteau, and engineer, Emile Gagnan, revolutionized the world of underwater exploration with the creation of a device which could be used by ordinary people, the Aqualung. The previously used and cumbersome “hard-hat” equipment was next to impossible for archaeological work; the mobility and affordability of the Aqualung enabled feasible work to be done in an efficient manner. But the instrumental advancements converged with a war-torn and chaotic continent following World War 2; treasure hunters took advantage of the new technology and ransacked previously undisturbed underwater sites for personal gain (Muckelroy, 1978: 31).

Not only was Cousteau instrumental in the development of underwater gear, he spear-headed one of the first systematic investigations of a classical wreck. Near Marseilles, off Grande Conglué, Cousteau led his team to research a large amphora mound. However, since maritime archaeology had not yet implemented any set methodology in its undertaking of excavations, Cousteau’s initial research standards have been regarded as unacceptably low. For example, no plan for the site was ever created and an ongoing dispute over the actual number of wrecks is still disputed (Benoit, 1961). But what is important to recognize in the initial research was the effective implementation of the aqualung for underwater excavation (Muckelroy, 1978: 31).

However, Cousteau’s constituents, Frederic Dumas and Commander Philippe Taillez, recognized the inadequacies of the methodology and did their best to document as much as possible. Taillez went on record to state “We tried sincerely, to the best of our ability, but I know many mistakes were made. . .If we had been assisted in the beginning by an archaeologist, he would surely have noted with much greater accuracy the position of each object; by personal inspection he would have drawn more information from the slightest indications” (Taillez, 1965: 91). Out of Taillez’s confession it is crucial to recognize what a tremendous leap forward this was for the development of maritime archaeology; not only was the necessary gear now available, but researchers not only recognized their initial mistakes, but adamantly sought ways to ensure future excavations would not succumb to the same

inconsistencies. The greatest problem the brave new world of archaeology faced was the lack of archaeologists ambitious enough to take themselves underwater. However, that was soon to change as a U.S. team from the Museum of the University of Pennsylvania stepped into the field.

“In 1960, George Bass led a team including Peter Throckmorton, Joan du Plat Taylor, and Frederic Dumas in excavating a site, off Cape, Gelidonya, of a ship that sank around 1200 B.C.[E.]”(Muckelroy, 2001: 32). Located in 30 meters of water, the excavation demonstrated conventional methods of archaeology could be applied underwater and the efforts brought significant new understanding to Eastern Mediterranean trade during the late Bronze Age. Due to the great success of Bass’ expedition, the U.S. sponsored several projects in Turkey, including the 4th and 7th CE century wrecks off of Yassi Ada, and 4th century BCE wreck near Kyrenia, Cyprus. As a result of the successes of the aforementioned excavations, the surviving ship’s structure was raised and is currently on display for the public at the Kyrenia Castle (Swiny and Katzev, 1973; Katzev 1974).

These expeditions were the stepping stone for maritime archaeology not only being officially recognized as an academic discipline, but also the beginning of governmental involvement in financing, protecting and regulating excavation sites. In 1969, Yugoslavia established the Office of Protection of Monuments and a great deal of work started to be carried out with establishing systematic methodology during excavations (Vraslovic, 1974). Bass and his team institutionalized the standards, ideas, and procedures of maritime archaeology which are still in implementation by many of today’s projects.

As maritime archaeology became more entrenched in academic acceptance, the area of study widened to include areas outside of the Mediterranean. One of the most distinguished excavations occurred in Stockholm harbor and informed the world of the archaeological majesty of the Baltic’s worm-free waters. In 1628, the *Wasa* warship set sail on its maiden voyage; ironically, the vessel sank immediately upon leaving the dock— the ship lay in Stockholm harbor, untouched until 1956 (Franzen, 1966). The *Wasa* was raised

and its unequivocal display continues to draw hordes of visitors each year. Unlike the Mediterranean, the unpredictably sudden and violent storms as well as the moving shoals of the Scandinavian waters created a graveyard for medieval ships and the lack of worms in the water allowed for better preservation of submerged vessels. Under the leadership of G. Van der Heide research and excavations were carried out on vessels discovered in the drained areas of the North Sea and more specifically the riverboats of Zwammerdam; these excavations contributed information and challenged pre-existing ideas to the understanding of early Common Era century vessels (Muckelroy, 1978: 33)

While the new discoveries of Scandinavia were intriguing, across the channel, excavations of the Blackfriar's Romanship and the re-excavation of the Sutton Hoo royal ship burial site demonstrated the field of maritime archaeology was continuously growing in not only interest, but also standardization. In 1964, the establishment of the Council for Nautical Archaeology sought to standardize the practices of archaeologists and to promote more archaeologists to become divers. Truly, the invention of the Aqualung, merely two decades prior, revolutionized the field and allowed access for trained specialists to submerged field-work. One might say, the Aqualung was the first true breath of the official life of Maritime Archaeology. As the number of archaeologists turned club divers increased, traditional archaeological practices of methodical geo-locating famously lost ships was put into application; the most successful of such approaches was the discovery and excavation of the *Mary Rose* (McKee, 1973). The ground-breaking discoveries would lead to the gradual acceptance of Maritime Archaeology as an accepted academic discipline and in 1973 St. Andrews University established the first Institute for Maritime Archaeology. The same year the Protection of Wrecks Act was passed and began to tackle the legal issues which emerged with the commercial availability of personal SCUBA equipment (Muckelroy 1978, 33)

While most Maritime Archaeological excavations have occurred in Europe and the Mediterranean, in recent years research has become popular in North and Central America. With its rich history of colonialism the Caribbean's waters house countless Spanish vessels,

and North America is pilfered with French and English ships. As Maritime Archaeology is still a young study, each year new ships are discovered and each announcement is met with great interest from the public.

Shipwrecks and the mysteries of what lies beneath the waves have captivated the minds of people since the beginning of maritime navigation, and with technological advancements such as ROV's, deep sea submarines, sonar location, seabed scanning— to name a few— the field is only becoming more interesting. The 2001 UNESCO convention to establish “rules concerning activities directed at underwater cultural heritage” solidified the importance of the field and each year maritime archaeologists continue to prove the innate value of the study for increasing our understanding of man’s relation with the waters of the



Figure 4. The ghostly bow of the legendary RMS Titanic

world. From the humble beginnings of clergymen documenting skeletal remains of Roman ships to the billion dollar commercial successes of locating and excavating the Titanic, Maritime Archaeology will only become more influential and deeply

entrenched into the continuing study of humanity.

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