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Malaysian Maritime Archaeology: Whither in the Next Decade?
Arkeologi Maritim Malaysia: Kemanakah Dekad Seterusnya?

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Abstract

The development of maritime archaeology in Southeast Asia is slower even though this region is historically rich in maritime trading ports and maritime polities. Since the 1980s, the progress of maritime archaeology in Malaysia started slowly and with the collaboration between the Malaysian government and private commercial companies. In 2015, a maritime archaeology salvage project took place on Bidong Island, Terengganu, by a local university and local experts. Malaysia also provides through the National Heritage Act 2005 a mechanism to protect the national heritage including underwater cultural heritage to replace the Antiquities Act 1976 and the Treasure Trove Act 1957. The newfound shipwreck site acts as a catalyst in Malaysian waters to improve the effort to protect underwater cultural heritage and continue maritime or underwater archaeology activities in the future through local effort. To do so, a more comprehensive capacity development analysis is needed to establish and secure this new archaeology especially in the academic world in Malaysia using the framework introduced by Jänicke (1997) that provides new insight on how to make sure any effort to establish new discipline or continuation of a good workforce by three systemic framework conditions which are cognitive-informational framework, political-institutional framework, and economic-technological framework. Those three systemic framework conditions are crucial in order to provide and maintain a good continuation effort in maritime archaeology in Malaysia.

Perkembangan bidang arkeologi maritim di Asia Tenggara adalah lebih perlahan meskipun rantau ini memiliki sejarah maritim yang kaya dari segi pusat perdagangan, entiti kerajaan maritim dan khazanah tersimpan yang masih belum diselidiki di kawasan masing-masing. Semenjak tahun 1980-an, perkembangan bidang arkeologi maritim di Malaysia bergerak perlahan dengan wujudnya kolaborasi antara kerajaan Malaysia dengan syarikat komersial persendirian. Baru-baru ini ketika 2015, sebuah projek salvaj di Pulau Bidong Terengganu yang dikendalikan sepenuhnya oleh universiti tempatan dengan kepakaran tempatan. Tambahan, Malaysia kini menggunakan National Heritage Act 2005 sebagai mekanisme terbaru dalam menjaga warisan kebangsaan termasuklah warisan kebudayaan bawah air bagi menggantikan Antiquities Act 1976 dan Treasure Trove Act 1957. Projek ini menjadi satu titik mula bagi usaha meningkatkan penggunaan kepakaran dan usaha

tempatan dalam perkembangan bidang arkeologi maritim Malaysia serta usaha melindungi serta memulihara warisan kebudayaan bawah air. Untuk ini, sebuah analisis menggunakan konsep pembangunan kapasiti harus dilakukan, sekaligus untuk membina bidang arkeologi baru ini terutamanya di peringkat akademik di Malaysia dengan menggunakan kerangka sistem yang diperkenalkan Jänicke (1997) dimana tiga sistem kerangka ini penting untuk diambil kira bagi memastikan usaha menubuhkan bidang baru atau gerak kerja yang berterusan berlaku menerusi sistem kerangka kognitif-informatif, kerangka sistem politik-institusi dan juga kerangka sistem ekonomi-teknologi Ketiga-tiga sistem kerangka ini adalah mustahak untuk diteliti bagi memastikan keberlangsungan bidang arkeologi maritim di Malaysia dapat direalisasikan.

Keywords: maritime archaeology, capacity development, Malaysian archaeology, South-East Asia (SEA) archaeology, archaeology in academic | arkeologi maritim, Pembangunan kapasiti, arkeologi Malaysia, arkeologi Asia Tenggara, arkeologi akademik

Introduction

Maritime archaeology in Malaysia officially began in the 1980s through the government agency Jabatan Muzium dan Antikuiti (the Department of Museums and Antiquity, hereafter JMA). It grew slowly with the help of collaboration with private commercial companies such as Transea Sdn. Bhd and Nanhai Marine Archaeology Sdn. Bhd. Development of this new archaeology especially in the Global South such as Malaysia, Indonesia, and Vietnam underwent similar situations in which collaboration with commercial partners was necessary as these countries did not have their experts and financial resources. In the beginning, archaeologists assisted divers in underwater excavations even if both parties did not have the skills in diving or archaeology. In Malaysia, the Malaysian Navy (Tentera Laut Diraja Malaysia or TLDM) would dive while the archaeologist would assist on the boat.

Nowadays, capacity in maritime and underwater archaeology varies depending on the institution in each country and the expertise they possess. Maritime archaeology in Southeast Asia is slower even though this region is historically rich in maritime trading ports and polities. Orillaneda (2016) wrote that it has only been in a few decades that maritime and shipwreck archaeology emerged in this Southeast Asian region, and that is why there is limited information regarding shipbuilding and technology including ceramic trade wares produced by China and Southeast Asian tradition. Orillaneda (2016) mentioned even though the 15th century plays a huge role in the Southeast Asian region, the field of research in maritime archaeology is close to none. He stated that "Melaka, considered the period's premier polity, has surprisingly yielded scarce material evidence," (Orillaneda 2016). Because of this, he suggested that the best way to answer questions regarding that period is through the research of shipwrecks. Moreover, in most cases of trading shipwrecks, the artifacts found are in abundance, thus providing more accurate data on products dating from the year of the wreck and the development of trading ceramics in the region.

In this article, the authors will introduce an analysis of Malaysian maritime archaeology through the framework of capacity development focusing on the systemic framework condition. Capacity development in this article is derived from the work of Jänicke (1997) for environmental policy which said there are five factors that influenced the outcome of certain strategies which are (a) actors, (b) strategies, (c) systemic framework conditions, (d) situative contexts and (e) problems (see Fig. 1). According to Jänicke, "perceived problems lead actors to develop and implement strategies (typically against opposing target groups) under systemic conditions and within situative contexts (Jänicke 1997).

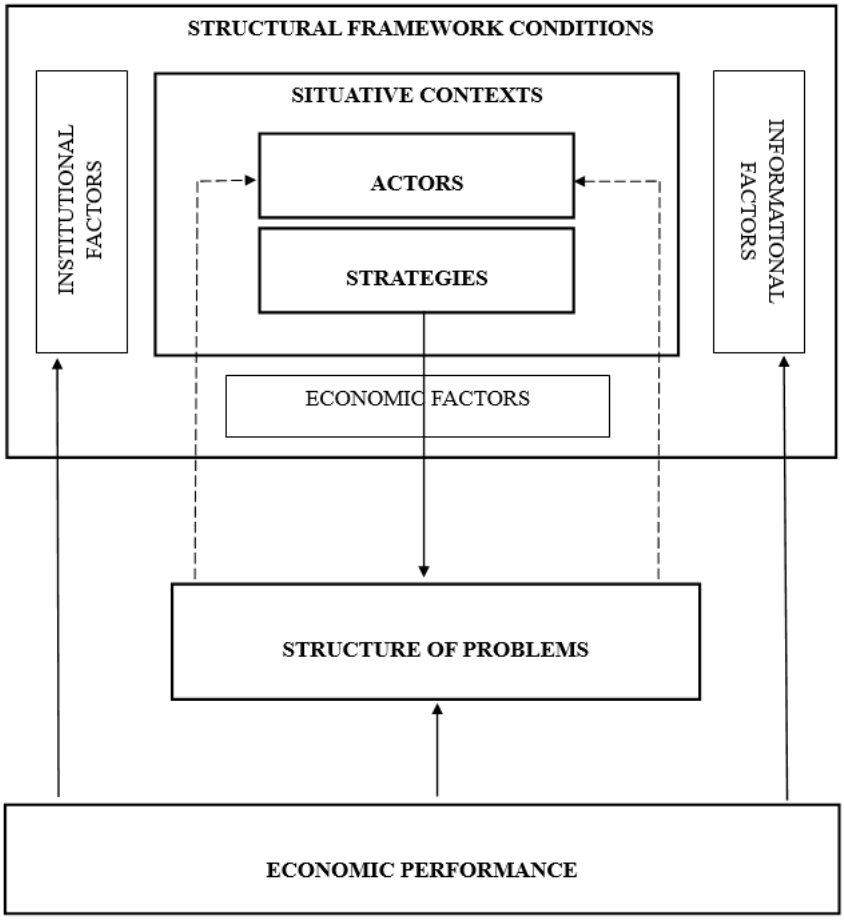

Fig. 1 Model of policy explanation by Jänicke (1997:5)

Robert MacKintosh (2019) borrows a theoretical concept from the environmental sciences literature by Jänicke (1997) and demonstrates how it can be applied to maritime archaeology. This framework is chosen as the authors believe to provide an analysis based on the development of maritime archaeology in Malaysia, all stakeholders or actors need to be included. Using this borrowed concept from Jänicke (1997), we can discuss how the framework can be used as an analysis framework in Malaysia in maritime archaeology through these five factors.

Structure of the problems

The ability to solve a problem depends on the nature of the problem itself (Jänicke 1997). It is true that in every archaeological project, the archaeologist's team will be facing different kinds of problems. In maritime archaeology, the main challenges are the remoteness and difficulty to access the site, which leads to a problem in protecting it (MacKintosh 2019). In many cases, this issue leads to a lower priority given to the field. The severity of maritime archaeology also can be seen using a specialized type of technology and different sets of skills required by the actors. One needs to have basic diving skills and enhance the skills based on the requirement of the sites.

Actors

The second factor, actors, might be considered the most familiar problem in the development of maritime archaeology. Until now, individual capacity development has always been the main agenda in capacity-building networks. It focuses on the competencies of the individual such as knowledge, skills, and abilities (Jänicke 1997), but it is not sufficient for establishing new ideas or theories in practicing maritime archaeology. This is what we can see been provided by the training by UNESCO and the Southeast Asian Ministers of Education Organization Regional Centre for

Archaeology and Fine Arts (SEAMEO SPAFA) in Thailand. The capacity building provided by the center is not enough or can be called a mono-factorial solution for this 21st-century requirement. According to Manders and Underwood (2015), this kind of capacity building is often measured in its success by listing the number of actors trained, or the number of courses ran. Malaysia especially cannot rely only on this approach anymore instead; we need new support and mechanisms from local expertise to enhance this new archaeology field.

Situative Context and Strategy

These two factors will be supported with the approach of situative context and strategies to make it a complete capacity development strategy as mentioned by MacKintosh. Creating strategies to develop capacity in maritime archaeology and underwater cultural heritage protection could help produce long-term gains, but only if they are tailored to each state's unique amalgam of framework conditions and situative contexts. Analysis of the framework conditions and the development of a suitable strategy should form a key stage in all capacity development efforts. The strategy that has been used all this while at the regional level suggested that there is awareness at the administrative level; workshops, seminars, and proceedings that have been conducted annually or bi-annually, but it was more focused on the political-institutional level. The strategy is the general approach to the problems which is using instruments, capacities, and situative opportunities in order to achieve the long-term goal. Strategies depend on the capabilities of producing knowledge and taking coordinated and strategic action based on that knowledge.

Systemic Framework Conditions

The focus of this article is how systemic framework conditions as the third factor in capacity development should be the focus of Malaysian maritime archaeology's future. According to (Jänicke 1997), three interacting groups of framework conditions are distinct but related to each other. In other words, if we only been focusing on only one group out of these three, we cannot achieve the long-lasting goal of establishing maritime archaeology as a whole in Malaysia. The first one is the cognitive-informational framework conditions. This condition is where knowledge is "produced, distributed, interpreted, and applied. Without knowledge there are no (perceived) problems, no public awareness, and consequently no policy process" (Jänicke 1997). When this condition is applied in maritime archaeology, three levels are identified which are 1) the ability of archaeologists to produce information, 2) the dissemination of this information causing or raising public awareness, and 3) political awareness (MacKintosh 2019). The second group in framework conditions is political-institutional framework conditions, which are the constitutional, institutional, and legal structures for interaction (Jänicke 1997). Finally, the last group is the economic-technological framework condition, the gross domestic product (GDP) of the country, and the availability of technology (Jänicke 1997). These framework conditions impact the ability of a country to provide better care and support for maritime archaeology, and if Malaysia is to develop capacity development initiatives without addressing these three conditions, any effort towards it can only achieve temporary success for a short term. Figure 2 shows the classes of systemic framework conditions mentioned by Jänicke.

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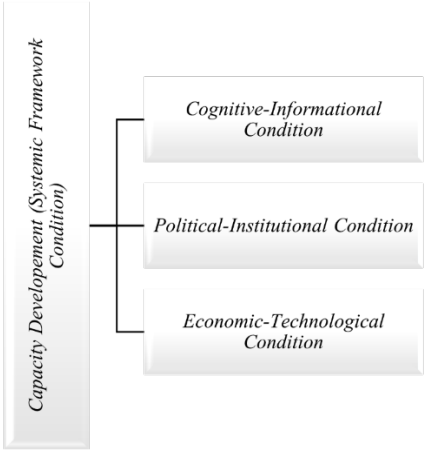

Fig. 2 Systemic framework conditions influenced capacity development.

Maritime Culture and Underwater Archaeology

It is quite confusing for those new to the field to separate these two popular terms - underwater or maritime archaeology. Which one is supposed to be used when conducting research and where does the overlap occur within these two terms? To distinguish between those two, Muckelroy (1978) gave a model for us to recognize the overlap between the terms underwater, maritime, or nautical archaeology as shown in Fig. 3 below.

Nautical Archaeology	A + B + D
Archaeology under water	E + D
Underwater Archaeology but not Nautical nor Maritime	F
Area concerned with Maritime Archaeology	E + D + B + C

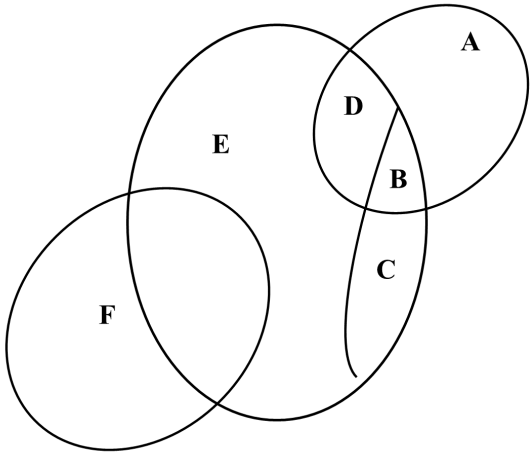

Fig. 3 Overlap in maritime archaeology fields based on model by Muckelroy (1978).

As stated above, the sub-discipline of nautical and maritime archaeology is not necessarily found or excavated in water regions (underwater or deep-water areas) as tagged in A, B, and C. Nautical archaeology is defined by the study of any sea vessel and its construction, it can be found either on land or in the sea. Meanwhile, maritime archaeology can be defined as the relationship of the people with the marine environment, the culture it possesses, and its influence on the people's lives. Underwater archaeology is the study of any monuments, artifacts, or site found under the sea even if it does not have any relationship with the maritime culture. Those artifacts or sites related to underwater areas such as old town sites or aircraft, that do not have any relation to nautical or maritime heritage are tagged in F. Using this diagram, we can see that maritime archaeology poses

a bigger picture in explaining the field that related to underwater archaeology. The UNESCO website (2017) states:

> Underwater archaeology is a sub-discipline, which studies submerged; sites, artifacts, human remains, and landscapes. It is to be seen in the larger context of maritime archaeology, which studies human relations with oceans, lakes, and rivers and is complemented by nautical archaeology, which studies vessel construction and use.

Asyaari Muhamad (2018) mentioned in his book that underwater archaeology does have differences in physical aspects compared to land or terrestrial archaeology, it is just that in a way they differ in working methods, the tools being used, and the characteristics of the artifacts found. Nevertheless, he mentioned that the objectives of any archaeological field are still the same, which is simply to search, research, and reconstruct the past. It is agreed upon that the terms provided by maritime archaeology are broader Mundardjito (2007) and cover bigger aspects of maritime culture compared to underwater archaeology. In this paper, we will follow the definition provided by UNESCO above to distinguish the differences between underwater archaeology which is the study of submerged sites including landscapes, artifacts, and human remains that are found underwater. Meanwhile, maritime archaeology is the study of human relations with marine areas including lakes, oceans, and rivers. As for nautical archaeology, they fit into the definition of the study of vessel construction and its use.

Underwater Archaeology in Malaysia

Jabatan Muzium dan Antikuiti (Department of Museums and Antiquity) phase (1980-2005)
From 1980 to 2005, the JMA was Malaysia's sole administrative agency in heritage and history. During this period, the number of shipwreck sites found by them with commercial companies increased (Table 1). The most significant sites (projects) were the Diana shipwreck and the Risdam shipwreck which attracted news headlines because they involved legal actions. The Risdam was built in 1713 and according to Green (1986), the vessel left Ayutthaya in a leaking condition on December 8th, 1726, and on January 1st, 1727, the vessel was intentionally abandoned near Pulau Batu Gajah to save the lives of the crew when the leak became substantial (Green 1986; Brown and Sjostrand 2001). The Risdam wreck is an example of an 18th century Dutch East Indiaman, a *Vereenigde Oost-Indische Compagnie* VOC flute (Ooi 2015). For the Risdam wreck, artifacts were looted in Mersing, Johor, and brought to Singapore through illegal salvaging work undertaken in 1983 by H.C.Besancon and Dutch East Indian Wreck Research Foundation (Bilcher Bala and Baszley Bee 2002), and later were impounded by the Singapore authorities. The artifacts returned by Singaporean authorities were five tin ingots and 61 elephants' tusks (Green 1986).
Meanwhile, the Diana was an English East Indiaman, a country trader vessel. The name Diana is known from the archival records of the British East India Company (Brown and Sjostrand 2001). The wreck was found in 1993 after sinking in 1817, crashed against submerged boulders in the Straits of Melaka. Through the research of Dorian Ball, a Singapore-based treasure hunter, he found the Diana wreck and the salvaging work was undertaken by Malaysian Historical Salvage (MHS), a private commercial enterprise under the supervision of JMA in 1994. In the case of Diana, there was dissatisfaction between the salvors (Dorian Ball and the MHS) versus the Malaysian government as the latter was to partake 35 percent of the value of cargo (Wells 1995). This situation was perceived by both Ball and MHS to be disadvantageous and led them to take the Malaysian government into a prolonged court proceeding concluding in favour of the Malaysian government

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(Ooi 2015). The Diana situation acted as an eye-opener to the Malaysian government to take a better stand and more proactive measures regarding maritime archaeology in the future. Most of the findings in the time of JMA with commercial companies were discovered by foreign researchers and private companies. During this period, the Malaysian government used the Antiquities Act 1976 (Act 168) and the Treasure Trove Act 1957 (Act 542) as the legal means to carry out any operation (terrestrial or underwater) regarding national heritage. However, the Antiquities Act 1976 only regulates the West Malaysian region and did not mention any underwater cultural heritage. While both Acts are related to Malaysian heritage, they were relatively old and were not able to address newer issues (Abdul Munir Yaacob 1989); for example, the Treasure Trove Act 1957 was enacted when Malaysia gained independence in 1957, but the law was too weak and only focused on treasure itself, and not about the preservation and protection of heritage (Mohd Yuszaidi Mohd Yusoff and Muammar Ghaddafi Hanafiah 2015).

	Shipwreck sites	Age	Found	Agency/Company Involved
1.	Japanese Wreck, Pantai Cendering Terengganu	1941-45	1980	JMA, TLDM
2.	Risdam, Mersing Johor	1727	1984	TLDM, JMA, UM, WAMM
3.	Azie, Tanjung Tuan	-	1989	JMA
4.	La Paix, Beting Bambek, Tanjung Tuan	1805	1993	Transea Sdn. Bhd.
5.	Diana, Tanjung Bidara Selat Melaka	1817	1993	Malaysia Historical Salvors Sdn. Bhd.
6.	Nassau, Tanjung Tuan	1606	1993	Transea Sdn. Bhd.
7.	Duerte de Guerra, Tanjung Tuan	-	1993	Transea Sn. Bhd.
8.	Middelburg, Tanjung Tuan	-	1993	Transea Sdn. Bhd.
9.	Sao Salvador, Tanjung Tuan	-	1993	Transea Sdn.Bhd.
10.	Nanyang, Pulau Pemanggil Pahang	+-1380	1995	Nanhai Marine Archaeology Sdn. Bhd.
12.	Longquan, Laut China Selatan Terengganu	+-1400	1996	Nanhai Marine Archaeology Sdn. Bhd.
13.	Royal Nanhai, Pulau Pemanggil Pahang	+-1460	1995	Nanhai Marine Archaeology Sdn. Bhd.
14.	Turiang, Selat Johor	+-1370	1998	Nanhai Marine Archaeology Sdn. Bhd.
15.	Singtai, Pulau Redang	+-1550	2001	Nanhai Marine Archaeology Sdn Bhd
16.	Desaru, Perairan Desaru Johor	+-1830	2001	Nanhai Marine Archaeology Sdn Bhd
17.	Wanli, Perairan Dungun Tanjung Jara Terengganu	+-1620	2003	Nanhai Marine Archaeology Sdn Bhd
18.	Tanjung Simpang, Mangayau Sabah		2003	Nanhai Marine Archaeology Sdn Bhd

Table 1 Shipwreck sites found during the JMA period from 1980 to 2005. Abbreviations: Jabatan Muzium dan Antikuiti (Department of Museums and Antiquities, JMA), Tentera Laut Diraja Malaysia (Malaysia Royal Navy, TLDM), Universiti Malaya (UM), Western Australia Maritime Museum (WAMM). Sources: Zainuddin Baco and Stephen Chia (2020) and Bilcher Bala and Baszley Bee (2002).

In 2001, JMA established a unit focusing on maritime archaeology. Samsol Sahar[1] and Sharipah Lok Lok Syed Idrus[2] were among the personnel in JMA that were actively involved in underwater or maritime archaeology. They also became the co-authors with Sten Sjostrand about Malaysian shipwrecks and the Wanli wreck. While some members of the maritime archaeology unit underwent diving training, others who did not would assist with the classification of the finds as well as cleaning and registering artifacts (Sjostrand and Sharipah Lok Lok 2007). They also received a special training class by Dr. Roxanna Brown in ceramics history and identification at the Southeast Asian Ceramics Museum in Bangkok University in 2003. During the 1990s, as Malaysia slowly gained experience in maritime archaeology, the government realized the need to have well-trained curators and staff in JMA. Thus, one assistant curator (Samsol Sahar) was given a UNESCO fellowship award. Other members of JMA, Peter Koon from Jabatan Muzium Sabah (Sabah State Museum, JMS), and a TLDM officer were trained under the SEAMEO SPAFA program based in Bangkok, Thailand in the 1990s and Samsol Sahar together with Sherman trained with SEAMEO SPAFA again in 2003 (Sjostrand et al. 2006:14; Sherman pers. comm. 2022).

Jabatan Warisan Negara (Department of National Heritage) phase (2006 - present)

In 2006, a new government agency named Jabatan Warisan Negara (JWN) was established, after the National Heritage Act 2005 (ACT 645) was proposed as a new mechanism to protect the heritage of Malaysia. The responsibilities regarding the protection and preservation of national heritage transferred from the JMA to JWN. JWN also established a specific unit for underwater archaeology within the archaeology department. Currently, there is seven personnel from JWN that handles everything regarding underwater cultural heritage (UCH). Figure 4 outlines the organizational hierarchy of the underwater archaeology unit in Malaysia.

[1] Samsol Sahar, Adi Haji Taha, and Sten Sjostrand wrote the 2006 book Mysteries of Malaysian Shipwrecks published in collaboration with the Ministry of Culture, Arts and Heritage Malaysia, JMA and Nanhai Marine Archaeology Sdn Bhd. He joined JMA in 2001 and was appointed as head of the maritime team that has been undergoing training in maritime archaeology. Ministry of Culture, Arts and Heritage is now known as the Ministry of Tourism, Arts, and Culture (MOTAC) (Sjostrand et al. 2006)

[2] Sharipah Lok Lok and Sten Sjostrand wrote the 2007 book The Wanli Shipwreck and Its Ceramic Cargo, also published in collaboration with the Ministry of Culture, Arts and Heritage Malaysia, JMA, and Nanhai Marine Archaeology Sdn Bhd. She was one of the members appointed in the maritime team section in JMA who first learned diving and study about 17th-century Chinese porcelain.

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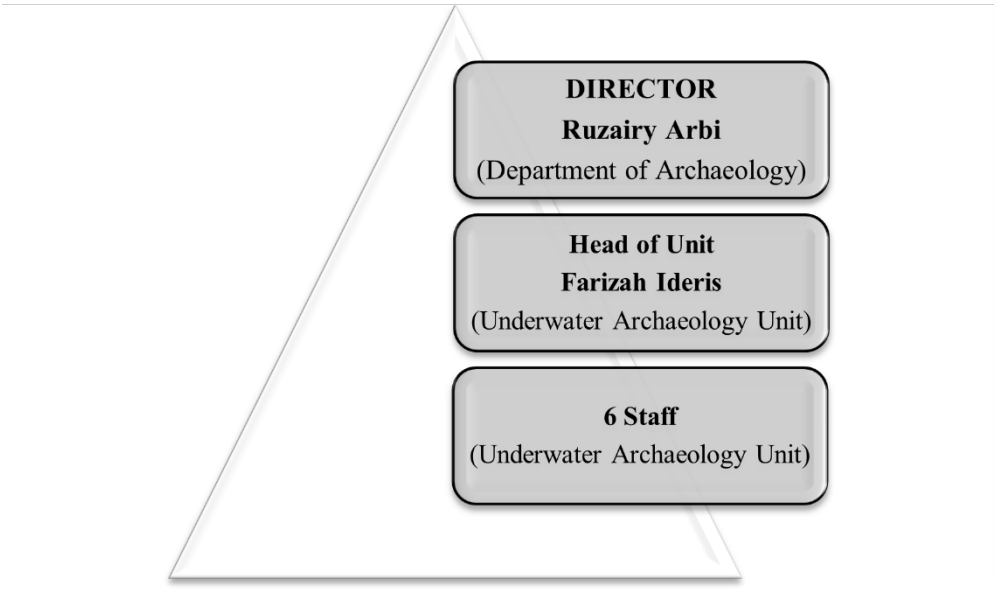

Fig. 4 Organizational chart of the JWN underwater archaeology unit.

	Maritime sites	Details	Year	Agency involved
1	Melaka Straits	Survey for finding potential shipwrecks	2007	JWN, PERZIM, JMM, UMT, TLDM
2	Tanjung Tuan	survey to find UCH	2014	JWN
3	*Bidong Wreck,* Pulau Bidong Terengganu	shipwreck wood and artifacts from the 15th century	Found in 2012, salvaged in 2015	JWN, UMT, ATMA, UZMA
4	Penjom, Pahang	Wooden shipwrecks	2021	JWN
5	Pulau Melaka	+-1500M (Ceramic, coins, wooden shipwreck)	2021	JWN, PERZIM, ATMA

Table 2 Significant projects and discoveries under JWN.

From 2015 until 2017 a team consisting of JWN, Universiti Malaysia Terengganu (UMT), and private company UZMA through its underwater archaeology research division (UAR), and a senior researcher specializing in maritime archaeology from the Institute of The Malay World and Civilization (ATMA) Universiti Kebangsaan Malaysia (UKM) investigated a shipwreck site in Bidong Island which was found in 2012. This team conducted the first locally researched salvage operation for the Bidong Wreck. They managed to discover many ancient artifacts that were suspected to originate from Thai kilns in the 15th century (Asyaari Muhamad 2018). Because it is fully excavated by local university expertise, the artifacts salvaged can be used for further research in the future by the new generations of student archaeologists that is now stored in UMT. This newfound shipwreck site acts as a catalyst in the development of maritime archaeology in Malaysian waters (Asyaari Muhamad 2018) to improve the effort in protecting underwater cultural heritage thus continuing to perform any maritime or underwater archaeology activities in the future using local expertise.

The situation that happened to the Diana and Risdam shipwrecks before this leads to several questions regarding the potential and future of maritime archaeology in Malaysia. One of them is how this field can be upgraded into research-led archaeology by academicians or archaeologists themselves, rather than commercial-led archaeology. This problem has arisen in several cases in underwater salvage operations in Malaysia, and surely the same situation cannot be allowed to

occur again. This research is relevant in Malaysia, as one of the first steps to acknowledging the field of maritime archaeology, especially in Malaysia's cognitive-informational framework condition.

Maritime and Underwater Archaeology Development

Training programs in Thailand (SEAMEO SPAFA and UNESCO)

Earlier developments in Southeast Asia regarding maritime archaeology were introduced in Thailand which became the center of training for maritime archaeology in the region. UNESCO has set the guidelines for regional capacity building for how the State Parties can better identify, research, and protect their underwater heritage. The Annex to the Convention on the Protection of the Underwater Cultural Heritage in 2001 set out 36 specific rules concerning activities directed at underwater cultural heritage that should be accepted and applied as the reference document for interventions directed at underwater cultural heritage (UNESCO 2002:58). Many Malaysian museum officers received training in Thailand under SEAMEO SPAFA and UNESCO including Samsol Sahar, Sherman Sauffi[3], and Khairil Amri[4]. This regional field training was conducted at the Underwater Archaeology Division of the Fine Arts Department in Chanthaburi, Thailand from 2001 until 2008. As the main location for capacity building in the Southeast Asian region for underwater and maritime archaeology, the training was organized to achieve these objectives and targets (Favis 2003):

1) To build regional capacity in the protection and management of UCH through professional training in field techniques on underwater archaeological site inventory and mapping, non-invasive techniques of site identification, inventory and investigation, museology techniques, and site monitoring and protection according to international professional standards. The application of the provisions of the Annex to the Convention is particularly stressed.
2) To provide a platform for effective networking among the Member States by encouraging close collaboration and dissemination of best practices, thereby promoting regional cooperation through the exchange of information on the conservation and management of a shared heritage.
3) To prepare Member States for the ratification and implementation of the Convention on the Protection of the Underwater Cultural Heritage 2001 and its Annex.

(Favis 2003)

During the JMA phase until the takeover of responsibilities by JWN, over 10 personnel gained their diving license and proper training (Sherman pers. comm. 2022) with some of them placed in different agencies today. Nevertheless, having this agency personnel to gain proper training in conducting technical difficulties whilst carrying out excavation or salvage operations underwater is beneficial and is a must for Malaysia. But having trained officers are not enough as they still needed experienced archaeologists for guiding and ensuring them through a systematic excavation of the wreck sites.

[3] Now an assistant curator (research officer) of prehistory, land, and maritime archaeology in Jabatan Muzium Sarawak or Sarawak State Museum.

[4] Currently working as a JWN museum assistant.

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Malaysian Law on Underwater Cultural Heritage (National Heritage Act 2005)

After the establishment of JWN in 2006, Malaysian authorities used Act 645, or the National Heritage Act 2005 to manage the legal part of this field. As stated in this Act 645; underwater cultural heritage in Malaysia is defined as:

> Underwater cultural heritage means all traces of human existence having a cultural, historical, or archaeological character that has been partially or totally under water, periodically or continuously, for at least one hundred years as-
>
> 1. Sites, structures, buildings, artifacts, and human remains, together with their archaeological and natural context.
> 2. Vessels, aircraft, other vehicles, or any part thereof, their cargo or other contents, together with their archaeological and natural context; and
> 3. Objects of prehistoric character.
>
> (Law of Malaysia: National Heritage Act 2005 (Act 645) 2006:16)

Part IX of the act from Section 61-66 dealt specifically with underwater cultural heritage in Malaysia. Before this, the previous acts under the Antiquities Act 1976 and Treasure Trove Act 1957 did not have any laws pertaining to underwater cultural heritage as the awareness of this issue was close to none and because it was too early for Malaysia in this aspect of law. Before this National Heritage 2005 act existed, the Antiquities Act 1976 and Treasure Trove Act 1957 were the only laws that could protect national heritage, but they did not cover all aspects of heritage (Abdul Munir Yaacob 1989). The Treasure Trove Act 1957 mainly focuses on the treasure itself instead of the protection and conservation of the heritage and was later replaced by Antiquities Act 1976 and was used until 2005 (Mohd Yuszaidi Mohd Yusoff and Muammar Ghaddafi Hanafiah 2015). Treasure trove is defined as any money, coin, gold, silver, plate, bullion jewelry, precious stone, or any object or article of value found hidden in, or in anything affixed to, the soil or the bed, of a river, or lake or of the sea, the owner of which is unknown or cannot be found, but does not include any tangible cultural heritage (National Heritage Act 2005:12). The authors believe capacity development in maritime archaeology especially in the Malaysian context needs to be discussed as much as the discussion about legal affairs regarding heritage management. For the time being, Malaysia is lacking in the discussion of theoretical concept writing in archaeology, especially in maritime archaeology which is considered still at the infancy level of development.

Players Involved and Limitations

In many ways, the development of maritime archaeology cannot be sustained if only led by a one-sided effort. This type of effort can cause various complications and dangers in the future if not detected and mentioned early by the people involved in the research area. Mainly, it was the government's effort and responsibility in ensuring the historical evidence of the nation was saved and protected. To do so, government agencies such as JWN and JMM were established according to their specialty and knowledge. Since the 1980s, JMA – which is now known as JMM, has been conducting many surveys and excavations of underwater sites and some of them have provided significant findings of artifacts including gold, tin ingots, iron pieces, coins, ceramics, cannons, beads, glass, and shipping paraphernalia (Ooi 2015).

As the Southeast Asian region is one of the best and the richest in the history of maritime industries in the past, it is the most perfect place for researchers to conduct maritime-related research in this area. For nearly three decades since the 1980s, Malaysia has slowly and progressively built up its

knowledge in understanding its value in the field of maritime and underwater archaeology. This effort should continue to do so in the next three decades, developing future knowledgeable and innovative archaeologists in protecting the underwater cultural heritage.

This effort should be complemented by all three systemic framework conditions – (1) cognitive-informational framework conditions, (2) political-institutional and, (3) economic-technological framework conditions. These three conditions should be focused on together, not just being one-sided efforts in our effort to establish the field of maritime archaeology. The tradition of mono-factorial approaches, like individual training of Actors, is not able to succeed on its own without the wider effort to seek to understand the three systemic framework conditions in the Malaysian maritime archaeology field. In other words, a more holistic idea, cornered by the three conditions, will become a holistic strategy to boost the development of capacity in maritime archaeology in Malaysia. The academic community needs to fasten their grasp in this field than the treasure salvors, as, across the globe, the community of treasure salvors might harm and disturb the underwater artifacts for their own gain. If it continues to do so, the loss of archaeological data from the maritime world will be lost forever.

Political-Institutional framework condition

The first and most important player in the field belongs to the government agency itself in providing guidance and explaining laws. Even though Malaysia did not ratify the Convention on the Protection of the underwater Cultural Heritage 2001 (CPUCH), the government agreed to accept all the guidelines provided in the CPUCH 2001 as the benchmark for protecting underwater heritage in Malaysia (Zainuddin Baco et al. 2022) such as rule 6 of the annex mentioning any activities directed at underwater cultural heritage shall be strictly regulated to ensure proper recording of cultural, historical and archaeological information. The same is also found in the National Heritage Act 2005 mentioned in sections 65 and 66. Malaysia did not ratify this CPUCH 2001 as during this convention only the delegates from JMA attended, so they only voted to accept the guidelines and rules. After that in 2002, all the Malaysian agencies involve in underwater cultural heritage and maritime, academicians and representatives from private salvage company held a meeting on this issue on ratifying the convention (Adi Taha 2003; Zainuddin Baco et al. 2021). Until 2015, this CPUCH 2001 still has not been ratified based on several concerns regarding national security and sovereignty in maritime areas. According to Adi Taha (2003), Malaysia initiates to draft the National Heritage Act 2005 in 2003 as the first or early step in order to ratify the CPUCH 2001 (Adi Taha 2003). According to the director of JWN, Malaysia still has moral obligations towards the convention even if Malaysia does not ratify the CPUCH (Zainuddin Baco et al. 2021).

Economic-Technological framework condition

A country's gross national product (GNP) per capita is an important determinant of existing capacities (Jänicke 1997). Even with the effort already being initiated at the institutional level, the economy of the country does have its own roles to provide the means and allocation suitable to the requirement such as boats, training facilities, and many more. Malaysian government sends museum and heritage officers to gain training and new techniques to preserve heritage in the regional training field in Chanthaburi, Thailand. Up until now, Malaysia has yet to come up with its own initiatives to have a training facility in the maritime archaeology field and still relies on the training provided by UNESCO in Thailand. But, according to JWN's archaeology director, there is an idea to establish one training center, but the capacity to have a support team of academics to run the institution needs to be developed first to have continued progress (Ruzairy pers. comm. 2021). For a facility to be set up, a lot of investment needs to be done, and technical expertise is required.

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It is suggested that Malaysia needs to learn from the experts such as in Australian museums and research institutions before we can come up with our local expertise in the next decade.

Cognitive-Informational framework condition

The second player in the field is the researchers themselves. These players can be classified as interested laypeople; such as treasure salvors, local people, and academicians; such as fellows, lecturers, students, and preservationists. The most important factor in this class is the academicians' category. In other words, support from an academic institution can help to boost the development of maritime archaeology in the country, as academically, they can provide thorough research and investigation, publish articles in journals, and share knowledge with the community, and other researchers globally. One excavation project can provide many answers to our past as a nation, so continuous research from academic institutions is a must in providing longer-term success in the maritime archaeology field. Many countries already have an institution run by academicians and professional archaeologists in this field, such as India through the Maritime Research Center in Pune and Australia through the Western Australian Maritime Museum and Flinders University. Treasure salvors are defined as people who get their primary source of income through investment organizations to recover shipwrecks for profit. This is what we called as commercial-led archaeology. They proceed to salvage the artifacts through minimization of recovery cost which usually has a maximum commercial value (Giesecke 2002). This is also saying that their first goal is strictly towards financial profit. This kind of act can lead to the loss of archaeologically valuable data and artifacts for future researchers. Local people or community in Malaysia also play their part in locating and informing the agency when they found artifacts. In the case of Bidong Wreck, they artifacts were first found by the fishermen in 2012.But in certain cases, in Sabah for instance, the local community takes their chances in gathering the artifacts without the knowledge of authorities after the excavation of Tanjung Simpang Mengayau Wreck. Also in Melaka, the fishermen in Kampung Hailam found and sold various artifacts to private collectors (Nazir Ayob pers. comm. 2022).

Maritime Archaeology Malaysia 2020

For the time being, none of the universities in Malaysia offers a course on maritime archaeology specifically. This situation is not shocking as many countries in the world experience the same thing and only a handful of institutions around the world offer a program of maritime or underwater archaeology. This reason may be contributed to the fact that this field is too specialized, and it requires a certain set of skills to do excavation underwater, for instance, the person needs to have a diving license first to be able to do the work on the wreck site. This situation might not gain interest for students in tertiary education level to pursue studying the field. Even though Malaysia has started salvaging the remaining wrecks found from the 1980s, there are no academic institutions that offer courses on this subject. From 2015 until 2019, universities such as Universiti Malaysia Terengganu (UMT) started the research of Bidong Wreck in Terengganu, salvaging the artifacts using an archaeological methodology with the help of maritime experts such as Assoc. Prof. Dr. Asyaari from the Institute of The Malay World and Civilization (ATMA). This first effort from the local university should be supported by other local universities that have the capabilities to do research regarding maritime archaeology. In Malaysia, the highest power of an academic institution or university falls under the university administration’s responsibilities and cannot be made by the outsiders such as government agencies.

In the Institute of The Malay World and Civilization (ATMA), since 2015, one of the senior fellow researchers who is now the deputy director of the institution is currently expanding this field of archaeology by doing heritage impact assessment (HIA) in the maritime area in Malacca, Malaysia.

Two of his postgraduate students are helping him expand this maritime archaeology to be implemented as one of the course subjects in tertiary-level education in Malaysia. Since 2020, he already has led three projects regarding HIA in Malacca, Malaysia which involved the maritime area.

As a result of the Bidong Wreck project from 2015 to 2019, Malaysia will establish a training center for marine archaeology on the island of Bidong. This can be seen as an opportunity to create awareness from the people's level until political awareness to protect the underwater cultural heritage. UMT is preparing to develop a center for marine archaeology that could pave a way for Malaysia to continue the effort to be the training center of underwater archaeology in the Southeast Asian region besides the one in Chanthaburi, Thailand. At the same time, ATMA will try to lead in maritime archaeology on the west coast of Malaysia. When this effort is already on its way to success, for future development, Malaysia might expand its influence in maritime archaeology across East Asia and create a bigger network of researchers' community in this field. This would help accumulate information in the database of shipwrecks across Asia for future research ideas.

Way forward in the Field

In conclusion of this writing, the authors would recommend that Malaysia should already be looking and studying to establish this maritime and underwater archaeology in tertiary education. Future research in maritime archaeology can be expanded from the study of shipwrecks, the origins of the ships and their cargo, the history of shipbuilding, and the symbolism of any wrecks. Any pattern on the ships might help us to understand the status and the technology of the people in that time that the modern world can learn and appreciate. This article also hopes to contribute more to maritime archaeology writings, especially in the theoretical concept of maritime archaeology in Malaysia and the authors will also continue to do more writings and share with the researcher community in Malaysia especially.

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