

Indonesian Maritime Cultural Resources Management:
A Study of Salvaged Material Cultures from Historic Shipwreck Finds in Indonesia

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Abstract

The struggling in the ethical issues of submerged underwater sites and underwater cultural heritage have been undertaken in Indonesia for the last two decades. Since the first major salvage case has occurred in Indonesia by Michael Hatcher, the central Government response has focused on the commercial survey and salvage of material cargoes from the historic shipwreck finds instead of the long term preservation. During these 20 years, commercial companies in collaboration with the National Shipwreck Committee recovered and salvaged substantial numbers of material cargoes. Unfortunately, the majority of these operations occurred without the involvement of archaeologists and lack of proper and controlled archaeological methods and excavation techniques. Since 2010, the Indonesian Government has declared a moratorium that temporarily stopped all commercial survey and salvage activities, and prohibits the sale of the artefacts. Nowadays, more than 190,000 artefacts raised by salvagers are currently stored at the National Shipwreck Committee warehouses near Jakarta, in Cileungsi, West Java, Indonesia. This study attempts to illustrate the disadvantages of the commercial salvage practices and the auction of salvaged artefacts. This research also discusses past and present practices related to maritime cultural resource management in Indonesia by identifying idiosyncrasies and providing some suggestions, where necessary, for improvement, to contribute to a more ethical system of protection and the long-term management of the Indonesian maritime cultural resources, including its existing collections from salvaged shipwreck sites that are stored at the National Shipwreck Committee warehouse today.

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Declaration of Candidate

I certify that this thesis does not incorporate without acknowledgment any material previously submitted for a degree or diploma in any university; and that to the best of my knowledge and belief it does not contain any material previously published or written by another person except where due reference is made in the text.

Signed:

A handwritten signature in black ink, appearing to read 'Hutomo Putra', written in a cursive style.

Hutomo Putra

CHAPTER 1

INTRODUCTION

1.1. Research background

As a country with a rich history and significant maritime cultural resources, Indonesia has experienced a true struggle with the ethical issues related to submerged archaeological sites and underwater cultural heritage. In fact, Indonesia is a country with a long track-record of commercial salvage and illegal looting, a lack of human resources to protect and research archaeology resources, inadequately trained underwater cultural heritage professionals, and issues related to the ethical considerations of the management of underwater cultural heritage (Flecker 2012:12–15). All the aforementioned factors and issues are problematic from an Indonesian Government perspective.

The commercial salvage activities are not unique to Indonesia but are a major ethical issue for underwater archaeology projects around the world (Bass 2011:11–14). Maritime or underwater archaeology aims to collect artefactual information and study the context of material cultures, while the main purpose of salvaging activity is the collection of material cultures for trading activity based on their monetary values (Bass 1966:16–17; 2011:11–14). Furthermore, the international best-practice standard for archaeology or underwater cultural heritage management is to keep datasets or collections together and, thus, maintain knowledge from these shipwreck sites and make them available for public access and future study. Salvage operations on the other hand calculate the most profit that can be made from minimum effort and hardly ever considers long-term preservation options (Maarleveld 2011:930–934).

Related issues of the management of underwater cultural heritage are comprised of many aspects. The problems with substandard underwater cultural heritage legislation and its

impact on archaeological resources are considered as one of the related issues in this research. Most problematic, Indonesia has two contradictory legislations pertaining to underwater cultural heritage that are administered within two different Indonesian Government institutions. The Coastal Zone and Small Islands Department, the National Shipwreck Committee Unit of the Ministry of Marine and Fishery administers the *Salvage and Utilization of the Valuable Material Cargoes from the Sunken Ship* legislation, while the Cultural Heritage Protection Division of the Ministry of Education and Culture is the Government's delegate for the *Cultural Heritage Protection Act*. It shows that Cultural Resources Management (CRM) in Indonesia includes and allows for the involvement of commercial and political interests in underwater cultural heritage and thus facilitates treasure hunting (Lenihan 1982:42).

The *Salvage and Utilization of the Valuable Material Cargoes from the Sunken Ship* legislation was drafted and endorsed by the National Shipwreck Committee in 1990. The formation of this committee and the 1990 legislative measures were the Indonesian Government's response to the first well-known salvage case in Indonesia: that of the *Geldermalsen* shipwreck by Michael Hatcher. The *Geldermalsen* site on Heluputan Reef represented the remains of a Dutch East India Company ship that sank in 1752 (Edwards 2000; Johnston 1997:287–288). The salvaged, archaeological artefacts from this 18th-century shipwreck, such its cargo of ceramics were auctioned via Christie's Auction House and raised \$20 million (Christie 1986), triggered a porcelain boom in the global art market (Sheaf&Kilburn 1988; Jörg 1986).

Since the legislative framework came into being, commercial surveys and salvage operations continued from 1990 to 2010 and were undertaken in Indonesian waters by salvage companies in collaboration with the National Shipwreck Committee. During these 20 years, commercial companies recovered and salvaged substantial numbers of material

cargoes. The majority of these operations occurred without the involvement of archaeologists and lack of proper and controlled archaeological methods and excavation techniques. Since 2010, the Indonesian Government has declared a moratorium that temporarily stopped all commercial survey and salvage activities, and prohibits the sale of the artefacts. As a result, more than 190,000 artefacts raised by salvagers are currently stored at the National Shipwreck Committee warehouses near Jakarta, in Cileungsi, West Java, Indonesia. All artefacts in this storage are not conserved and have yet to undergo conservation treatment—all artefacts raised prior to 2010 still await proper ex-situ recording, conservation treatment, study, and collection management.

1.2. Research problems and research questions

The aforementioned issues all relate to the commercial or economic perspectives of the salvage of shipwrecks and their valuable material cargoes. In fact, the Indonesian Government's position has been to make a profit from the selling of material cargoes from shipwreck sites rather than their optimization, utilization, and preservation for the benefits of further research, public knowledge and programs, and benefitting from the site and their associated artefacts as the cultural heritage tourism precincts. The latter considers shipwreck sites as long-term benefactors of Indonesian society, cultural heritage and the local economy. Since the formation of the National Shipwreck Committee, the Indonesian Government has mainly aimed to oversee shipwreck exploration and establish regulations designed to provide benefits for private treasure hunting companies from the sale of recovered material cargoes (Adams 2010:68). Such companies need to meet specific requirements to work including: the use of an Indonesian-registered company; the payment of a deposit and fees: acquiring permission from up to 22 different government departments: while maintaining minimum

archaeological standards and submitting to on-site supervision by Indonesian authorities (Flecker 2002:20–22).

As a result of the 2010 moratorium on commercial survey and salvage activities, commercial salvage operations have been temporarily put on hold and projects already in progress were stopped—they remain unfinished to date. Furthermore, all sales or auctions of salvaged archaeological materials have been prohibited for the duration of the moratorium. The moratorium has effectively created a loss of funds already invested by commercial companies into the salvage operations of shipwreck sites. Plus, as aforementioned, cultural material raised by commercial salvage companies are now stored in the National Shipwreck Committee warehouse and remain untouched.

The question arises: why does Indonesia still focus on commercial salvage operations and allows for the sale of its cultural heritage material rather than utilizing these important historic assets by preserving and optimizing them as a resource for the Indonesian people and future generations? It may be that the Indonesian Government still does not consider the significant contribution that archaeological sites and their associated cultural materials can provide in understanding the country's past when using and managing such resources in an ethical and sustainable manner.

Another possible hypothesis is the emphasis on the economic benefits from selling the salvaged artefacts. By considering the reason for the National Shipwreck Committee's conduct and the ramifications of commercial salvaging and the shared profit from selling the salvaged valuable material cargoes, the Indonesian government has argued that these activities represent national assets providing significance incomes and revenue for the country. In other words, it clearly defines the position of materially valuable cargoes as Indonesia's national treasure chest, and thus not as national cultural heritage resources.

Since 2010, the moratorium has stopped commercial survey and salvage activities, but the Indonesian Government has yet to formulate solutions to deal with issues related to its maritime culture resource management and the long-term strategies, i.e. conservation, curation, and display, for all salvaged artefacts. With this in mind, this thesis will focus on the issues related to maritime cultural resource management and the commercial salvage of shipwreck cargoes in Indonesian waters. The main question addressed in this thesis will be: How can maritime cultural heritage practices in Indonesia and the associated legislative frameworks be improved to provide better and more economical long-term strategies for the future? And if so, in what ways can these be taken forward?

1.3. Research aims and objectives

This thesis attempts to illustrate the disadvantages of the commercial salvage practices and the auction of salvaged artefacts. It sets out to explain the essential benefits of the preservation and protection of these material culture resources for Indonesia. The main aims that will be addressed are:

- How to assess the effect of illegal looting and commercial salvage projects on maritime cultural resources in Indonesia today;
- to study how the current legislative framework can provide for better protection of maritime cultural resources;
- to suggest solutions to improve the maritime cultural resources management.

This thesis will discuss past and present practices related to maritime cultural resource management in Indonesia. Subsequently, by identifying idiosyncrasies and providing some suggestions, where necessary, for improvement, it aims to contribute to a more ethical system of protection and the long-term management of the Indonesian maritime cultural resources,

including its existing collections from salvaged shipwreck sites that are stored at the National Shipwreck Committee warehouse today.

1.4. Significance

This study will lay out for consideration the significance of contributions that can be gained by the study of the huge numbers of salvaged material artifacts and their associated cultures. This will represent a significant contribution in this context by means of exploring the advantages resulting from conducting the protection and preservation on the material cultures. Indeed, the contribution only can be understood by realizing four related aspects described below.

The first aspect is the importance and essential meaning of material cultures. In general, the term material culture is used to describe the cultural products, including artefacts, objects and relics, made by a specific culture at a particular time (Prown 1982:1–3). In the maritime or underwater archaeological context, this also includes shipbuilding and tools, which are associated with and represent the material evidence of societies in the past, such as natural materials, material production (pottery, ceramics, glass), and human remains (Viduka 2012:6). Moreover, material culture is not only occurred in their context, but also conduct that context as the stage and sustain of human behaviour (McGuire 1992).

Then, Julian Thomas discusses how material culture can provide cognitive aspects and substantial human progress (Thomas 1996). Furthermore, material manifestations can represent the internalized norms and values of a culture by looking their patterns and templates (Childe 1936; 1942). Material cultures are also considered as an illustration of their meanings to be structured much like a text (Hodder 1992). More importantly, material culture is very resistant to analyse and interpret as the primary data for researchers, especially for archaeologists (Guarnello 2005:19–27).

The second aspect is salvage which is similar with treasure hunting and its impact on underwater cultural heritage or cultural resources. This issue begun from the destruction of shipwrecks and many thousands of other underwater sites due to the exploration by salvage companies which occurred in the past. The recovery of material cargoes from shipwrecks on the sea floor is an activity which has occurred for centuries. In the middle of the 20th century, around 1940–1950, many materials are salvaged in variety of sea depths and by different nations around the world, such as some regions in the United States, European countries, Mediterranean regions, and many countries in Asia.

For instance, a boom of treasure hunting activity occurred in Florida (USA) after the discovery of the 1715 plate fleet off Vero Beach (Throckmorton 1990:8). Another salvage case occurred in the Mediterranean where there is a large number of Roman shipwrecks in different places such as Grand Conglouë, Cape Dramont, and Île du Levant in France; Mahdia of Tunisia, and Albenga in Italy (Du Plat Taylor 1965). Salvage was undertaken by, small groups, or even by big companies before and as a result the development of SCUBA gears and diving equipment (Bass 1966:1–22; 1983:389). During the salvage, divers removed artefacts from the seabed without applying any archaeological methods, meanwhile the archaeologists just had to wait on the deck or surface.

The third aspect is the action of countering the salvage issue by conducting and developing the appropriate underwater and maritime archaeology practice, theory, and methods. The beginning of the shipwreck and nautical archaeology era was pioneered by SCUBA divers and John Goggin, who began the task of investigating shipwrecks (Frost 1963; Goggin 1959; 1960). In the 1960s, the number of nautical archaeology projects exploded. The discovery of a Viking ship in Denmark by divers and its subsequent excavation by archaeologists using a cofferdam (Crumlin- Pedersen and Olsen 2002), the discovery of a Bronze Age shipwreck which found at Cape Gelidonya, Turkey, which was

the first excavation done on the seabed (Bass 1967), along with the excavation of the warship *Vasa* in the waters off Stockholm, Sweden (Cederlund 2006) were noted as significant results from this beginning of the global spread of shipwreck and underwater excavations. After these discoveries, other underwater shipwreck excavation projects followed around the world including the 16th-century Basque whaler at Red Bay in Canada (Grenier, Bernier and Stevens 2007); the 1554 Spanish wreck at Padre Island in Texas (Arnold and Weddle 1978); the 17th-century Portuguese shipwreck in Kenya (Piercy 2005); the 14th-century shipwreck in Korea (Keith 1980); Spanish fleet wrecks in Ireland (Martin 1975); a classical Greek in the Messina Strait (Eiseman and Ridgeway 1987): and the Dutch East India Company ships in Australia (Green 1977).

The fourth aspect relates to the consequence of utilizing artefacts from shipwreck salvage projects. The main purpose of salvaged material cargoes is to seek profit by selling them to collectors. Contrary to archaeology, salvagers do not undertake any further research, preservation, conservation, and publication of the studies of the ships and their associated artifacts (McManamon 2005; Flatman 2007; Van Tilburg & Staniforth 2012). Archaeological projects keep all of the raised material cargoes—they are preserved, stored, and displayed at museums in order to keep them safe for future generations and public consumption (Bass 2011:16). Museums with complete shipwreck collections are, for example, the *Vasa* Museum in Stockholm, Sweden, the Bodrum Museum of Underwater Archaeology in Turkey (Bass 2011), and the *Mary Rose* Museum in Portsmouth, UK. Their exhibitions attracted many visitors and they successfully generated significant income for their respective country. Therefore, archaeologists assist with national incomes by using proper strategies to utilize and manage the material cargoes.

1.5. Limitations

Shipwrecks and their cargoes, in fact, are valuable sources of knowledge and information. In particular, shipwreck cargoes themselves may provide conflicts related to their commercial or economic value, which arise from events including jurisdiction, access, preservation, recovery, proprietorship, sale and display of materials (Smith 2003:25). Therefore, this research will focus on the ethical issues arising from the activity of commercial salvage in Indonesian water.

Principally, this thesis will examine two issues which are associated with current maritime cultural resources management practices in Indonesia. The existence of two contrary Indonesian legislations and their application by two Ministries, and the impact of commercial activity on the salvage of shipwreck cargoes are the scope of this research. It will include a review of the *Salvage and Utilization of the Valuable Material Cargoes from the Sunken Ship* and the *Cultural Heritage Protection* legislations. It will also provide an assessment of salvaged shipwreck cargoes. The data used for this research relate to the shipwreck cargoes that were salvaged from six sites: the Pulau Buaya, Karang Heluputan, Teluk Sumpat, Cirebon, Batu Hitam (Belitung), and Jepara shipwrecks. Materials from all these sites are currently stored in the National Shipwreck Committee warehouse.

1.6. Research methods

In order to answer the research questions, two components will be used as well as the relevant archaeological methods. Firstly, a literature review will be conducted to investigate the important aspects in this research. In general terms, this method is an appropriate technique and is used to describe a current body of research that aims to explaining and assisting professional practices, by identifying and developing new perspectives of research toward to interpreting existing literature (Fink 2005). This review will cover the literature on ethical issues in maritime archaeology, including: commercial salvage activities and their

impact on the maritime cultural resources; the study of artefacts as potential resources of material culture, and the practises of underwater cultural heritage management. They will be assessed with the aim of demonstrate the disadvantages resulting from commercial salvage activity of the shipwreck cargoes, especially those that occurred in Indonesian waters. The assessment aspects, which are related to the impact on the significance of these resources, consist of the historical aspect, the scientific or technical, the aesthetic, the social, the experience, and the economic impact.

Secondly, this thesis will conduct the comparative method in archaeology. In general, comparative method is a formalization of the comparison that is unavoidable in any attempt at cross-cultural analysis (Roscoe 2008:734). This method will identify and investigate the models of other countries which have had issues within their legislative framework and/or underwater cultural heritage management procedures similar to those of Indonesia, and have already resolved the issues. Those countries that will be used as a comparative model are the Netherlands and Australia.

This method also will compare the well-established model of underwater cultural heritage management from another country. It aims to identifying the proper strategy to utilize and manage the potential maritime cultural resources, especially, the shipwrecks and their cargoes. This study will also look at the responses of a particular country toward to the discovery of valuable cargoes within archaeological shipwrecks in their territory. Therefore, the case study of the *Batavia* shipwreck in Australia is considered as a suitable example to be examined in this analysis step.

1.7. Chapter outline

This thesis is divided in chapters, all relevant to the main questions asked in this chapter. Chapter One provides background information and an outline of this research. The methods

and aims applied to this research are also explained in this chapter. Then, the current legislation that sits within two Indonesian government institutions and the history of commercial salvage in Indonesia mentioned in this chapter, is further discussed in Chapter Two.

Chapter Three illustrates the loss of potential significance if shipwreck cargoes are salvaged for commercial gain. This chapter also goes into the knowledge and revenue that can be gained from the archaeological study of shipwreck cargoes, including material relating to the historical, scientific or technical, aesthetic, social, experience, and economic aspects.

Chapter Four discusses commercial salvage and treasure hunting activities in the light of ethics in maritime archaeology. This chapter also provides proper models of Underwater Cultural Heritage Management (UCHM) developed to solve ethical problems or issues. Related to the examples discussed in this research, countries like the Netherlands and Australia—both known to have successfully established the appropriate underwater cultural heritage management frameworks—will be examined as proper models for the formulation of suitable UCHM and legislation framework in Indonesia.

Chapter Five defines suitable principles of management and utilization of salvaged material cargoes from historic shipwrecks and it provides a comparison to other countries. It considers the management and utilization of material cultures from the *Batavia* shipwreck in Australia.

Chapter Six contains the recommendations related to the aims and objectives of this research. It considers some suggestions that could be useful for the enhancement of maritime cultural resources management in Indonesia. Lastly, the conclusion reached in this research is described in Chapter Seven.

CHAPTER 2

LITERATURE REVIEW

2.1. Introduction

The complicated issues related to commercial salvage and a combination of relevant theories and literatures are discussed in this chapter. These include the importance and essential meaning of material culture; a discussion of how salvage activity is similar to the treasure hunting profession and its impact to underwater cultural heritage; the development of underwater and maritime archaeology practice, theory, and method. This thesis assesses how salvage activities can be countered; and how utilizing artefacts from shipwreck excavation projects were undertaken successfully by other countries.

The study of artefacts as material culture aims to explain the importance of the objects, which are in turn used as principal data for this research. Resources related to the definition of salvage and treasure hunting activity, and its impacts to underwater cultural resources will demonstrate the ethical issues in maritime archaeology. The development of underwater and maritime archaeology practice, theory and methodology, and legislation will be described in the consideration of countering the activities of commercial salvage and treasure hunters and the issues arising from this activity.

The issues growing out of the bias in heritage legislations between those covering commercial salvage and the protection of underwater cultural heritage, commercial activity after the discovery of valuable shipwrecks and their cargoes, and the struggle with the utilization of salvaged shipwreck cargoes, that have occurred in Indonesia and, will look at the relevant case studies from other countries will be studied in order to investigate the proper actions to solve those issues. These countries are the Netherlands and Australia. Meanwhile, this chapter aims to formulate the proper methods of underwater cultural heritage management in Indonesia; and in particular, the case study of the commercial salvage of

artefacts from the historic shipwrecks, such as the Belitung and Intan shipwrecks, and the study case of *Batavia* shipwreck management in Australia will be considered as the appropriate model that could be applied in Indonesia.

2.2. Studies of Artefacts as the Material Cultures

In archaeology, material cultures are divided into some forms, such as objects, artefacts, ecofacts, features, relics, and sites. Material culture also has similar meanings in different contexts. Basically, material culture is the study of artefacts in association with the conception, function, values, and interpretation of human behaviour in the past (Prown 1982:2). In another meaning, material culture is the manifestation of culture through material goods and is considered as the evidence of human existence in the past societies (McGuire 1992).

In archaeological terms, material culture is an equation between archaeological and human culture which constitutes the realization of cultural ideas and norms (Johnson 1999:17). The meaning of material culture can be structured much like a text (Hodder 1992). Substantially, material culture is very resistant to analyse and interpret by archaeologists (Guarnello 2005). These meanings then can be developed as the proper perspectives in some archaeological theories.

Material studies in archaeology are normally divided into two types of research, i.e. empirical and theoretical. Empirical studies comprise of the analysis of artefacts including description, categorisation, and comparison. Meanwhile, theoretical study examines the association between the object and human behaviour, and investigate the relationship of material culture's nature to societies, from the past and present, and includes the process of material culture interpretation (Wallace 2011:107).

Studies of material culture also can provide information about an aspect that allows a connection and relationship between archaeology and other disciplines. For instance, archaeology and anthropology disciplines can identify and investigate the material cultures by understanding the human nature (Leone 1981:7). In this context, artefacts can be seen as primary data, even by archaeologists or anthropologists. The archaeologists can use the material culture in their study of past societies, meanwhile the anthropologists utilize them in their contemporary studies (Hudson 1984:31–39).

For the archaeologist, material culture is determined as the major evidence in aims for linking the information between present and the past (Binford 1972). It means the archaeologists really need the material cultures in their research. Gordon Childe (1956) described the archaeological record as the result of human behaviour that should be reconstructed to synthesize the mind and thoughts behind it (Childe 1956). To conclude, there are potential significant contributions to be made by understanding material culture, that is not only relevant to the past, but also to the present and the future.

2.2.1. From antiquarian archaeology to ‘New Archaeology’ theory

Material culture is the most important resource for archaeologists to develop theories and methods. Thus, the utilization of material culture is closely associated with the development of archaeological theory in history. Artefact utilization began around the 19th century, simultaneously with the antiquarian and initial archaeology period. In this period, the primary objective from any kind of archaeological research projects was the collection and classification of all this material evidence of past cultures (Thomas 2004). The issue that appeared in this period was about the missing link between the significance information from the past evidence and objectives that should be discovered, exposed, and transferred to the present (Johnson 1999).

Thus, this issue was rendered to a massive argument which was started by archaeologists around that time. Some historians of archaeology claim that archaeologists were only focused on digging and collecting the masses of archaeological materials without investigating and interpreting the valuable information associated with them (Clarke 1973). Previously, it was argued that the accumulation of the archaeological data was not relevant to a better understanding of human behaviour and the nature of past societies (Clarke 1968). In addition, Lewis Binford argued the perspectives and objectives from traditional archaeology were insufficient and distorted in fundamentally of archaeological observations (Binford 1977).

According to these issues, the archaeological world theory then was developed significantly in the 1960s. After the big argument about traditional archaeology perspective, there were many theories appeared related to the utilization of archaeological materials by archaeologists who have developed some important perspectives. It was marked as the beginning of new archaeological theory, which included processual and post-processual archaeology—both developed in the 1970s and 1980s (Clarke 1973; Binford 1983a, 1983b; Deetz 1967; Johnson 1999; Hodder 1986). In this period, material culture was utilized and used by archaeologists and the public along with the research data, or it could be the source of significant knowledge and information related to the past.

2.2.2. From private collection to public consumption

After the development of archaeology theories and methods, the study of material culture also has sustained its growth. In this period, material culture is not just only used by archaeologists and other researchers as data in their projects, but also need to be conducted and utilized properly for public information. In other words, material culture should not only remain in storage or warehouses but should be displayed and published about by Museums

using the appropriate methodology for museology. It also means archaeologists need to collaborate with museums and other collecting institutions.

Furthermore, the archaeologists and other related profession should publish the result of material culture studies in very detail and comprehensive ways. It should aim to demonstrate and provide significant information and knowledge that can be consumed by the general public. However, the archaeologist needs to prepare and organise the appropriate publication archaeology method in order to avoid bias in information. In other words, museology and the publication of archaeological studies also play an important role in the study of material cultures.

First of all, artefacts in museum will not lose their meaning if the interpretation of the objects can be occurred during the exhibition (Crew and Sims 1991:71). It means the exhibition should contain the valuable information that engages visitors and create interpretations about the meaning of the artefacts themselves. The objects themselves can be interpreted using significant aspects such as their functional, sociological, cultural, natural, or historical contexts (Ravelli 2006).

Indeed, the museum has three main functions regarding the artefacts or collections (Manders 2012), these are:

1. Management of collection:
 - Acquisition;
 - Registration;
 - Documentation;
 - Conservation;
 - Restoration.
2. Communication;
3. Research.

The artefacts in museum can be obtained in many ways, from the collector, loans from other museums, trade with private sector, and acquisition from archaeological sites. Fieldwork is the most important source for the museum, especially as it can establish new collections with the involvement of archaeologist during the field work (Charoenpot et al 2012). However, collecting the artefacts through fieldwork often triggers ethical and legislative problems.

Meanwhile, museology focuses on the responsibility of preserving objects, presenting object-related information, and making objects and their narratives accessible for publics (Charoenpot 2012). Study of museum is also noticed as the example of public culture that emphasizes the museums' role in creating a sense of history and organizing objects into the tangible past and future for the contemporary society (Taylor 1993a). Therefore, for the objects used in museology studies or archaeological museums, the archaeologist should provide the detailed context to create valuable meaning for artefacts (Staniforth 2001), covering the:

1. information;
2. context;
3. value.

As a mentioned above, communication with the public is an important aspect of a museum's role. This communication is comprised of exhibitions, education, and publications. In order to conduct the proper communication in exhibition, museums need to understand the interaction between three contexts, such as:

1. The personal context: knowledge, experience, and expectations of the individual;
2. The social context: the social environment, the visitors;

3. The physical context: the building or museum area. (Falk en Dierking 1992 pg no)

However, there are some ethical problems that can arise during the process of utilization of the artefacts in museums, such as describe below:

1. Displaying human remains;
2. Illegal trade on the archaeological finds;
3. 'Difficult' heritage, i.e. artefacts that come from unethical contexts (Manders 2012)

2.3. Material Cultures in Maritime Archaeology Context

In maritime or underwater archaeology the context comes from material cultures all aspects of seafaring including ships, boats, their cargoes, and passengers; and the economic systems operating within ships between the crew and passengers (Muckelroy 1978:6; Viduka 2012). Furthermore, material cultures from maritime and underwater contexts can be associated with some other important aspects comprised of the relationship between the material cargoes to other objects, and the reasons for packaging and transporting the objects (Staniforth 1996). The archaeologist should understand the processes of human or environmental activity that can affect an artefact assemblage on the seabed before recreating the ship and its culture (Muckelroy 1977:47–57).

In other words, context is the most crucial aspect in maritime archaeology. This aspect is considered as the major concern in archaeological research. Not only that, all aspects of maritime archaeology context should be supporting each other in attempt to build a very clear interpretation. It also really works in order to avoid biased perceptions and interpretations, for instance, about the material cultures from the shipwreck find.

Some archaeologists have described and explained the importance of context and the association between the objects and their environments in their research projects. Keith Muckelroy indicates that a ship has an important role in the cultural identification process, based on, the perspective of the ship as a machine or an example of the culture's technology with the hull interpreted as an artefact distinct from the cargo and personal items on board (Muckelroy 1978: 216). Jonathan Adams, in his articles, is concerned with the nature of boats and ships as an archaeological source material that contain various mental templates and ideologies of its builders, and makers of the cargo (Adams 2001: 281). In his research, David Gibbins conducted the investigation of Mediterranean wreck archaeology and of its artefacts including, among others, a cargo of North African cylindrical amphoras (dating to AD 200) found at Plemmirio in South-East Sicily. From this research, he aimed to investigate some aspects from the wreck assemblages and the cargoes, such as, the morphological variability among amphoras, the contemporaneity and significance of different types, the chronology, the contents, and epigraphy (Gibbins 1990; 1996).

The importance of material cultures belonging to the shipwrecks finds also are illustrated by Michael Flecker (2001). He reported the evidence of a ninth-century wreck that was discovered in Indonesia. From the evidence of the material cargoes that were salvaged from the shipwreck, it proved and provided the earliest evidence of direct trading activity between India and China (Flecker 2001). However, this discovery was undertaken by commercial salvage company that aimed to sell the shipwreck cargoes instead of conducting *in situ* preservation and conservation of the ship, as well as a comprehensive material and contextual study.

2.3.1. Shipwreck cargoes and ethical issues

The discussion of ethics in archaeology, in general, has concentrated on two particular issues. Those issues are focussed on the “indigenous” issues, in particular the reburial and repatriation of remains and artifacts within the post-colonial context, and on the looting of the archaeological artefacts from sites as saleable commodities (Pluciennik 2001:3). Especially, looting is considered a serious issue that impacts archaeological sites. The Society of American Archaeology (SAA) created a policy to tackle the issue. It describes the eight principles of archaeological ethics:

1. Stewardship;
2. Accountability;
3. Commercialization;
4. Public Education and Outreach;
5. Intellectual Property;
6. Public Reporting and Publication;
7. Records and Preservation;
8. Training and Resources. (Lynott 1997:593)

Principle 3, the commercialisation of archaeology, is considered as the most concerning issue related to looting and exploitation, and the commercial value of archaeological objects is most relevant to the major problem identified in this research. In more detail, material cultures from historic shipwrecks, which is commonly called shipwreck cargoes, always becomes the main trigger and reason for the looting and commercial activity involving archaeological objects.

Shipwreck cargoes are still the centre of struggles related to some of the ethical issues in maritime archaeology. The ethical issues in this context are the big argument between

‘archaeologists’ and ‘treasure hunters’, about the ‘adequate’ and ‘inadequate’ behaviour in relation to the studying and removal of finds from the material cargoes of the historic shipwrecks found (Flatman 2007). Flatman mentions that practitioners need to consider their own impetuses as well as the site-specific ethics during the project, and their responses to solve the problems and explain the aims of the project (Flatman 2007:77).

George F. Bass (2011) addresses two ethical issues in maritime archaeology. Firstly, he explained the controversy around the publication of the maritime archaeology projects. Because, an unpublished shipwreck project regardless of the sophisticated excavation technique is still considered a looted wreck (Bass 2011:10). Bass also mentions the distinction between archaeology and treasure hunting. He argued that in order to educate the public about the purposes of archaeology and the difference between maritime archaeology and treasure hunting, archaeologists should build a better case for their approach to shipwrecks by doing a better job, i.e. beyond simply reprimanding treasure hunting activities (Bass 2011:11–14).

Jeremy Green also addresses the differences between treasure hunters and maritime archaeologists. He emphasizes that archaeologists are not permitted to become involved in selling artefacts and the prohibited role for an untrained person to conduct archaeological excavation (Green 2008). In addition, the salvage of artefacts from underwater sites or shipwrecks that have commercial value often occurred with the legal permission of the country involved. The ethics involved in this context is of little or no concern to the governments that are supposedly the guardian of their national cultural heritage (Green 2008:1603).

2.3.2. Ethics in maritime archaeology: Commercial salvage and treasure hunting

Based on the discussion above, there are two key points as the main concern for maritime archaeology as a discipline. Those two issues are treasure hunting activity and salvaging the archaeological evidence from historic shipwrecks via commercial projects. Instead of questioning the motivations of salvagers and treasure hunters, it is better to prevent their actions by identifying and recognizing their manipulation techniques for obtaining the legal permits from Governments and by being involved in the shipwreck finds project.

In fact, salvagers and treasure hunters are experts and very skilful with their deceptions and tricks. In 2007, Jerome Lynn Hall described and explained 8 deceptions which are commonly used by commercial salvage groups and treasure hunting companies in manipulating public opinion about the profit of salvaging the material cargoes and regarding preserving them as the underwater cultural heritage (Hall 2007:2–6). These deceptions are described below:

1. The laws of finds and salvage apply to shipwrecks;
2. *In Situ* preservation will only harm the artefacts;
3. Treasure hunters should be allowed to have access to underwater cultural heritage sites;
4. Treasure hunters are actually “doing archaeology”;
5. There is no need to be an archaeologist to practice archaeology;
6. Salvaging is legal, therefore, it is ethical;
7. Archaeologists act as the great barrier with high intellectual merit who seeks to prohibit public access to underwater cultural heritage finds;
8. Treasure hunters are the representative of public good. (Hall 2007:2–6)

From those eight deceptions, it can be seen the reasons behind the success of the commercial salvage groups and treasure hunting company in conducting the salvaging of shipwreck cargoes in some countries. They can convince the Government and the public about the benefits and profits from salvaging the shipwreck cargoes. This is usually related to the national economic benefits that can be achieved by selling the artefacts. Therefore, archaeologists are the only profession that can prevent these activities. Indeed, the archaeologists need to fulfil their responsibilities better, not only for themselves, but also collaborate with the Government of countries, especially in addressing what they are permitting and what the impact is on the next generation (Throckmorton 1990:10).

However, the eight deceptions outlined by Hall are not enough to convince the public to be aware and concerned about the real impact from salvaging and treasure hunting activities. Heather Pringle's (2009) article, for example, clarifies that the public is questioning the reasons for prohibiting private companies or non-academic groups to undertake the same project, i.e. investigating shipwreck finds on the sea floor, as a university or museum (Pringle 2009:1–5).

In another article, Pringle described the salvaging techniques that are commonly used by salvagers and treasure hunters in removing the artefacts from the shipwrecks and their impact on those sites. She looked at the case of treasure hunting operations on a shipwreck site in the Florida Keys National Marine Sanctuary as well as a protected area that is located in the US. In this case, a Florida Company, known as *Salvors Corporation*, conducted some illegal activities, such as destroying the seagrass and removing the artefacts from a site by blasting the sediments on the sea floor in order to find coins and ingots. As a result, in 3 months, salvagers blasted more than 600 holes, measuring 6 to 9 meters in diameter on the sea floor and caused significant damage to, at least, 1.63 acres of seagrass ecosystems (Pringle 2013:1–6). Unfortunately, the nation only received monetary compensation, while the loss of

information and knowledge for future generations cannot be undone, nor can the ecological damage be reversed.

In the UK, salvaging and treasure hunting activity are noted as criminal actions against heritage assets. In general terms, heritage crime means any offensive actions that can harm the value of heritage assets and their impacts to this and future generations (English Heritage 2001a). Moreover, English Heritage has classified the following as criminal activities based on some previous cases, they include:

1. Damage caused to the historic environment;
2. Illegal excavation and remove the artefacts from the historic environment;
3. Architectural theft;
4. Unethical alteration and demolition of listed monuments (English Heritage).

English Heritage argues that any damages from criminal activity will cause great expense and take a very long time to be repaired. It can also be considered permanent destruction. Moreover, destruction of cultural heritage has further impact on the loss of knowledge for future generations.

As a result of these impacts, legislation and guidelines pertaining to underwater cultural heritage were developed on an international scale. Commercial salvage, however, still occurs in many places around the world and Indonesia is therefore no exception.

2.4. The development of UCHM and legislation

Underwater cultural heritage is defined as all traces of human existence that contain a cultural, historical, and archaeological value, which have been partially submerged or are

totally under water, continuously or even periodically, for at least 100 years. More specifically, they consist of:

1. Sites, structures, buildings, artefacts and human remains, within their natural and archaeological context;
2. Vessels, aircraft, and other vehicles or any parts of them, their cargoes, within their natural and archaeological contexts; and
3. Objects such as prehistoric figures (ICOMOS 2006).

For the management of underwater cultural resources, there are some information requirements that should be met. They include an inventory of sites, protection in place; publication in form of educational programs, and excavation reports; the display of the excavation results by exhibition in museums, and take an appropriate decision such as take no action if they are located (Delgado 1997). Hence, management of the cultural heritage or resources that are submerged or totally under water is more complicated compared to those found on the land.

Laws protecting underwater cultural heritage are basically developed in order to prevent the salvagers and treasure hunting activities from destroying historical sites. This law also has a function as an umbrella of protection over the underwater cultural heritage from unlawful activities that could potentially harm and destroy the shipwreck finds within their environments. Especially important for the particular countries that have struggled with those issues, such as, the US and the UK, and a country that has potential underwater cultural heritage underwater cultural heritage assets, such as Australia, they reacted quickly by conducting the proper division and an appropriate management system. Further, the

underwater cultural heritage law has become more developed, not only in regional scale, but also in form of international frameworks.

2.4.1. UCHM frameworks in the United States of America

In the United States, the *Abandoned Shipwreck Act* (ASA) was established in 1988 as a response of the conflict of jurisdiction of historic shipwrecks that were located in USA territorial waters. This particular act allowed each state in the US to control the excavation of submerged land in their territorial waters and prevent the pillaging of wreck sites by treasure hunters (Runyan 2011:950). In this Act, shipwrecks in the US are defined as being:

1. Abandoned in submerged land of a State;
2. Abandoned in coralline protected zone under the supervision of a State; and
3. The wrecks that are eligible for inclusion in the National Register of Historic Places.

There are other agencies that also address and handle underwater cultural heritage management, related with the National Parks' environments across the United States, these include the National Park Service (NPS), and the National Oceanic and Atmospheric Administration (NOAA). In fact, their existence is really important for the preservation, management, and research of underwater cultural heritage (Runyan 2011:952).

Related to the protection of underwater cultural heritage, there are some related Acts which are effective against the major issues in the underwater cultural heritage, including, the *National Historic Preservation Act*, the aforementioned *Abandoned Shipwreck Act*, and the *Sunken Military Craft Act* (Runyan 2011:962). Furthermore, the *Archaeological Resources Protection Act* (ARPA) protects archaeological resources in the US. This act also contains the

strong statement against the trafficking in archaeological resources, including the underwater cultural heritage or resources (King 2004:252–255).

2.4.2. UCHM frameworks in the United Kingdom

In the UK, the underwater cultural heritage management is considered and divided into some aspects, such as, the term of zones, responsibilities, archaeological finds characteristics and types, and site protection acts (Firth 1993:65–76). Based on the areas, they are divided into three, such as, inland waters, estuaries and ports, inter-tidal areas, territorial sea, and zones beyond terrestrial waters. Meanwhile, for the responsibility aspects, they take responsibility on some important aspects, including responsibility for site protection, for recording and documentation, and for determining the ownership of the archaeological resources (Firth 1993:66–67). In particular, for the archaeological characteristics, they are divided into some elements, including:

1. Shipwrecks and related seabed debris;
2. Aircraft wrecks and related seabed debris;
3. Submerged prehistoric and historic land surfaces, sites, and objects. (Gribble 2011)

Historically, the United Kingdom, indeed, has developed and established underwater cultural heritage frameworks. In 1973, the UK has established the *Act for the Protection of Historic Shipwrecks*, as considered as the Country's initial authority for the protection of historic shipwreck finds in the UK territorial waters. In 2002, this Act was superseded by the *National Heritage Act* and expanded the scopes of what is defined as underwater heritage resources, including, shipwrecks, aircraft, and other cultural resources. In 2003, English Heritage agency took a leading and administrative role in archaeology organizations to assess

the procedure of maritime archaeological survey in the UK country's territories. In 2005, this agency conducted a five years plan which aimed to increase the public understanding of the historical environment and to encourage the public to be more aware of and more concerned with the value of its archaeological resources (Oxley 2007).

2.4.3. UCM frameworks in Australia

In Australia, the underwater cultural management and legislation were first developed in 1964. The *Museum Act 1964* was considered the first legislation that specifically addressed the protection of historic shipwrecks in Australia and was enacted in Western Australia. More specifically, this law is designed to protect four Dutch shipwrecks that were discovered off the Western Australian coast (Jeffery 2006:124). In reality, this particular act has been implemented and based on multiple issues such as reports of looting on the *Batavia* site and the use of explosives on the *Vergulde Draeck* shipwreck (Henderson 1986:69–71).

Based on this circumstance, the Commonwealth has instigated the *Historic Shipwrecks Act* in 1976. It applied to all Australian waters adjacent to all states and territories. Basically, the major provision of the 1976 *Historic Shipwrecks Act* is focused on the protection of a shipwreck and all the associated relics, even while still located under water or when they have been removed from the waters and now on the land (Jeffery 2006:126). In more detail, the main concerns of this particular Act, are:

1. The blanket protection of all shipwrecks which are older than 75 years;
2. An obligation on the reporting of every shipwrecks found;
3. Protection of shipwrecks and associated artefacts which are younger than 75 years;
4. Protection of shipwrecks significant to Papua New Guinea;
5. Declaration of up to a 200 hectare protected zone surrounding a historic shipwreck;

6. Payment of a reward and award for the notification of a shipwreck that is declared as “historic”;
7. The establishment of a Register of Historic Shipwrecks and Historic Artefacts;
8. An authority to keep a track of historic artefacts that held by individuals;
9. An authority to give the permit for definite actions;
10. Appointment of Inspectors other than State and Federal Police; and
11. Penalties or fines for breaching certain provisions.

After the establishment of the *Historic Shipwreck Act* of 1976, maritime archaeology programs then developed in all Australian states. Nevertheless, the program continued to struggle with the issues of commercial salvage in particular communities (Staniforth 1987:23). These issues then triggered the formation of the Australian Institute for Maritime Archaeology (AIMA) in 1982. Subsequently, this organisation proposed and advised the Commonwealth about the review of the maritime archaeology program across Australia and the efficiency of the *Historic Shipwreck Act* in 1976. Based on these reports, it resulted in the development of four specific National programs (Kendall 1990), they were:

1. Conservation and protection of historic shipwreck sites and associated material as national cultural resources;
2. Developing a comprehensive register of historic shipwrecks and associated materials;
3. Obtaining the support of an informed public for historic shipwrecks as a cultural resource;
4. Promoting and socializing the Government commitments to the protection and preservation of historic shipwrecks and associated materials.

Hereafter, these national programs were applied and adopted by all State agencies and became the basis of management of underwater cultural heritage (Hosty and Stuart 1994:14). At the same time, the international law frameworks of underwater cultural heritage were developed and applied.

2.4.4. International frameworks and laws

Based on the several cases of commercial salvage and treasure hunting that were occurred around the world, the existing underwater cultural heritage law and management is considered to be in need of development and improved more comprehensively in a wider and broader scale. As a result, the international law frameworks of underwater cultural heritage management and law, thus, have approached and considered to find an appropriate solution for subsequent, similar cases. Moreover, it also shows that these issues need to be looked as a serious problem that harms the cultural asset of a country. There are three international law frameworks that deliberated on and have the strong provisions and authorities to be adopted in every country. Those three are the UNESCO convention in 2001, the ICOMOS charter in 2006, and the UNCLOS provision in 1982.

2.4.4.1. The UNESCO *Convention for the Protection of Underwater Cultural Heritage*

The 2001 UNESCO *Convention for the Protection of Underwater Cultural Heritage*, basically, is an international regulation that is specifically intended to manage underwater cultural heritage. In principal, this convention has been organized at general conference at Paris in 2001. During the convention, there are some important aspects that were described as the general reasons of this convention being held (UNESCO 2001). In summary, those aspects will be described below:

1. Acknowledging and realizing the importance of underwater cultural heritage as an integral part of humanity that needs to be protected and preserved by all states and countries;
2. Conveying the importance of underwater cultural heritage through some programs such as those based on research, information, and education, to be consumed by public;
3. They were deeply concerned about the increasing numbers of commercial companies exploiting underwater cultural heritage, in particular, the certain activities of sale and acquisition or barter of underwater cultural heritage;
4. Realizing and believing in the need for cooperation among states and countries, international organizations, scientific institutions, professional organizations, archaeologists, divers, publics; moreover, the development of rules relating to protection and preservation of underwater cultural heritage in conventionality with international law frameworks, including the UNESCO 1970 *Convention on the Means of Prohibiting and Preventing the Illicit Import, Export, and Transfer of Cultural Property*, the UNSECO 1972 *Convention for the protection of the World Cultural and Natural Heritage*, and the United Nations 1982 *Convention on the Law of the Sea*.

In fact, the 2001 Convention was the last in a series of four UNESCO Conventions pertaining to the protection of cultural heritage. It is, however, known as the first universal protection system for underwater cultural heritage (Forrest 2002:3). Moreover, these conventions contain the transformations of the term cultural property.

It began with the 1968 UNESCO recommendation *Concerning the Preservation of Cultural Property Endangered by Public or Private Works*. This recommendation was enacted as a response to building operations that occurred around that time which might

possibly have an impact, major or minor, and illicit and removal of the cultural heritage property (UNESCO 1968). Hence, UNESCO enacted the 1970 *Convention on the Means of Prohibiting and Preventing the Illicit Import, Export, and Transfer of Cultural Property*. In this convention, UNESCO listed a number of types of cultural heritage that might be of value and importance for a state and could be illicitly excavated and transferred to another place or state (UNESCO 1970).

In the 1972, the phrase “cultural heritage” was used for the first time in an international convention, i.e. in the 1972 UNESCO *Convention concerning the Protection of the World Cultural and Natural Heritage*. In this convention, the definition of objects that need to be protected has become broader and more conceptual in nature instead of just cultural property, it included monuments and sites (UNESCO 1972). On the other hand, last but not least, another recommendation was enacted by UNESCO in 1976, which related to the *Convention Concerning the International Exchange of Property*. In this case, the property term is described in a broader context, including a wide range of material objects and the law system. In principal, property can be divided as real or personal, including movable and immovable, tangible and intangible, public and private, and intellectual property (Reichelt 1985:67).

2.4.4.2. ICOMOS 1996

Basically, this ICOMOS charter, specifically, completed the previous ICOMOS *Charter for the Protection and Management of Archaeological Heritage* in 1996. In this 1996 charter, underwater cultural heritage is considered as part of archaeological heritage, which is in, or has been removed from an underwater environment. It includes submerged sites and structures, wreck sites and wreckage, within their archaeological and natural context (ICOMOS 1996).

Furthermore, the 1996 charter was enacted to help bring appropriate archaeological expertise to bear on threats to underwater cultural heritage in an efficient manner. The other reason is to ensure the investigations of underwater project should be transparent and relevant with the aims, methodology, and the anticipated results clearly stated. The fundamental principal, the *in situ* preservation of underwater cultural heritage should be considered as a first option. Moreover, the other considerations were:

1. Encourage public access;
2. Non-destructive techniques, non-intrusive survey and sampling should be encouraged in preference to excavation;
3. Investigation must not cause an impact to underwater cultural heritage more than is necessary to maintain the mitigation of the site or the research objectives of the project;
4. Investigation must avoid unnecessary disturbance of human remains or recognized sites;
5. Investigation must be accompanied by sufficient documentation or recording.

2.4.4.3. UNCLOS 1982

The 1982 *United Nation's Convention on the Law of the Sea* (UNCLOS), in principal, addressed the issues of protection for every nation, and concerned at least three areas of waters (UNCLOS 1982, article 33), including:

1. The Territorial Sea;
2. The Contiguous Zone;
3. The Continental Shelf;

4. The Exclusive Economic Zone (EEZ); and
5. The Inland waters.

In article 149, there is a statement and description of “archaeological and historical objects” (UNCLOS 1982 article 149). It defines:

All objects of an archaeological and historical nature found in the area (beyond the limits of national jurisdiction) shall be preserved or disposed of for the benefit of mankind as a whole, particular regard being paid to the preferential rights of the state or country of origin, or the state of cultural origin, or the state of historical and archaeological origin.

In detail, Article 303 states that the property must be protected by the states, including vessels, air craft, and other state owned vessels that have not been abandoned. The states have the authority to prevent the removal of archaeological objects and those of a historical nature from the contiguous zone, which extends from the limit of territorial seas (12 nautical miles) to 24 nautical miles (UNCLOS 1982 article 303:1–4). It states:

1. States have a duty to protect objects of an archaeological and historical nature found at sea and shall cooperate for this purpose;
2. In order to control traffic in such objects the coastal state may, presume that their removal from the sea bed in the zone referred to in article 33 without approval, would result in an infringement within its territorial sea of the law and regulations;
3. Nothing in this article affects the rights of identifiable owners, the law of salvage or other rules of admiralty, or laws and practices with respect to cultural exchanges;

4. This article is without prejudice to other international agreement and rules of international law regarding the protection of objects of an archaeological and historical nature.

However, the 1982 UNCLOS charter does not clearly mention the underwater cultural heritage, yet, only describe the duty and rights of the states to apply their existing domestic preservation laws to the territorial sea and contiguous zone.

2.5. Conclusion

Based on the discussions above, the study of material culture is truly important, not only for archaeologists and other related researchers, but for the community. The context and association between the artefacts and their environments are considered as the main concern for this study. It aims to avoid the lack of information related to the ethical issues in archaeology, such as, the process of acquisition of the artefacts and the valuable aspects that can be achieved or loss from that process.

Study of material culture does not only focus on the artefacts itself, and also needs to communicate, deliver, and provide the artefacts for public consumption. Archaeologists and other related researchers need to collaborate with museums and other cultural institutions in order to conduct proper techniques and best-practise methods for presenting and displaying the artefacts to the public. It also aims to avoid providing biased information and knowledge, not just the essentials from the artefacts itself, but also include public and community perspectives.

In maritime archaeology context, material cultures are including the shipwrecks with their cargoes and their natural environments. Indeed, they cannot be separated or lost from their contexts as this is considered as the most important information. Salvagers and treasure

hunting activity, however, which only focus on retrieving the material cargoes or artefacts, led their removal without following the proper method and technique. Based on some reports and articles, there are major cases of the use of explosives and blowing the seabed to find the valuable artefacts on the shipwreck sites around the world, including the UK and USA. Therefore, salvaging for commercial purpose and treasure hunting activity are considered a major issue in maritime or underwater archaeology.

As a results of this issue, the UK and the US, as the countries involved in the development of maritime and underwater archaeology, have developed the underwater cultural heritage management and law system. Underwater cultural heritage management is basically conducted to prevent and stop the commercial salvage of underwater sites and the selling of removable artefacts. In principal, the *in situ* preservation and conservation of shipwrecks, material cargoes, and its natural environments, are identified as fundamental in this management. These principles also aim to protect the historic shipwrecks and their environmental contexts, even the archaeological evidence or the valuable information, for future generations.

Furthermore, the underwater cultural heritage management system and law also have developed on a wider scale, such as, the 2001 UNESCO Convention, the 2006 ICOMOS, and the 1982 UNCLOS. Indeed, some countries have ratified those three conventions as a serious approach to protect their underwater cultural heritage assets. Basically, the first two mentioned focus on the protection and preservation the underwater cultural heritage from the illegal activity of commercial salvage, removing shipwreck cargoes, and selling or illicitly trading the artefacts, whereas the last mentioned focuses on the sub-division of the waters territory as well as the underwater cultural heritage areas. These frameworks, principally, become the countering actions against the deceptions of salvagers and treasure hunters. Therefore, all models of underwater cultural heritage management system and legislations,

regional or international parameters, are really important for every country to protect and preserve their cultural assets.

Yet, there are some countries that have still not ratified the international frameworks for underwater cultural heritage protection. Indeed, they are still struggling with their internal and external problems. These problems include the struggle against the activities of commercial salvage and treasure hunting; the selling of artefacts that has occurred because of biased legislations; the lack of concern about the importance of underwater cultural heritage as a national cultural asset; and the lack of professionalism and proper human resources in maritime archaeology area, such as occurred in Indonesia are the study area of this thesis.

CHAPTER 3

METHODOLOGY

3.1. Introduction

The methodology that is applied in this research is guided by a solid body of literature on the ethics of underwater cultural heritage. Several approaches were chosen to identify the effects of particular activities on underwater cultural heritage resources, through heritage impact assessment (ICOMOS 2011), to those more concerned with the improvement of underwater cultural resources management. The process of assessing the impact or effect of an action itself is discussed according to the International Association for Impact Assessment guidelines (Cashmore 2009:1) and the ethical values on maritime archaeology (Flatman 2007), which deals with issues such as the salvaging of material cultures from historic shipwrecks. Therefore, this research focuses on the methodological approaches to maritime cultural resource management and the commercial salvage of shipwreck cargoes in Indonesian waters, specifically to answer the main question addressed in this research, that is: how can maritime cultural heritage practices in Indonesia and the associated legislative frameworks be improved to provide better and more economical long-term strategies for the future and if so, what are the ways forward?

3.2. Finding an approach

Finding the way by reviewing the literatures of underwater cultural resources management is approached in with the aim to answer the main question in this research. Literature reviews themselves are important to support the identification of a research topic, question, or hypothesis that will have contributed to the research (Rowley and Slack 2004:32). From the review of literatures in Chapter Two, there are three broad approaches that can be used to investigate the main question in this research, they are:

1. The reasons for studying of material culture;
2. The major impacts from ethical issues in maritime archaeology;
3. The pre-eminent reason is the development of underwater cultural heritage management.

Related to the data that will be used in this research, there are five steps involvement of significance of a collection, such as:

1. Observation of the items;
2. Collecting the selected objects;
3. Researching their history and context;
4. Understanding the value and developing criteria;
5. Classification.

3.2.1. Finding the objects

First of all, the author of this thesis attended the two-day workshop held by the National Shipwreck Committee, Ministry of Marine and Fishery entitled: “The utilization of historic shipwrecks and its cargoes” on 14 and 15 December 2015 in Indonesia. Basically, this workshop aimed to find the proper solution for the further utilization of material cargoes from the historic shipwreck collections that are stored at the National Shipwreck Committee warehouse located in Cileungsi, West Java, Indonesia. The organizing committee of this workshop invited stakeholders from all Indonesian provinces as a part of the moratorium on the commercial salvage process. The committee proposed to and encouraged the

representatives of other provinces to support the prevention of suspicious activities leading to commercial salvage, and report them to the appropriate institutions and central Government.

The workshop was divided into two days of activities. The first day focused on the utilization of historic shipwrecks and their cargoes. The discussions were divided into three topics, i.e. tourism, history and culture, as well as Indonesian legislation pertaining to UCH. These topics were delivered by the expert speakers and areas such as the archaeologists, the Government agents representing the Ministry of Tourism and Economic Creative, the Ministry of Education and Culture, and the Ministry of Marine and Fishery, and Horst Liebner. Meanwhile, the participants of this seminar consisted of the representatives from some of Indonesian provinces, the representatives from Badan Keamanan Laut (Indonesian Coast Guard), and the associated stakeholders.

On the second day, the committee organized the field trip to the National Shipwreck Committee warehouse in Cileungsi, which was attended by all of the participants. It was the first time that the National Shipwreck Committee opened its warehouse to members of the public. Subsequently, all participants were guided by the committee to look around all of the artefact collections inside of the warehouse. In this field trip, the visitors could see that still much more artefacts were not stored based on the standards of archaeological procedure, due to the limited space and lack of proper cabinets and containers. Moreover, they were also not recorded and labelled by following the standard of archaeological documentation technique which was related to the lack of available human resources. During the trip, the author and other participants were allowed to take pictures of all the collections inside and asked all kind of questions of the committee. Due to inappropriate documentation of the artefacts, it is for example unknown what the exact numbers of artefacts in the warehouse are. On 18 December 2015, the author spent time at the secretariat office of the National Shipwreck Committee, inside the Ministry of Marine and Fishery building, to access information in the

artefact archives. From this visit, the author successfully collected a complete record of artefact archives from the National Shipwreck Committee staff, including the inventory of the artefact numbers, an inventory of the artefacts' conditions, a catalogue of artefacts, the samples of labels, and copies of the standard operational procedure for commercial salvages, and the standard operational procedure of for the auctioning of the salvaged material cargoes.

Related to the dualism of contrary legislations discussed earlier, the author also collected data and information from the Directorate of Cultural Heritage Protection and Preservation, Ministry of Education and Culture. From this visit, the author successfully collected the data and information that is entirely different and opposite from the National Shipwreck Committee data. The data and information that has been collected from this unit was more focused on the scientific survey and the long-term preservation and conservation of artefacts and shipwrecks. The main difference between these two units is the funding support allocated from the national budget, rather than their relationship with the commercial salvage companies (as the donor of commercial project).

3.2.2. Finding subsidiary resources

The subsidiary resources in this context are the reviewing of legislations that are established on the Indonesian system, in association with the issues in this research. Such as described in Chapter One, there are two legislations that have been established, they are the: *Salvage and Utilization of the Valuable Material Cargoes from the Sunken Ship* legislation administered by the Coastal Zone and Small Islands Department, the National Shipwreck Committee Unit of the Ministry of Marine and Fishery; and the *Cultural Heritage Protection* legislation administered by the Cultural Heritage Protection Division of the Ministry of Education and Culture. These two legislations show the major difference in practice that became one of the triggers for this research and the main issue studied in this research.

Related to the *Salvage and Utilization of the Valuable Material Cargoes from the Sunken Ship* legislation, the author has not only reviewed the main provision of its legislation, but also identified the supporting legislation and the related aspects such as the structural formation of National Shipwreck Committee, the Presidential decree, the ministerial decree, the protocol of survey and salvage of the valuable cargoes, and the legislation for auctioning the valuable cargoes and its procedure. Furthermore, the author also collected the information on commercial survey and salvage activities that were occurred from 2000 to 2010. These activities were initiated and supervised by the National Shipwreck Committee within their stakeholders in collaboration with the commercial salvage company as the sponsor of those activities.

On the other hand, the *Cultural Heritage Protection* legislation that is administered by the Cultural Heritage Protection Division of the Ministry of Education and Culture, is also reviewed by the author. Similarly, this reviewing has not only investigated the contents of the provisions, but also identified the actual report that have been done by this unit relating to the surveys and research of historic shipwreck finds. In more detail, these activities were initiated and funded by using their allocation budget, without involving the private companies or the outside investors.

3.3. Identifying the Potential Data that can be Assessed for the Improvement of Indonesian Maritime Cultural Resources Management

As described above, there are two particular resources that have been collected relevant to the main issue in this thesis. The salvaged and stored material cargoes from commercial salvage activities under the supervision of the National Shipwreck Committee are considered as the main potential resource of archaeological data that can be assessed in this research. This consideration has been approached based on the real condition of those salvaged

artefacts, which have still not been utilized properly, especially, for the further improvement of Indonesian Maritime Cultural Resources Management.

With the aim of assisting the assessment process, the author will investigate the salvaged artefact archives or databases that are already inventoried by the National Shipwreck Committee. This investigation will be effected, however, by the actual condition of those artefacts, which have not been recorded and inventoried using proper techniques this complicates the process of classification. Therefore, the author will use all the databases of those artefacts collected that were conducted by the National Shipwreck Committee, Ministry of Marine and Fishery, as the primary data in this thesis.

Subsequently, the second resource that will be supported the assessment of this research is the Indonesian Maritime Cultural Resources legislations. As described above, Indonesia has two legislations that are contrary each other, administered by two different Government agencies. In fact, this difference is considered as the trigger for another important issue in this research, which is the bias in legislation between them, and its implications relating to Indonesian Maritime Cultural resources, the material cargoes from historic shipwreck finds in Indonesia. Hence, the author will review those two legislations within their supporting aspects in order to illustrate the actualisation from these legislations and its impacts.

CHAPTER 4

DATA RESULTS

4.1. Introduction

This chapter presents in detail the two existing legislations in Indonesia related to and impacting the country's maritime cultural resources. They are:

1. *Salvage and Utilization of the Valuable Material Cargoes from the Sunken Ship* legislation administered by the Coastal Zone and Small Islands Department, the National Shipwreck Committee Unit of the Ministry of Marine and Fishery; and the
2. *Cultural Heritage Protection* legislation administered by the Cultural Heritage Protection Division of the Ministry of Education and Culture.

This chapter highlights their differences and discusses how they basically advocate opposing procedures.

4.2. Legislation: *Salvage and Utilization of the Valuable Material Cargoes from the Sunken Ship*

In fact, the commercial survey and salvage activities in Indonesia are supported by two related decrees. These legislations cover the activity of exploration and the utilization of the valuable material cargoes from the sunken ships. Indeed, their activities are under the control of the Minister of Marine and Fishery, and include the:

1. Presidential Decree No. 19/2007/National Committee of Salvaging and Utilization of the Valuable Material Cargoes from the Sunken Ship;
2. Ministerial Decree No. 39/2000/Practical Guidance of the Salvage and Utilization of the Valuable Material Cargoes from the Sunken Ship.

These activities are also supported by other legislations that outline the protocol for the assessment and auctioning of the valuable material cargoes from the sunken ships. They are described in two legislations, such as:

1. Minister of Treasury Decree No. 184/06/2009 about the assessment and auction procedure of valuable cargoes from the sunken ship;
2. Presidential Decree No. 25/1992 about sharing profit of auction result of valuable cargoes from the sunken ship.

Subsequently, those legislations have become the umbrella law of the National Shipwreck Committee, which was established, as aforementioned, after the salvage event related to the *Geldermalsen* shipwreck cargoes in 1985. The committee itself has been conducted under the Presidential Decree No. 19/2007, resulting in the collaboration of some Indonesian Government institutions, including:

1. Chairman: Minister of Marine and Fishery;
2. Vice-Chairman: Minister of Education and Tourism (now is Ministry of Education and Culture);
3. Secretary 1: General Director of Coastal Zone and Small Island, Ministry of Marine and Fishery;
4. Secretary 2: General Director of Ancient and History (now is General Directorate of Cultural Heritage Preservation and The Museum), Ministry of Education and Tourism (now is Ministry of Education and Culture);
5. Superintendent: Minister of Marine and Fishery, Minister of Education and Tourism (now is Minister of Education and Culture), Minister of Fortress, Navy, and Police.

The National Shipwreck Committee has established a protocol for commercial survey, salvage, and the sales of material cargoes from historic shipwrecks is outlined in Figure 1.

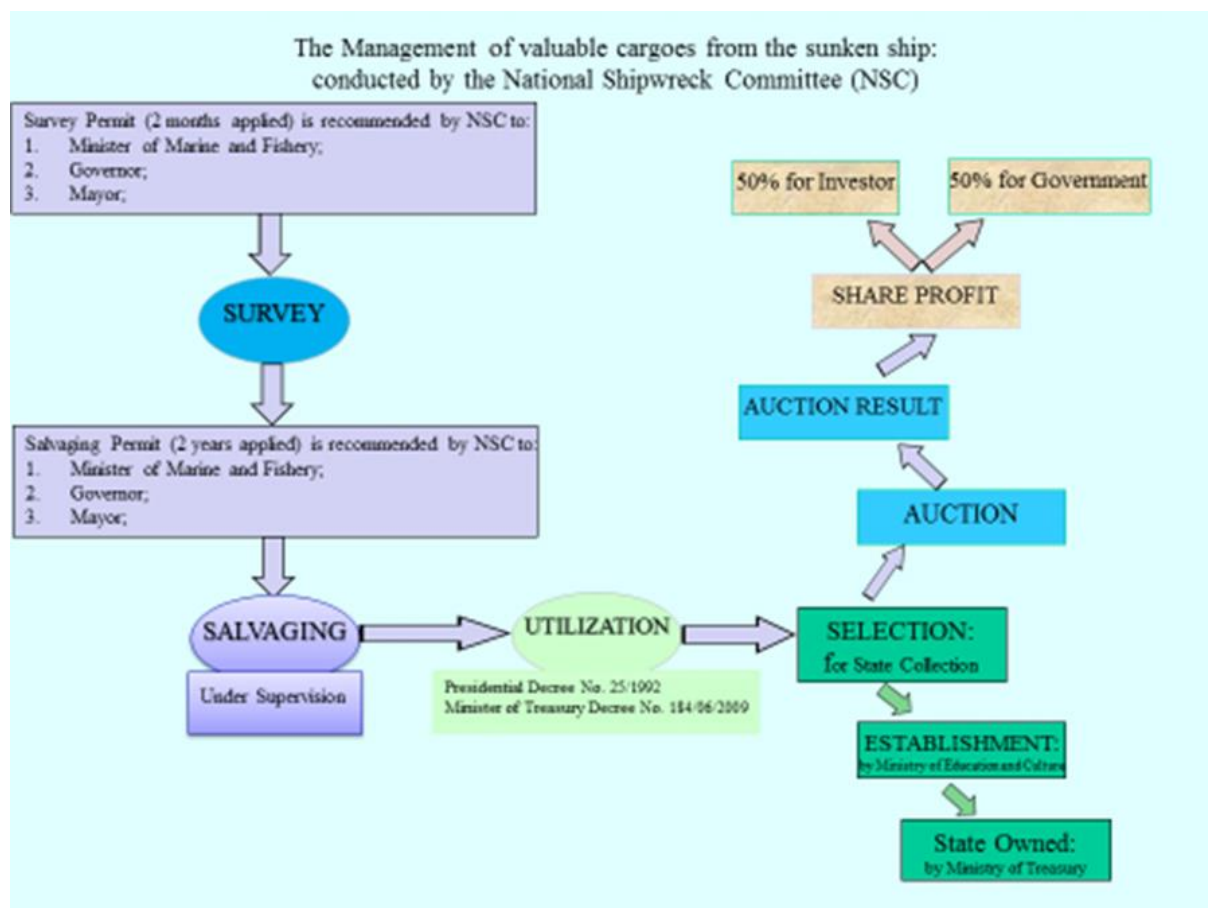


Figure 1. The Protocol for the Survey and Salvage of the Valuable Material Cargoes from Historic Shipwrecks which managed by the National Shipwreck Committee (Source: Ministry of Marine and Fishery).

Figure 1 shows how the National Shipwreck Committee maintains two types of activities, which are the commercial survey and commercial salvage. Commonly, the survey is conducted as the pre-requirement before initiating the salvaging. To begin with, the private sector should have completed the administration process depending on the survey area in form of the permission from three members of the Government sector, including the Mayor,

the Governor, and the Minister of Marine and Fishery. This survey permit period expires after the two months. After the administration is completed, the survey activity can be initiated by the company, without the supervision of the National Shipwreck Committee or the related stakeholders. Lastly, the company should report the real data acquired from the survey activity to the committee.

Then, after the survey, if the company would initiate the salvaging process, they should manage the administration as well as the working permit which takes the form of the signature permit from the three members of Government agencies, such as the Mayor, the Governor, and the Minister of Marine and Fishery. The main difference between the survey and salvaging activity is the supervision involvement from the competent authorities during the salvage until the redeployment of artefacts from sea to the land. Similarly, after finishing the salvaging activity, the salvager should report all of the results from the salvaging action.

In the next step, according to the Presidential decree number 25 in 1992 and Minister of Treasury decree number 284 in 2009, all of material cargoes that are salvaged from the historic shipwreck finds should be utilized by Indonesian Government. The utilization of those artefacts will be assessed by conducting the classification process as: the classification of those artefacts for the National collection and the classification for auctioning purpose. For the first mentioned, the classification process will be supervised intensively by the representative from Ministry of Education and Culture before items are assigned as National heritage assets. On the other hand, the auctioning process will be supervised by the representative from the Ministry of Treasury, subsequently, the results from the auctioning will be shared adequately, which are 50 percent for the investor and 50 percent for the Government.

After the establishment of commercial salvage legislations and the implementation of legal procedures 29 commercial surveys projects were undertaken from 2001 to 2009 with the

funding and collaboration with for-profit companies (Figures 2 and 3). Furthermore, the National Shipwreck Committee issued 11 commercial salvage permits to different commercial companies to salvage the material cargoes from historic shipwrecks found. With the permits in hand, the salvage activities took place in the years 1990, 1999, 2002, 2005, 2006, 2008, 2009, and 2010.

No	Location	Companies	Years	Numbers of Material Cargoes	Descriptions
1	Pulau Buaya, Kepulauan Riau	PT. Muara Wisesa Samudera	1990	16,031	Chinese Ceramics, Song Dynasty
2	Batu Hitam, Belitung (Tang Cargo), Tuban	PT. Sulung Segara Jaya, PT. TORR	1999	10,757	Chinese Ceramics and Metal from Tang, Song, Yuan, Ming, and Qing Dynasty; Vietnam ; Thailand; Europe; Southeast Asia
3	Blanakan Sea	PT. Lautan Mas Bakti Persada	1999	13,590	Ceramics from Thailand, Vietnam and China
4	Karimata Strait	PT. Tuban Oceanic Research and Recovery (PT.TORR)	2002	31,029	Chinese Ceramics and metal from Yuan Dynasty
5	North Java Sea, Cirebon	PT. Paradigma Putra Sejahtera (PT.PPS)	2005	271,834	Chinese Ceramics from the five dynasties, jewellery, Metal.
6	Karang Heluputan Sea, Kepulauan Riau	PT. Adi Kencana Salvage	2006	21,521	Chinese ceramics, anchor, canon and metal containers, from Ming and Qing Dynasty
7	Teluk Sumpat Sea, Kepulauan Riau	PT. Adi Kencana Salvage	2006	15,461	Chinese ceramics and gem stones from Yuan and Qing Dynasty
8	North Java Sea, Jepara	PT. Adi Kencana Salvage	2008	14,814	Chinese Ceramics and Chinese coins from Song-Yuan Dynasty
9	North Java Sea, Karawang	PT. Paradigma Putra Sejahtera (PT.PPS)	2008	6,442	Chinese Ceramics from the Fives Dynasties
10	East Belitung Sea	PT. Paradigma Putra Sejahtera (PT.PPS)	2009	37,680	Coins, Canon, and Ceramics from XVII CE
11	Ujung Pamanukan Sea	PT. Comexindo Usaha Mandiri (PT.CUM)	4/1/2010 (Unfinished)	18,469	Chinese Ceramics from Ming Dynasty

Table 1. The Commercial Salvage Databases (Source: The National Shipwreck Committee, Ministry of Marine and Fishery).

Table 1 clearly demonstrates that salvage companies retrieved a significant number of material cargoes from different types and periods. Nowadays, almost all of the material evidence from these sites is stored in different places. The National Shipwreck Committee itself can only afford to manage six locations in Pulau Buaya, Karang Heluputan, Teluk Sumpat, Cirebon, Batu Hitam (Belitung), and Jepara.

4.2.1. Series of Commercial Salvage Activities in Indonesia

In 1989, the first official salvage activity in Indonesia occurred at the *Pulau Buaya* wreck. This shipwreck dates to the twelfth or thirteenth century and the carried a cargo of Chinese ceramics (Flecker 2002:21). No archaeologists were involved in this activity. Many years after the recovery of the shipwreck cargoes, the Ceramic Society of Indonesia did publish, however, a book of the ceramics and artefacts salvaged from this shipwreck (Ridho & Edwards McKinnon 1997).

In 1997, the tenth-century Intan shipwreck (A.D. 940) was salvaged and noticed as an important discovery related with maritime polities in Southeast Asia, including Indonesia (Manguin 2004). This shipwreck contained many religious and significant articles such as silver ingots, Chinese silver and gold coinage from Java marketplaces in the past (Wicks 1992). Moreover, it also had large numbers of Chinese ceramics, aromatic resins, spices, and woods which were also available in Java marketplaces (Christie 1998). In fact, the commercial salvage activity was undertaken and divided into two events. During these activities, limited archaeology was involved, until Michael Flecker (2000; 2001a) was engaged to record and document the site.

In 1998–1999, another official salvage activity without archaeology and Indonesian researcher getting involved was occurred again. This salvage was sponsored by a private company after getting an official permit to salvage the Chinese shipwrecks in the Belitung Island territory, including: the *Tang* shipwreck, the *Tek Sing* shipwreck, the *Ming* shipwreck, and the *Yuan* wreck (A.D. 850) then officially named as the *Belitung* wreck site (Flecker 2001:221). There were salvaged important artefacts such as 763 inkpots, 915 spice jars, and 1,635 ewers with different important motifs including the Buddhist lotus symbols, Chinese calligraphy, geometric decorations, and Quranic inscriptions, which are assumed to be the commodities for sale at Indian Ocean marketplaces, were exposed and salvaged at this site (Guy 1986).

The only salvage operations, that used archaeological excavation methods under the supervision of government officials were the work undertaken on the Cirebon and Karawang shipwrecks (A.D. 930–990), by a local private company that collaborated with foreign private company in 2006 (Hall 2010; Liebner 2009). There were 500,000 ceramics, gold objects, silver, copper, iron, bottle, glass, beads, coins, and precious stones during the salvaging (Utomo, 2008: 35-60; Liebner, 2009). These artefacts are identified as evidence of trading networks in Indonesia around the ninth century (Liebner 2009).

4.2.2. The National Shipwreck Committee documentations

After those event series, the National Shipwreck Committee organize the inventory of those salvaged shipwreck cargoes. Again, they recount all salvaged artefacts to get precise numbers, and also to conduct the classification with divides them based on their conditions, such as illustrated in the charts below.

Hasil Inventarisasi Terpadu BMKT (kondisi)

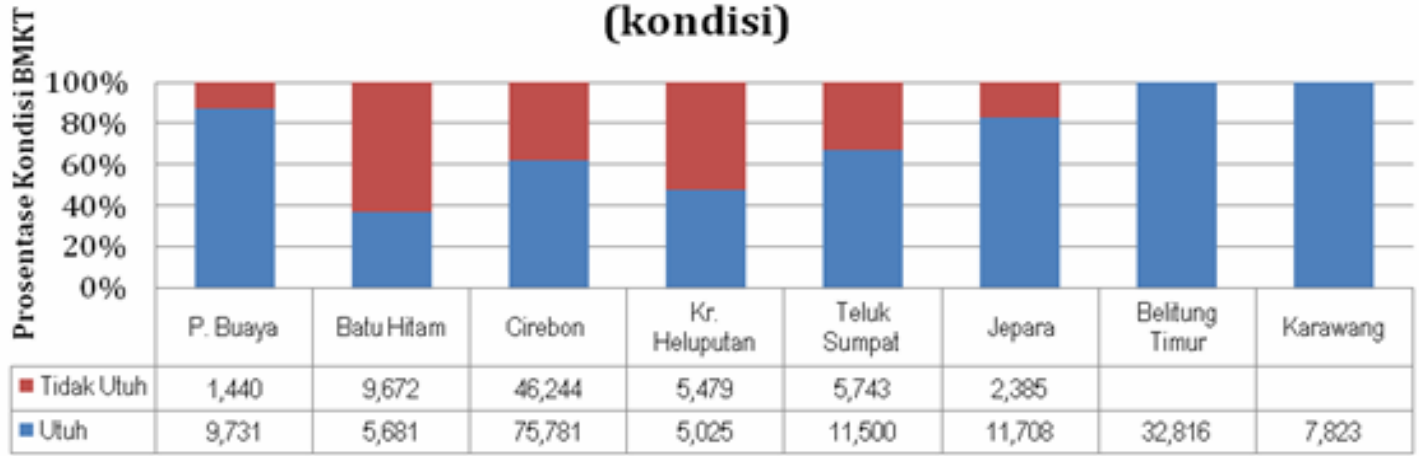


Figure 2. The Integrated Percentages of Shipwreck Cargoes Inventory Results. * Red Colour: Incomplete Condition; * Blue Colour: Complete Condition. (Source: The National Shipwreck Committee, Ministry of Marine and Fishery).

After the recounting process National Shipwreck Committee staff numbered and labeled all artefacts. Due to the limited availability of human resources and the huge numbers of artefacts, they kept the artefacts in baskets as a temporary place and put the labels with the pictures, numbers, and limited descriptions on the baskets. This labelling was officially conducted by following two guidelines to cataloguing image collections, they are the small museum cataloguing manual (Ericksen et al 2009) and a guide for documentation works for museum in developing countries (ICCRUM-UNESCO 2011).


SEKRETARIAT PANITIA NASIONAL BENDA BERHARGA ASAL MUATAN KAPAL YANG TENGGELAM (PANNAS - BMKT)


JPR - 01

Jenis BMKT : Mangkok
Jumlah : 72
Kualitas :
Pengecekan :

Tanggal : Pemeriksa : Paraf

Dokumentasi :




Dok. Des -13


SEKRETARIAT PANITIA NASIONAL BENDA BERHARGA ASAL MUATAN KAPAL YANG TENGGELAM (PANNAS - BMKT)


JPR - 02

Jenis BMKT : Mangkok
Jumlah : 84
Kualitas :
Pengecekan :

Tanggal : Pemeriksa : Paraf

Dokumentasi :




Dok. Des -13

Figure 3. The labelling format that used by the National Shipwreck Committee (Source: The National Shipwreck Committee, Ministry of Marine and Fishery).

Beside the labelling documentations, they also create the electronic database for each artefact. This database comprises of the number of artefact, type, character, material, and small descriptions.

No.	Artefacts Number	Artefact	Type	Material	Amount	Description
1.	TS/PRG/001	Piring/Plate	1	Kaolin	1	Utuh/complete
					2	Tidak utuh/incomplete
2.	TS/MGK/002	Mangkok/Bowl	1	Batuan/rock	4	Utuh/complete

Figure 4. the model of each artefact database that created by the National Shipwreck Committee (Source: The National Shipwreck Committee, Ministry of Marine and Fishery).

In the National Shipwreck Committee warehouse, there is a large desalination room within six tanks, including four small and two large tanks. They are used for desalinating and cleaning the artefacts after the labelling and database processing are completed.

As described above, related with the National Shipwreck Committee job description, these shipwreck cargoes utilization consider as the national asset (that will go to the block). Therefore, they designed a proper catalogue that contained the information and description of these artefacts, and more importantly, included the price netted of each artefacts type. To date, they already published two catalogues of salvaged artefacts from two locations, such as, the artefacts from *Belitung* wreck and *Karawang* wreck.

4.3. The Cultural Heritage Protection legislation

Firstly, underwater cultural heritage as executed by the Cultural Heritage Protection Division focuses on scholarly research and includes the long-term preservation and conservation of underwater cultural heritage. Underwater Cultural Heritage as delegated to this division is covered and protected under two legislative documents in the past and present:

1. *Law No. 5/1992/Objects of Cultural Heritage*, under the supervision by Minister of Education and Culture; and
2. *Law No. 11/2010/Cultural Heritage Protection*, under the supervision by Minister of Education and Culture.

The first legislative document was endorsed in 1992 and superseded in 2010 by *Law No. 11/2010/Cultural Heritage Protection* in a response by the Cultural Heritage Protection and Preservation Unit to prevent and halt the activities of commercial salvagers raising and selling material from historic shipwrecks. Along with the ratification of *Law No.*

11/2010/Cultural Heritage Protection, the Cultural Heritage Protection Division declared a moratorium to stop all commercial survey and salvage activity in Indonesian waters for an unspecified time.

The current legislation, i.e. *Law No. 11/2010/Cultural Heritage Protection* details the protection and preservation of material cultures from historic shipwreck finds in Indonesia. In provision no. 26, there are four specific statements about procedures related to cultural heritage survey and excavation. They are:

1. The Government is responsible for the search for artefacts, monuments, structures, and/or locations that are considered to be cultural heritage;
2. Government search activities relating to cultural heritage sites, or those expected to be cultural heritage sites prohibit the public or community from undertaking any **excavation, diving, and/or salvage on land or underwater**;
3. Search activities mentioned in item 1 and 2 are only allowed for the purposes of **research** with the legal permit from local governments and depend on the sites location.

4.3.1 The Cultural Heritage Protection and Preservation Unit activities and documentations

From 2006 to 2011, staff from the Cultural Heritage Protection Division of the Ministry of Education and Culture undertook an archaeological assessment and surveys of 33 historic shipwreck sites in Indonesian waters (Table 2.). Their work was funded from their annual national budget and thus is not sponsored by any commercial salvage company. The 33 finds were subject to what the 2001 *UNESCO Convention on the Protection of*

Underwater Archaeology considers best-practise in underwater culture heritage management, i.e. *in situ* preservation (UNESCO 1995; ICOMOS 1997).

No	Evidences	Years	Location	Water depth (in m)
1	War Aircraft (Pesawat Tempur)	2011	Pulau Meti, Halmahera Utara	34
2	“Hawiamaru” shipwreck	2011	Teluk Kao, Halmahera Utara	6-10
3	“Kawimaru” shipwreck	2011	Teluk Kao, Halmahera Utara	6-12
4	“Topas” shipwreck fragments	2011	Pulau Solsol, Halmahera Utara	5
5	“Barnabas” shipwreck	2011	Pulau Wangeotak Halmahera Utara	6-12
6	“Sebira” shipwreck	2011	Pulau Sebira, Kepulauan Seribu	37
7	“Tidung” shipwreck	2011	Pulau Tidung Kepulauan Seribu	43
8	The Dutch shipwreck	2011	Pulau Belanda Kepulauan Seribu	40
9	“Poso” shipwreck	2011	Gosong Congkak Kepulauan seribu	30
10	“Tabularasa” shipwreck	2011	Pulau Pramuka Kepulauan Seribu	38
11	“Papatheo” shipwreck	2011	Pulau Papatheo, kepulauan Seribu	15-30
12	“Kumbang” shipwreck	2011	Pulau Kumbang Kepulauan karimunjawa	12.5
13	“Mati 1” shipwreck	2011	Perairan Batu Lawang, kepulauan Karimunjawa	53
14	“Mati 2” shipwreck	2011	Perairan Batu Lawang, kepulauan Karimunjawa	53
15	Iron and Metal fragments	2011	Pulau Nyamuk, Kepulauan Karimunjawa	3-4
16	“Parang” shipwreck	2011	Pulau Parang Kepulauan Karimunjawa	28
17	“Nusa Indah” shipwreck	2010	Pulau Menjangan, kepulauan Karimunjawa	28-30
18	“Geleang” shipwreck	2010	Pulau Geleang, kepulauan Karimunjawa	48
19	“Taka Menyawakan” shipwreck	2010	Pulau Taka Menyawakan, Kepulauan Karimunjawa	3-9
20	“Kumbang” shipwreck	2010	Pulau Kumbang Kepulauan karimunjawa	2-13
21	Parang shipwreck	2010	Pulau Parang, Kepulauan karimunjawa	34-38
22	Indonoor Shipwreck	2010	Pulau Kemujan, Kepulauan Karimunjawa	15
23	Seruni Shipwreck	2010	Pulau Seruni, Kepulauan Karimunjawa	10
24	Ceramic sherds	2010	Pulau Genting, Kepulauan Karimunjawa	2

25	Iron and metal fragments	2009	Maluku Utara, Perairan Tidore	50
26	Toshimaru	2009	Halmahera Utara, Maluku Utara	7
27	Mawali (WW II Ship)	2009	Bitung Manado, Selat Lembe	20-28
28	Aquila (Panama)	2009	Pantai Wayane Teluk Ambon	17-35
29	Unknown shipwreck	2009	Perairan Pulau Nangka, Kota Kapur, Bangka-Belitung	28
30	VOC Shipwreck	2008	Pulau Buton, Sulawesi Tenggara Perairan Sagori	7
31	WW II Shipwreck	2007	Sumatera Barat, perairan pesisir selatan	22-28
32	Ashigara shipwreck	2006	Makassar, sulawesi selatan, perairan Barang Lompo	32
33	Chinese Shipwreck	2006	Kendari, Sulawesi Tenggara, perairan Selayar.	21

Table 2. The Survey Databases (Source: The Cultural Heritage Protection and Preservation Division from Ministry Education and Culture).

As illustrated in Figure 1, the artefacts ownership is divided for two different purposes, that is, the artefacts that are intended for the auction house and those selected as part of Indonesia's cultural heritage. The last mentioned, indeed, is processed officially by the Cultural Heritage Protection and Preservation unit, Directorate of Culture, Ministry of Education and Culture.

CHAPTER 5

DISCUSSION

5.1. Introduction

This chapter provides an assessment of the data presented in the previous chapters, in order to answer the question raised by this research by implementing the methodologies as well as described in chapter 4. The scope of this analysis focuses on the relevant research aims, which were:

- to assess the effect of illegal looting and commercial salvage projects on maritime cultural resources in Indonesia today;
- to study how the current legislative framework can provide for the better protection of maritime cultural resources; and
- to suggest solutions to improve the maritime cultural resources management in Indonesia.

This chapter applies two appropriate methods relevant to the research questions and objectives set out in Chapter One. The first methodology is an assessment of the impact of commercial salvage as an ethical issue in maritime archaeology (Flatman 2007:85–89). In this context, the impact means what has been lost from what has been done, in associated with the commercial salvage activity as described in Chapter Two. The impacts also consider some related aspects, which consist of historical, scientific or technical, aesthetic, social, experience, and economic significance.

Secondly, the current Underwater Cultural Heritage (UCH) management practices and legislations in Indonesia an important issue that will be assessed in this chapter. It considers

the bias in the underwater cultural heritage legislative systems in Indonesia, more specifically, the Government considerations in looking at the status and importance of Indonesian Underwater Cultural Heritage, in this context, historic shipwrecks and their cargoes. Therefore, the comparative method in archaeology will be used in order to examine the Indonesian maritime cultural heritage practices (Roscoe 2008:734). It will be compared with the other countries that have struggled with similar issues and succeeded conducting the appropriate underwater cultural heritage legislation system, these are, the Netherlands and Australia.

5.2. The legislative impact on Indonesian maritime cultural resources

To begin with, this consideration arises from the Indonesian Government actionable that conducting the National Shipwreck Committee and using the legislation of *Salvage and Utilization of the Valuable Material Cargoes from the Sunken Ship* to achieve the profit by removing the valuable cargoes from historic shipwreck finds and selling them to collectors. Indeed, the historical background of this practice arose from –the quick response to the salvaging of *Geldermalsen* by Michael Hatcher. However, based on the number of commercial salvages series such as illustrated in Chapter Two, it can be assumed that the Indonesian Government decided to collaborate with the salvagers and treasure hunters for the economic motives. These facts are strongly debated and considered –when discussing ethics in the context of the maritime archaeology discipline.

Maritime archaeology as a discipline, in comparison with the other sub-disciplines of archaeology, has maintained a set of informal ethical principles, including communal ethics and professional responsibility (Mather and Watts 2002: 593-607; Bass 2003: 57-69). However, maritime archaeology has not yet developed as an acknowledged discipline in Indonesia. The very limited number of human resources in maritime archaeology also cause

an uncontrolled exploitation of the Indonesian underwater cultural heritage properties. It does not mean the Indonesian archaeologists should not be contemplating or reacting to these issues, however, the salvagers are more successful in convincing the Government of following the salvage path.

As described in Chapter Two, Indonesia has two contrary underwater cultural heritage legislations; however, the legislation of *Salvage and Utilization of the Valuable Material Cargoes from the Sunken Ship* is more dominant rather than the legislation of *Cultural Heritage Protection*. Moreover, that salvage legislation is supported by other legislations that contain the procedure for selling the valuable material cargoes. In maritime archaeology, this issue is considered as a serious ethical problem that needs to be resolved. On global scale, there is a paradigm that assumes that Indonesia supports the law of commercial salvage.

5.2.1. What have we lost from what has been done?

In this thesis, as described in Chapter One and Three, it has become clear that there are a lot of material cargoes or artefacts that were salvaged commercially—they are not utilized or studied properly. As a result, more than 19,000 artefacts, which were salvaged without archaeological standards and documentation, are stored at National Shipwreck Committee's warehouse under supervision of Indonesian Ministry of Marine and Fishery. More importantly, the commercial salvage process, in fact, induces the loss of the significance and context aspects that should be gained from historic shipwreck finds and their associations.

There is no need debating the ethics surrounding commercial salvage and treasure hunting activities. In another motive, the salvager has only pursued to recover or remove the underwater cultural heritage property for obtaining a reward from a court of competent jurisdiction (Brice 1996:338). In fact, it always causes the impact that really harms the underwater cultural heritage property and the archaeologists. In this research, because of the

lack of documentations and archaeological standards, this assessment will only focus on the aspects that have been lost from these 19,000 artefacts.

In the general terms of archaeology, material culture as well as the archaeological evidence is the most important aspect. Such as described in the literature review chapter, the artefacts within their environment or the place that they found, contain much significant knowledge and information about human behaviour between the past and present (Binford 1972). More specifically, context is one of very important aspect of archaeological research and interpretation. It assumes that archaeological evidence without context is similar to objects without valuable meaning.

In this research, those artefacts originally in context, have been salvaged or removed from their contexts in the most unethical way and without the use of archaeological methodology. As a result, these salvaged material cargoes from 10 sites are considered to have no valuable meanings. In fact, there are three essential values that have been lost from the commercial salvages that have been done. Those three consist of scientific or technical, social, and economical aspects. Moreover, those aspects are assumed as having been disregarded from the concern of the related Indonesian Government agency, which is, the National Shipwreck Committee, Ministry of Marine and Fishery.

The scientific or technical aspect is placed as the first major significant loss in this assessment. For researchers, especially archaeologists and anthropologists, material cultures are the primary data in their research projects. However, there are two conditions that should be of concern to researchers. Firstly, the principle of context is the major concern for the study of artefacts. Without context or the association between the archaeological objects and their environments, archaeologists will have lost the detail necessary for knowledge and information gathering during their interpretation phase.

Secondly, the other condition relates to the unethical system and techniques of recovering the artefacts. In this context, the material culture of historic shipwrecks from underwater sites or the seabed is considered. In maritime archaeology research projects, underwater excavation or recovery the removal of artefacts from the *in situ* context is generally placed as the very last option to be undertaken. However, if forced to do, the underwater excavation should conduct the archaeological standard and procedure to be accomplished. This becomes important because of the commercial salvage technique that is quite often destructive and really harmful, both for the shipwreck as well as for the natural environment. The worst thing is the commercial salvage undertaken without inappropriate archaeological documentation of the site, while the salvagers publish dramatic documentation in order to attract the public and collector attention to gain support for their existence as the saviour of underwater treasure.

Subsequently, the social aspect is assumed as the second vital element that also lost from the essence of Indonesian maritime cultural resources. This aspect, conceptual, is also divided into two perspectives. Firstly, the social aspect of the material culture with the shipwreck is the major information that should be achieved. For instance, the position of the material cargoes on the shipwreck can provide an information of the division of social structure on the vessel, such as the spaces for the ship crew, passages, and their commodities. On the other hand, the other perspective is the association between the shipwreck cargoes and their natural environment. This association is really helpful for researcher to investigate the wrecking process of a ship, also the process of abandonment a ship during the wrecking process.

Lastly, the economic aspect is another loss from Indonesian maritime cultural resource essence. In this context, the economic value has different meaning in comparison with the economics from the salvager or treasure hunter perspective. The consideration of economic value from maritime archaeology perspective is the potentiality of maritime cultural asset or property of a nation, in this case, Indonesia. Indeed, Indonesia has lost the economic profit

from the shipwreck cargoes that have already been salvaged and sold at the auction house. Indonesia also missed out on the benefits from the potential of tourism to the sites where visitors can see the artefacts. Furthermore, the financial advantages that could be gained from the museum exhibition are also considered as part of the disadvantage to Indonesian economy.

5.2.2. What remains that could be used?

This chapter not only assesses the impact of commercial salvage to Indonesian maritime cultural resources, it also attempts to demonstrate how the potential remains can be utilized. It requires all Indonesian elements including the related Indonesian Government agencies, researchers, and Indonesian communities, to be more aware and concerned with the potential maritime cultural asset that they have. After the darkness of commercial salvage series, there are three aspects that are still left and could be utilized to gain valuable benefits. Those aspects are the historical, educational, and economic values.

First of all, the huge number of artefacts from different types and past periods are the real evidence of historical maritime activities. The variety and number of artefacts found shows that Indonesia has become the place of trading activities between Indonesia and other countries, and areas such as Persia, Arabia, and China, in particular those of the Batavia cargo. It can be seen from the large number of Chinese ceramics from different period that are stored at the National Shipwreck Committee warehouse nowadays. Another interpretation is Indonesia seas has been used as the sailing route by a large number of the Armada fleet, including, the Java Sea, also known as the silk road. Furthermore, the artefacts that are identified from different period also shows that

Indonesia has ever had a long maritime history, in particular, from the thirteenth until the seventeenth centuries.

Then, the educational aspect is the second aspect that can be developed further. Even though Indonesia has a myriad of maritime cultural resources, maritime archaeology as a discipline has yet to be taught in tertiary education. In comparison with other countries such as Australia and the UK, the study of maritime archaeology has been undertaken and developed after the discovery of historic shipwrecks. Indeed, the *in situ* preservation is a key factor in order to keep and preserve the archaeological objects for the further generation.

In this research time period, Indonesian maritime cultural assets are still being classified to become accessible for the people. The reason is because the National Shipwreck Committee's is attempting to secure them from the black market of illegal trading of goods which are still occurred in Indonesia. However, due to the moratorium on commercial salvage, this committee should give an open access to Indonesian archaeologist scholars and other researchers. Although, these resources were salvaged without the proper archaeological standards, they still can be used as the data for a research project based on their own qualities and inherent information.

Hence, the economic motive is another aspect that can be applied. It can be achieved by conducting a collaboration between the National Shipwreck Committee agency, the Ministry of Education and Culture, and the proper Indonesian museum, which is a maritime museum. Unfortunately, Indonesia has no dedicated maritime museum or collecting institution. However, if such museum could be build, the resources are the valuable assets which would show the evidence of Indonesian maritime history to public. By conducting proper management of the resources and creating an attractive exhibition,

it also can be functioned as a tourism drawcard that can commonly achieve the financial profit for the National economy.

5.3. How to improve the current Indonesian legislative framework?

In fact, Indonesia has similarities with the Netherlands and Australia in the development of underwater cultural heritage management. These three countries, unfortunately, have not ratified the 2001 UNESCO Convention on the Protection of Underwater Cultural Heritage. On the other hand, however, they have signatories to UNCLOS *Convention on the Law of the Sea*. Certainly, these two international frameworks are considered as the principal conceptual framework for underwater cultural heritage management. The Netherlands and Australia however have a long history of dealing with the same problems with salvagers as has Indonesia, before they have successfully developed their underwater cultural heritage legislations and management.

Australia and the Netherlands' concern for the protection of underwater cultural heritage resources was formed since the booming era of shipwreck discovery around the world. Indeed, in these countries it was just discussed in general aspects along with the cultural heritage on land. These countries, then, focused on underwater cultural heritage in more detail after the series of cases related to destructive activities on the shipwrecks and its cargoes, such as, diving activities, removing the artefacts, and auctioning the artefacts that were occurring around the world. Subsequently, these activities became the turning point for them to establish underwater cultural heritage legislative frameworks, in regional or even on an international scale. Based on their experiences, this chapter will compare the processes of developing the underwater cultural heritage legislative frameworks between the Netherlands, Australia, and Indonesia, in order to examine the aspects from the current Indonesian underwater cultural heritage legislation framework that need to be improved.

5.3.1. UCH legislative frameworks in Indonesia, Australia, and the Netherlands

First of all, the Netherlands always placed the sea as having a prominent role in its history. However, the Netherlands came relatively late to the consideration of the importance of protecting its maritime archaeological resources (Maarleveld 2006b: 31). The country's awareness began with the auctioning of the huge cargoes of the *Geldermalsen*, including the gold and porcelain objects, in the mid-1980s. This particular event then triggered the major boost of serious attention given to underwater cultural heritage management, because the Dutch Government recognized that there was a lack of attention paid to securing the underwater resources of their country (Manders and Maarleveld 2006: 129). As a result, the Ministry of Welfare, Health, and Culture created a small unit to undertake underwater archaeology in 1985 to contribute and provide new knowledge of underwater cultural heritage (Maarleveld 1997: 48). In 1995, the central of Dutch Government established the Department within the State Service for Archaeological Investigation under the name of the Netherlands Institute for Ship-and Underwater Archaeology (*Nederlands Instituut voor Scheeps-Onderwater Archeologie, NISA*). This establishment then resulted in the isolation of underwater archaeology within the governmental organization (Maarleveld 2007: 54).

In legislation, the Dutch have conducted the *Monuments and Historic Building Act*, which placed the land areas and inland waters as the first priority area. After they have paid more attention to maritime archaeology resources, they have expanded the protection of cultural heritage resources to maritime environments, and resulting in the legal protection of underwater cultural heritage to prevent illegal excavation in a zone of 12 km around The Netherlands waters (Manders and Maarleveld 2006: 129). In 2007, this protection then was expanded until it reached 24 km (Maarleveld 2006: 36). The consideration of this protection not only focused on the illegal excavation on the Dutch maritime cultural resources, but also

recognised the rapid development of new technologies that has led to more exploratory activities on the sea bed, for example, the development of SCUBA equipment (Maarleveld 2006b: 28).

More specifically, Dutch underwater cultural heritage management, basically, has been divided into three categories of threats that can potentially harm the underwater cultural heritage resources. The first threat is the mechanical threats that are defined as the actions of elements (Bryant 2002: 112). One of the considerations arising from this threat is a sediment erosion processing that can destroy the underwater cultural heritage in coastal areas (Flatman 2009: 45). Secondly, the natural threats include biological threats that also have the potential to harm the underwater cultural heritage object, for instance, a shipwreck. The last threat is damage that is caused by chemical degradation, such as the corrosion processing of metal objects (Manders 2006a: 58). However, the threat that is caused by human activities is a major concern for the protection of underwater cultural heritage resources.

Similarly, Australia has concerns with underwater cultural heritage management, which includes shipwrecks, from the development of SCUBA equipment that were available and sold in some Australian sport shops since the middle of the 1950s (Coleman 1987:5). This development then resulted in the increasing number of dive shops and dive clubs that prompted interest in the discovery of shipwrecks. By this time, many wrecks in Australia had been looted by the amateur divers, particular communities, or professional salvagers that proposed selling the objects on the commercial market (Hosty and Stuart 1994:10). An example is the discovery of the *Vergulde Draeck* in 1963 by a group of divers. Later on, there was a report of activity using explosives to obtain loot from the shipwrecks (Henderson 1986:69–71). Furthermore, reports of looting on the *Batavia* and *Trial* shipwrecks, which are known as the earliest wrecks evident on the Australian coast, became the trigger for Australian Government to pay more attention to the protection of its shipwrecks.

In the beginning in 1964, Australia had no particular heritage legislation. The *Commonwealth Navigation Act* only discussed about the responsibility of a finder of shipwreck after the discovery to report its location. In the same year, the Western Australian Parliament modified this Act which become the *Western Australian Act to Protect Shipwrecks*. In 1969, this Act was amended, and at the same time, the museum provided adequate resources and became more pro-active regarding maritime archaeology and shipwrecks protection (Crawford 1977:32). Furthermore, Australia has deal an agreement with the Netherlands for collaborating in one particular unit ([Australian and Netherlands Committee on Dutch Shipwrecks \[ANCODS\]](#) in 1972. The aims were to excavate the material for display and scholarly research between museums in Australia and the Netherlands (Bach 1982; Bolton 1977).

In this research case, the big difference between Indonesia Australia and the Netherlands legislation is the actionable response after the destructive activities on the underwater cultural heritage properties. The auctioning the *Geldermalsen* cargoes and the development of new technologies become the basis of underwater cultural heritage protection legislations in The Netherlands, meanwhile the finding of wrecks by amateur diving club activities related to the development of SCUBA equipment has been considered the major concern relating to Australian underwater cultural heritage legislation. Moreover, both legislations have not only focused on the protection of UCH, but also on providing knowledge from their underwater cultural heritage resources. On the other hand, after the salvaging and auctioning of the *Geldermalsen* cargoes, Indonesia has been more concerned about the loss of the economical profits instead of cultural value and information. In addition, the formation of National Shipwreck Committee, *Law of Salvage*, and *Auctioning Procedures of Shipwreck Cargoes* legislation confirms that the Indonesian government has only been focused on the economical value of shipwrecks.

Subsequently, Australian and the Netherlands underwater cultural heritage legislation have supported the shipwreck projects. For instance, Australian authorities have successfully undertaken the first major excavation of a colonial wreck, the *James Matthew*, in collaboration with the Western Australian Museum during 1970s (Henderson 1977). The museum's role here is to investigate the sites identified within twelve months of their being reported (Sledge 1977). Meanwhile, the Netherlands agency has conducted a large scale 'Slufter Project' in Rotterdam in 1986 and research projects in the Wadden Sea. In a further step, both of these countries then join together to investigate four Dutch shipwrecks including *Zeewijk* (1727), *Vergulde Draeck* (1656), *Zuytdorp* (1712), and *Batavia* (Robinson 1980:37). On the other hand, Indonesian legislation has only opened collaboration with commercial salvage companies to remove the shipwreck cargoes for auctioning instead of displaying those artefacts in the museum. Moreover, Indonesia has no open collaborations, even with their own researchers or other countries, to conduct a research project on the underwater cultural heritage.

5.3.2. Improvements to the current Indonesian Underwater Cultural Heritage legislative framework

Discussion concerning what has already happened will not change anything, although, it can be the basis for Indonesia to improve their current underwater cultural heritage legislations and management. It does not mean that the Indonesian underwater heritage system has totally failed. The moratorium of all activities in association with commercial survey and salvage are considered as the most actionable solution by the Indonesian Government's Ministry of Education and Culture and Ministry of Marine and Fishery in collaboration with the Indonesian Navy and Marine Police. The next step, Indonesia should consider the development of the proper underwater cultural heritage legislative systems and

management practices. In other words, the current underwater cultural heritage legislation should be improved more carefully. Therefore, this chapter also attempts to demonstrate the import aspects from the current Indonesian underwater cultural heritage legislation frameworks that need to be improved.

From those comparisons above, there are three aspects that can be applied to improve the current underwater cultural heritage system. Firstly, Indonesia must place its maritime cultural resources as a top priority in legislation as well as the *Cultural Heritage Protection* legislation, especially after the moratorium of commercial salvage. It means the Indonesian Government should revise the two legislations of *Salvage and Utilization of the Valuable Material Cargoes from the Sunken Ship* and *Auctioning Procedures of Shipwreck Cargoes* legislation. For an international framework, Indonesia should consider to ratifying the 2001 UNESCO Convention on the Protection of Underwater Cultural Heritage. In addition, as the archipelagic country which has ratified the law of the sea as known as UNCLOS 1982, Indonesia must note the provision in this law that discusses about the responsibility of a country to protect its underwater cultural resources.

Secondly, the Indonesian Government should support underwater cultural heritage research that focuses on the *in situ* preservation and conservation. In another word, Indonesian Government should maximize the performance of a directorate of cultural heritage preservation and the museum, and the Ministry of Education and Culture. Related to the lack of human resources, the Indonesian Government could fund scholarship opportunities for Indonesian archaeologist to study abroad and participate in maritime archaeology or underwater cultural heritage programs in other countries. In another way, Indonesia could cooperate with other countries that have already established effective underwater cultural heritage management and legislation. If not because Horst Liebner (2009) and Mick Flecker's (2001; 2002; 2003) initiative to have become involved during the

commercial salvage activities , Indonesia might not have the evidence of scientific research report, documentation, and information from these potential resources.

Thirdly, the Indonesian museum performance must be optimized. In Australia and the Netherlands, the museum is not only a place for exhibition; curators could have a role in assisting the investigation of shipwrecks through projects and an annual report every year. While developing the maritime archaeology or underwater cultural heritage disciplines in Indonesia, the Indonesian museum should manage and utilize the major numbers of salvaged artefacts in the National Shipwreck Committee warehouse. However, the museum should be concerned with the information and knowledge that can be provided to the public by offering exhibitions, related to the processing of the removed artefacts.

5.4. Conclusion

To summarize, this chapter attempts to analyse the current Indonesian underwater cultural heritage legislation related to the impact of its management of Indonesian maritime cultural resources, in this context, the salvaged material cargoes from historic shipwreck finds that are stored at the National Shipwreck Committee warehouse. This assessment considered the impact of current Indonesian underwater cultural heritage legislative frameworks on those salvaged artefacts including the aspects that could have been lost from the commercial salvage activities that have occurred in Indonesia. However, it also considers the remaining aspects that could be used and utilized from those resources.

This chapter also examines the aspects in current Indonesian underwater cultural heritage legislative frameworks that need to be improved. It is assessed by using the comparison of underwater cultural heritage legislative frameworks between the Netherlands, Australia, and Indonesia. These comparisons aim to recognize the weaknesses of current Indonesian underwater cultural heritage legislative frameworks and the steps that could be applied by

related Indonesian Government agencies to improve those frameworks. The comparisons not only discussed the current underwater cultural heritage legislative frameworks of the Netherlands and Australia, but also investigated the historical background of their underwater cultural heritage development. It also aimed to compare their actions to response to the ethical issues in maritime archaeology that have occurred in their areas.

From this assessment, it can be assumed that Indonesia has lost three important aspects from the current Indonesian frameworks. They consist of scientific or technical, social, and economical aspects. For scientific or technical aspect, Indonesia has lost the contexts in which the artefacts were found and their original environmental contexts because the commercial salvage companies or individuals work in Indonesia w never applied appropriate archaeological standards to the removal of the artefacts and recording of ships which has thus resulted in a lack of appropriate documentation and contextual loss. Consequently Indonesia could not provide this important knowledge and information for future generations. In regard to the social aspect, Indonesia lost the information about the artefacts association with the shipwrecks and its environments. Meanwhile, in context of economical motive, Indonesia also lost their potential to attract tourists and divers and the museum sector because of the auctioning of artefacts.

Apart from those loss explanations, however, Indonesia still has three remaining aspects that could be utilized, they are: the historical, educational, and economical aspects. Although Indonesia has lost many valuable cultural assets, there are a large number of artefacts as well as shipwreck cargoes, that also can be considered valuable Indonesian maritime cultural remains. In another words, Indonesia still has the evidence of maritime historical data that could be used as Indonesian maritime cultural resources. These resources also have the beneficial value as educational aspects. They could be utilized as the data for Indonesian archaeological scholars and related researchers to use in their research projects. In the future,

they could be considered as really useful resources to develop and establish the maritime archaeology discipline in Indonesia. More importantly, these resources can be used as the appropriate maritime cultural evidences to be displayed at the Indonesian museum. Furthermore, they can be not only utilized not just as the objects in an exhibition, but also has a function as tourism assets or properties that can provide economical value for Indonesian economy.

CHAPTER 6

FUTURE RECOMMENDATIONS

6.1. Implement only one appropriate legislation and management system which focuses on the protection and conservation of Indonesian Maritime Cultural Resources

After the enactment of a moratorium, the Indonesian Government should take action quickly. The circumstances demonstrate concisely and clearly that Indonesia should implement the one only appropriate legislation and its associated management system which focuses on the protection and conservation of its maritime cultural resources. The stress point in this context is a firm decision to remove the current Indonesian legislations, which are the *Salvage and Utilization of the Valuable Material Cargoes from the Sunken Ship* and the *Auctioning Procedures of Shipwreck Cargoes* as a part of Presidential Decree No. 19/2007; Ministerial Decree No. 39/2000; Minister of Treasury Decree No. 184/06/2009; and Presidential Decree No. 25/1992.

This implementation principally has beneficial values for the Indonesian Government and related agencies themselves. Firstly, it can obliterate the bias situation that exists between the Indonesian Government agencies that have been confused about the appropriate status of shipwrecks and their valuable material cargoes. This effects the excavation as well as salvaging activity or conservation of these shipwrecks and their artefacts as well as their *in situ* preservation. Secondly, this implementation will reflect the concise decision-making of the Indonesian Government in relation to and concerning the importance of their maritime cultural resources. Lastly, related to the data in this research, this implementation will determine the status of artefacts as important Indonesian maritime cultural resources and assets that need to be utilized more properly.

6.2. Increasing the Indonesian museum performances to utilize and explore the potential values of the current salvaged artefacts at the National Shipwreck Committee Warehouse

Based on the case study presented in this research, which concerns the bias legislation and lack of coordination and communication between the National Shipwreck Committee under the Ministry of Marine and Fishery and the Cultural Heritage Protection Unit under the Ministry of Education and Culture of Indonesia, it is clear that maritime cultural resources in the warehouses are not organized and utilized properly. This situation could actually be solved if the proper Indonesian museum had the protection of strong provision, which would be allowed it to be involved during the processing of salvaging of the site allowing it to record or document the process underwater and on the land as the supervision of the salvage process.

In order for this to occur the Indonesian Government should increase and maximize the performance of the Indonesian museum. However, the Government should decide on the proper museum to be involved which has a good record and performance level as well as the proper management system in place. Related to this thesis problem, the Government should also determine the institutions capable of conducting the appropriate archaeological procedures to manage those resources including conserving, desalinating, documentation (photographing and recording), labelling, and registering of the artifacts.

For effectiveness and efficiency, the Government could assign a collaborative unit which involves people from the National Shipwreck Committee, and the Cultural Heritage Protection Unit, which in turn is facilitated by the Museum, and it could also invite archaeologists and scholars from Indonesian Universities or broader institutions from other countries to take part. This collaboration also aims to strengthen the communication between Indonesian Government Agencies and stresses the seriousness of Indonesian Government

Agencies and related communities in protecting, preserving, conserving, and use of maritime cultural resources in more appropriate way, especially the large number of available artefacts identified in this research. Lastly, the museum could give a recommendation to Government to register these potential resources as the Indonesian maritime cultural assets.

6.3. Evaluate and revise the National Shipwreck Committee tasks

In principal, the moratorium effect is not only applied to the shipwrecks and the material cargoes, but also to the National Shipwreck Committee itself. As a special unit that was established by the Central Government, they also need to be evaluated and its membership revised, or even dispersed. As the Indonesian geography has major areas of sea instead of land, there is no need to disperse the existence of this committee as it is needed. As a solution, the Government could maintain this committee by conducting the new improvements suggested as the next step.

Firstly, the Government should modify or change the assignments and objectives of this particular committee. The work areas of Ministry of Marine and Fishery that are focused on the Indonesian territorial waters will give them a previous association with the communities and local people living on the coastal areas. This will give the committee an advantage in encouraging them to protect, conserve, and supervise the potential areas that may contain the undiscovered remains of historic shipwrecks and valuable artefacts. In other words, the National Shipwreck Committee could become a very beneficial part of the Indonesian Government program to educate, train, and facilitate the coastal communities understanding of the knowledge and the importance of finding, protecting, preserving, and conserving of historic shipwrecks including their cargoes.

Secondly, this committee should improve communication and collaboration with the other authorities to prevent the illegal salvaging and/or removal of the artefacts from underwater

sites which is fact still occurred in some Indonesian territorial waters. In fact, in the majority of cases is unfortunately still occurring as local traditional fishermen quite often use the destructive methods to remove artefacts causing harm to the wrecks and the environment while a lack of proper diving equipment could harm to the divers themselves . For existing resources, this unit should become a facilitator between the Cultural Heritage Protection Unit, the Museum, and archaeologists with the aim to organize the conservation and documentation of these artefacts at their warehouse that have acquired, and provide with the supporting facilities, spaces, and resources needed for this work.

6.4. Increasing the frequency of UCH law enforcement and establish priorities

Despite the complicated problems that already exist related to these research problems, Indonesia it has been assumed t still does not have a strong commitment to resolving these ethical issues. This assumption can be seen as supported by the lack of frequency of underwater cultural heritage legislation enforcement and the lack of priority given to it. Indeed, the current Indonesian underwater cultural heritage legislation, which is the umbrella law for the Cultural Heritage Protection unit, is considered not strong enough to prevent or stop the activity of removing the artefacts from underwater sites. In this context, the frequency of current underwater cultural heritage law enforcement should be strengthened.

Basically, the provision of underwater cultural heritage law is only a small part of Indonesian Act number 11 enacted in 2010. This Act actually contains the adequate provisions for the protection all of Indonesian cultural heritage resources in general; more specifically, these provisions are supported by 15 articles that explain the different punishments and sanctions for the trespass on Indonesian cultural heritage assets. However, due to the existence of the other legislations, this Act is looked upon as being powerless in its

application. Moreover, in these penalty provisions, there is no specific mention of the penalty that is to be applied if there is an infraction of underwater cultural heritage.

Based on this fact, these two kinds of opposite legislations need to be repealed as soon as possible. The only one improvement for to Act number 11 is the need to add a more detailed mention concerning the sanction or punishment of the infraction to the Indonesian underwater cultural heritage resources. For the next step, the improvement of socialization scale also needs to be undertaken by the Cultural Heritage Protection Unit in collaboration with the National Shipwreck Committee. This improvement is not only related to the coastal communities or local traditional fishermen, but also needs to reach the other related authority institutions including the Indonesian Navy, Indonesian Coast Guard, Police Marine, and Indonesian Border and Customs.

6.5. Considering the ratifications of the 2001 UNESCO Convention

After the establishment of the best solutions concerning the internal issues, Indonesia should consider improvements on a broader scale, which is improvements to the international framework. In other words, the government should consider the ratification of the 2001 UNESCO *Convention on the Protection of Underwater Cultural Heritage*. This consideration is not only to demonstrate the existence of Indonesia on a global perspective, but also shows the integrity of Indonesia as a nation which will protect all of their cultural heritage assets in more serious attention.

In order to realize this consideration, all of the related aspects need to work in harmony and take a quick action to encourage the central Government of Indonesia. Firstly, they need to define the processes relating to the discovery of underwater cultural heritage resources and register them with UNESCO as the Indonesian cultural heritage assets. Furthermore, they

should construct short-term and long-term plans, that not only focuses on the conservation and protection of the available underwater cultural heritage resources, but also on discovering other potential resources around Indonesian's territorial waters.

Learning about and reviewing the models of underwater cultural heritage management systems from other countries that have similar issues, as described in this thesis, can be considered as an alternative method to assist in the improvement of current underwater cultural heritage legislative systems. Reviewing the development of the Dutch and Australian underwater cultural heritage legislative systems will help Indonesia to find the aspects that need to be improved or revised in their own underwater cultural heritage legislative system. However, this reviewing will not entirely change the characteristics of Indonesian legislative system. Therefore, Indonesia should be careful to modify and improve their provisions as well as described in Chapter Four.

6.6. Establishing a UCH and Maritime Archaeology Program

In order to solve the lack of human resources and professionals in the maritime archaeology and underwater cultural heritage area in Indonesia, developing the underwater cultural heritage and maritime archaeology discipline program is considered an appropriate solution. Beside the resolving the human resources issue, this development is also really important to create the best qualified scholars of maritime archaeology. Therefore, before establishing these programs, Indonesia should prepare the internal and external aspects relevant to the Indonesian circumstances.

The development on new topics at universities, the employment or training of well-qualified archaeology lecturers, and the study of shipwreck cargoes as the underwater cultural remains are considered as the internal aspects that could be used to help train archaeologist. The first two mentioned aspects could be developed through the cooperation or comparative

studies between universities in Indonesia and other countries. Meanwhile, for the last mentioned aspect, the universities or related scholarly institutions could use the cultural artifacts in the National Shipwreck Committee warehouse as the archaeological resources to be utilized for practicing the archaeological methods and techniques including measuring, recording, conservation, and reconstruction.

The appropriate facilities, the available spaces, and the supporting archaeological equipment are considered the external aspects that need to be fulfilled to strengthen the establishment of these disciplines. The facilities and spaces which are the appropriate places to be used by the scholars to practice the archaeological method and techniques as mentioned above, are an appropriate archaeological laboratory and diorama of archaeological sites. Moreover, the supporting archaeological equipment, especially the diving and underwater survey equipment, are really important for assisting the scholars to conduct underwater fieldwork simulation projects.

CHAPTER 7

CONCLUSION

As described by Keith Muckelroy, material cultures are the all-important aspects of seafaring including ships, boats, and their material cargoes, passengers; and the economic systems on ship between the crew and passengers (Muckelroy 1978:6). Therefore, material cargoes from the historic shipwreck finds are assumed to be strong evidence for conducting the deep water investigation as part of maritime archaeology research, especially, the underwater archaeological shipwreck. However, all archaeological research should consider about the importance of association between the material cultures and its environment known as the context. In more detailed maritime archaeology terms, material cultures from maritime and underwater contexts are associated with some important aspects such as the relationship between the material cargoes and other objects and the reasons for packaging and transporting the objects (Staniforth 1996).

In this thesis, material cargoes from the historic shipwreck finds in Indonesia are considered as the major issue that lead to the complicated polemics in some of Indonesian elements. However, the ethical issues in maritime archaeology such as the Underwater Cultural Resources Management and the biased legislations, became the limitation and focus in this research scope. In fact, the circumstances of Indonesian maritime cultural resources management are still really complicated. The biased legislations lead to the inappropriate salvaging of material cargoes from underwater historic shipwreck finds in Indonesian territorial waters. Furthermore, after the enacted moratorium on commercial survey and salvaging, the salvaged material cargoes that are stored by the National Shipwreck Committee are not utilized properly as well the records lack the standards of archaeological documentation methods.

To summarize, the main question addressed in this research, that is, “How can maritime cultural heritage practices in Indonesia and the associated legislative frameworks be improved to provide better and more economical long-term strategies for the future and if so, what is the way forward?”. Therefore, this thesis tried to investigate the established underwater cultural heritage and underwater cultural resources management frameworks, by comparing the Indonesian management and legislation system with other developing countries, such as Australia and the Netherlands.

The investigation, in general, looked at the impact from commercial salvage activities in Indonesia by using the data about salvaged material cargoes that are stored at the National Shipwreck Committee warehouse; and specifically focused on the possible improvement to Indonesian maritime cultural resources management by identifying the aspects that need to be improved in the current Indonesian underwater cultural heritage legislative systems. The comparison of underwater cultural heritage management and legislative systems was considered to identify the weaknesses points in the current Indonesian system.

Observation, collecting the selective objects, researching their history and context, understanding the value and criteria and classification error the collecting data methodology that is used in this research. The total number of salvaged material cargoes that were approached as the archaeological data in this thesis were approximately more than 190,000 artefacts based on the databases held by the National Shipwreck Committee. Meanwhile, the legislations and their provisions were the subsidiary data that was also approached as the result of that methodology.

In Chapter Five, these resources were assessed by using two methods, they were, the ethical issue in maritime archaeology and the comparative method in archaeology. The first method, principally, assessed the effect of illegal looting and commercial salvage projects on maritime cultural resources in Indonesia today. The effect in this context comprised the

aspects that were lost from the commercial salvage project activities that occurred in Indonesia. However, it is not only assessed the negative impact, but also discussed the remains that could be used and utilized for the next steps as well as the solution of that problem.

On the other hand, the second method assessed the current legislative framework relating to the Indonesian maritime cultural resources. The discussion chapter assessed the aspects that needed to be improved regarding the current Indonesian legislative frameworks. Based on the explanation in this chapter, there are three aspects that can be applied to improve the current underwater cultural heritage system. The first result is Indonesia must place its maritime cultural resources as a top priority in legislation instead of the commercial salvage legislation. This consideration is based on the provision of two international frameworks, which were the 2001 UNESCO Convention and the 1982 UNCLOS. Secondly, Indonesian Government should support the underwater cultural heritage research that focuses on the *in situ* preservation and conservation that is a part of Directorate of Cultural Heritage Preservation and the museum, Ministry of Education and Culture's job desk. The last result is the improvement of the Indonesian museum performance to manage and utilize the major numbers of salvaged artefacts in the National Shipwreck Committee warehouse.

The assessment of the current Indonesian legislative framework was conducted by using the comparative method of two legislative frameworks from other countries that are Australia and the Netherlands. This comparison resulted in the identification of major differences between these three legislative frameworks that identified the weaknesses of the current Indonesian legislative framework. The first result is the actionable response after the destructive activities on the underwater cultural heritage properties. Secondly, the Australian and the Netherlands legislations not only focus on the protection of UCH, but also promote the gaining of knowledge from their underwater cultural heritage resources. Lastly, the

Australian and the Netherlands underwater cultural heritage legislation supported the shipwreck research projects and promoted the open collaboration between them.

Based on these discussions, there are 6 further recommendations that are provided to improve the Indonesian maritime cultural resources management framework. The first recommendation is Indonesia should implement only one appropriate legislation and management system that focuses on the protection and conservation of maritime cultural resources instead of the salvaging of artefacts and auctioning of them. It aims to obliterate the bias situation between the Indonesian Government agencies that have been confused about the appropriate status of shipwrecks within their valuable material cargoes; show decisive attitude of Indonesian Government –concerning the importance of their maritime cultural resources evidences; and to determine the salvaged artefacts status as the Indonesian maritime cultural resources and assets that need to be utilized more properly.

Increasing the museum performance to utilize and explore the potential values of the current salvaged artefacts at the National Shipwreck Committee warehouse is considered to be the second recommendation to improve the maritime cultural resource management in Indonesia. Although, the Government should determine the capable institution, in this context, the museum is the appropriate institution to undertake those archaeological procedures relating to those resources including conserving, desalinating, documentation (photographing and recording), labelling, and registering of the artifacts. Moreover, the Government could develop a collaborative unit between the National Shipwreck Committee, and the Cultural Heritage Protection Unit, which facilitated by the Museum to strengthen communication, stresses the seriousness of, and promote more concern about the protection, preservation, conservation, and utilization of maritime cultural resources.

Thirdly, evaluating and revising the National Shipwreck Committee tasks is the recommendation that the Indonesian Government should consider. Based on the works area

of the Ministry of Marine and Fishery that are focused on Indonesian territorial waters and have an association with the communities and local people on the coastal area, they could become the Government Agency to educate, train, and facilitate the coastal communities knowledge about and stress the importance of protecting, preserving, and conserving the historic shipwrecks including their cargoes found. Furthermore, this committee should improve the communication and collaboration with the other authorities to prevent the illegal salvaging or removing of artefacts from underwater sites that are in fact are still occurring in some Indonesian territorial waters.

The fourth recommendation is increasing the frequency of underwater cultural heritage law enforcement and its priority. This consideration is due to the assumption that Indonesia lacks the frequent implantation of underwater cultural heritage law enforcement and the focus on prevention or stopping the activity of removing the artefacts from underwater. The only one improvement to Act number 11 enacted in 2010 is that there needs to be added more detailed mentions of the sanction or punishment of the infraction to the Indonesian underwater cultural heritage resources. For the next step, the improvement of socialization scale also needs to be conducted by the Cultural Heritage Protection Unit in collaboration with the National Shipwreck Committee. This improvement is not only addressed to the coastal communities or local traditional fishermen, but also reaches to the other related authorities including the Indonesian Navy, Indonesian Coast Guard, Police Marine, and Indonesian Border and Customs.

Considering the ratification of 2001 UNESCO Convention is the proper fifth recommendation to improve the power of Indonesian underwater cultural heritage management and legislation. This consideration is aimed at showing the integrity of Indonesia as a nation that can protect all of their cultural heritage assets with serious attention. However, first of all, the related Government agencies need to define the

procedures concerning the discovery of underwater cultural heritage resources and register them to UNESCO as Indonesian cultural heritage assets. In addition, they also should develop short-term and long-term plans which are not only focused on the conservation and protection of the available underwater cultural heritage resources, but also on the discovery of the other potential resources around Indonesian territorial waters. Therefore, Indonesia could review and adopt the underwater cultural heritage legislative models from Australia and The Netherlands, indeed, without changing the characteristics or identity of Indonesian legislative system.

The last recommendation is about the establishment of underwater cultural heritage and Maritime Archaeology discipline program in Indonesia. This development is really important to create the best qualified scholar of maritime archaeology. However, Indonesia should prepare some aspects before establishing this program as mentioned above. Indeed, Indonesia already has a large number of underwater cultural resources from the salvaged material cargoes that are stored at the National Shipwreck Committee warehouse. Meanwhile, the appropriate facilities, the available spaces, and the supporting archaeological equipment are assumed as the external aspects that need to be fulfilled to strengthen the establishment of this program.

References

- Adams, J.L. 2010 New Directions in International Heritage Management Research. Unpublished PhD Thesis, Anthropology, University of Minnesota, Minnesota.
- Arnold, J.B. and S.R. Weddle. 1978 *The Nautical Archaeology of Padre Island: The Spanish Shipwrecks of 1554*. New York: Academic Press.
- Bass, G.F. 2011 The Development of Maritime Heritage. In A. Catsambis, B. Ford, and D.L. Hamilton (eds), *The Oxford Handbook of Maritime Archaeology*, pp. 3–24. Oxford: Oxford University Press.
- _____. 2004 Serçe Limani: An Eleventh-Century Shipwreck, vol. 1. *The Ship and its Anchorage, Crew, and Passengers*. Ed Rachel Series in Nautical Archaeology. College Station: Texas A&M University Press.
- _____. 1983 Shipwrecks and Treasure Hunter. *Journal of Field Archaeology* 10:389.
- _____. 1979b The Men Who Stole the Stars. *Sea History* 12 (Fall): 30.
- _____. 1979a Treasure-hunting Divers. *Journal of Field Archaeology* 6:104–107.
- _____. 1967 Cape Gelidonya: A Bronze Age Shipwreck. *Transactions of the American Philosophical Society* 57(8).
- _____. 1966 *Archaeology Underwater*. London: Thames & Hudson; New York: Frederick A. Praeger.
- Binford, L.R. 1972 *An Archaeological Perspective*. New York, Seminar Press.
- _____. 1975 Historical Archaeology: Is It Historical or Archaeological? *Popular Archaeology*, 4(3–4),.11–30.
- _____. 1983a *In Pursuit of the Past: Decoding the Archaeological Record*. London: Thames and Hudson.
- _____. 1983b *Working at Archaeology*. New York: Academic Press.

- Cederlund, C.O. and F. Hocker. 2006 *Vasa 1: The Archaeology of a Swedish Warship of 1628*. Stockholm.
- Charoenpot, S. et al. 2012 Museology. In *Training Manual: for the UNESCO Foundation Course on the Protection and Management of Underwater Cultural Heritage in Asia and the Pacific*. Published by UNESCO Bangkok, Thailand.
- Childe, V.G. 1936 *Man Makes Himself*. Watts: London.
- _____. 1942 *What Happened in History?* Harmondsworth: Penguin.
- Christie, J.W. 1998 Javanese Markets and the Asian Sea Trade Boom of the 10th to 13th Centuries AD. *Journal of the Economic and Social History of the Orient*, 41(3):344–381.
- Christie's Amsterdam B.V. 1986 *The Nanking Cargo, Chinese Export Porcelain and Gold, European Glass and Stoneware, recovered by Captain Michael Hatcher from a European Merchant Ship Wrecked in the South China Seas*. Auction Catalogue for an auction held on 28 April–2 May 1986. Amsterdam.
- Clarke, D.L. 1968 *Analytical Archaeology*, London: Methuen.
- _____. 1973 Archaeology: The Loss of Innocence. *Antiquity* 47: 6–18.
- Crew, S. and E.S. James 1991 Locating Authenticity: Fragments of a Dialogue. In I. Karp, and S.D. Levine (eds), *Exhibiting Cultures: The Politics and Poetics of Museum Display*. pp. 159–175 .Washington, DC: Smithsonian.
- Crumlin-Pedersen, O. and O. Olsen (eds.). 2002 *The Skuldelev Ships 1: Ships and Boats of the North*, vol. 4.1. Roskilde: Viking Ship Museum.
- Deetz, J. 1967 *Invitation to Archaeology*. New York: Doubleday.
- Du Plat Taylor, Joan, (ed.). 1965 *Marine Archaeology*. London: Hutchinson.
- Edwards, H. 2000 *Treasures of the Deep. The Extraordinary Life and Times of Captain Mike Hatcher*. Pymble (New South Wales): HarperCollins.

- Eiseman, J.C. and Ridgway S.B. 1987 *The Porticello Shipwreck: A Mediterranean Merchant Vessel of 415–385 B.C.* Ed Rachel Series in Nautical Archaeology. College Station: Texas A&M University Press.
- English Heritage. 2011a *Heritage Crime*. (Accessed 02 May 2016). Available at: <http://www.english-heritage.org.uk/professional/advice-by-topic/heritage-crime>.
- _____. 2011b. *English Heritage Calls on Communities to Help Tackle Heritage Crime*. (Accessed 04 May 2016). Available at: <http://www.english-heritage.org.uk/about/news/643873>).
- Falk, J.H. and Dierking, L.D. 1992 *The Museum Experience*. Washington D.C.: Whalesback Books.
- Firth, A. 1993 The Management of Archaeology Underwater. *Archaeological Resource Management in the UK: An Introduction*, Alan Sutton, Dover, NH (1993): 65–76.
- Flatman, J. 2007 The Origins and Ethics of Maritime Archaeology Part 1. *Public Archaeology* 6(2):77–97.
- _____. 2007 The Origins and Ethics of Maritime Archaeology Part 2. *Public Archaeology* 6(3):141–154.
- Flecker, M. 2001 A Ninth-century AD Arab or Indian Shipwreck in Indonesia: First Evidence for Direct Trade with China. *World Archaeology*, Vol. 32, February, (2001):335–354.
- _____. 2002 *The Archaeological Excavation of the 10th Century Intan Shipwreck*. BAR International Series 1047. Oxford: Archaeopress.
- _____. 2002 The Ethics, Politics, and Realities of Maritime Archaeology in Southeast Asia. *The International Journal of Nautical Archaeology* (31.1):12–24.
- Forrest, C.J. 2002 Defining ‘Underwater Cultural Heritage’. *International Journal of Nautical Archaeology*, 31(1):.3–11.

- Frost, H. 1963 *Under the Mediterranean: Marine Antiquities*. Englewood Cliffs, NJ: Prentice-Hall.
- Gibbins, D. and Adams, J. 2001 Shipwrecks and Maritime Archaeology. *World Archaeology*, 32(3):.279–291.
- Gibbins, D. 1996 Ancient Maritime Economics: A View from the Mediterranean. In P. Carrington (ed.). *Where Deva Winds her Weary Stream: Trade and the Port of Chester*, pp.45–67. Chester: Chester Archaeology Monographs 4
- _____. 1990 Analytical Approaches in Maritime Archaeology: A Mediterranean Perspective. *Antiquity* 64:376–389.
- Goggin, J.M. 1959—1960 Underwater Archaeology: Its Nature and Limitations. *American Antiquity* 25:348–354.
- Green, J.N. 1977 *The Loss of the Verenigde Oostindische Compagnie jacht Vergulde Draeck, Western Australia 1656*. Oxford: British Archaeological Reports Supplementary Series 36(i).
- Green, J. 2008 *Maritime Archaeology: a Technical Handbook*. Elsevier Inc.
- Grenier, R. B. and W. Stevens, (eds.). 2007 *The Underwater Archaeology of Red Bay: Basque Shipbuilding and Whaling in the 16th Century*, 5 vols. Ottawa: Canada.
- Gribble, J. 2011 *The UNESCO Convention on the Protection of the Underwater Cultural Heritage 2001 An Impact Review for the United Kingdom; Project Design*. *Journal of Maritime Archaeology* (6):77–86.
- Guarinello, N.L. 2005 Archaeology and the Meanings of Material Culture. In P.P. A. Funari, A. Zarankin, & E Stovel (eds). *Global Archaeological Theory: Contextual Voices and Contemporary Thoughts*, (1):19–27. New York: Kluwer Academic/Plenum Publishers.
- Guy, J.S. 1986 *Oriental Ceramics in Southeast Asia, 9th to 16th Centuries*. Singapore: Oxford University Press.

- Hall, J. 2007 The Black Rhino. *Journal of Maritime Archaeology* 2 (2):93–97.
- _____. 2007 The Fig and the Spade: Countering the Deceptions of Treasure Hunters in *AIA Archaeology Watch*. August 15, 2007.
- Hall, R.K. 2010 *Indonesia's Evolving International Relationships in the 9th to Early 11th Centuries: Evidence from Contemporary Shipwrecks and Epigraphy*. Cornell University: Southeast Asia Program Publications.
- Van Tilburg, H.K & M. Staniforth, 2012 Archaeological Publication. In *Training Manual: for the UNESCO Foundation Course on the Protection and Management of Underwater Cultural Heritage in Asia and the Pacific*. Published by UNESCO Bangkok, Thailand.
- Henderson, G. 1986 *Maritime Archaeology in Australia*. Nedland: University of Western Australia Press.
- Hodder, I. 1992 *Theory and Practice in Archaeology*. London: Routledge.
- _____. 1986 *Reading the Past: Current Approaches to Interpretation in Archaeology*. Cambridge: Cambridge University Press.
- Hosty, K. and I. Stuart 1994 Maritime Archaeology Over the Last Twenty Years. *Australian Archaeology*, 39 :9-19.
- Hudson, B.L. 1984 Modern Material Culture Studies: Anthropology as Archaeology. *American Behavioural Scientist*, 28(1,) September/October: 31–39.
- ICOMOS. 1996 *ICOMOS Charter on the Protection and Management of Underwater Cultural Heritage*. Sofia.
- Jeffery, B. 2006 Historic Shipwrecks Legislation. In Staniforth, M and M. Nash (eds.) *Maritime Archaeology: Australian Approaches*, pp:123–135. Springer, New York
- Johnson, M. 1999 *Archaeological Theory: An Introduction*. UK: Blackwell Publisher Ltd.

- Johnston, P.F. 1997 “Nanking Cargo Wreck.” In *Encyclopaedia of Underwater and Maritime Archaeology*, J. P. Delgado (ed.), pp.287–88. London: British Museum Press.
- Jörg, C.J.A. 1986 *The Geldermalsen: History and Porcelain*. Groningen: Kemper.
- Keith, D.H. 1980. A Fourteenth-Century Shipwreck at Sinan-gun. *Archaeology* 33(2):33–43.
- King, T. 2004 *Cultural Resource Laws and Practice: An Introductory Guide*, 2nd ed. Walnut Creek, CA: Alta Mira Press.
- Kendall, F.J. 1990 *An Assessment of the Effectiveness of Existing Legislative Arrangements for Protecting and Preserving Australia’s Underwater Cultural Heritage*. Report to the Department of Arts, Sports, and the Environment, Tourism, and Territories. Canberra.
- Lenihan, D.J. 1983 Rethinking Shipwreck Archaeology: A History of Ideas and Considerations for New Directions. In R. Gould (ed.), *Shipwreck Anthropology*, pp. 37–64. Albuquerque: University of New Mexico Press.
- Leone, P.M. 1981 Archaeology’s Relationship to the Present and the Past. In Richard A Gould & M. B Schiffer (eds.) *Modern Material Culture: The Archaeology of Us*, pp: 5-14. London: Academic Press Inc.
- Lozny, R.L. 2011 *Comparative Archaeologies: A Sociological View of the Science of the Past*. New York: Hunter College.
- Lynott, M.J. 1997 Ethical Principles and Archaeological Practice: Development of an Ethics Policy. *American Antiquity* 62 (4):589–599.
- Maarleveld, T.J. 2011 Ethics, Underwater Cultural Heritage, and International Law. In A. Catsambis, B. Ford; D. L Hamilton *The Oxford Handbook of Maritime Archaeology*, pp. 917–941. Oxford: Oxford University Press
- Manders R.M. et al. 2012 Significance Assessment. In *Training Manual: for the UNESCO Foundation Course on the Protection and Management of Underwater Cultural Heritage in Asia and the Pacific*. Published by UNESCO Bangkok, Thailand. Pg no

- Manguin, P.Y. 2004 The Archaeology of the Early Maritime Polities of Southeast Asia. In I.C. Glover and Peter Belwood (eds) *Southeast Asia from Prehistory to History*, , pp. 282–313. London: Routledge Curzon.
- Martin, C. 1975 *Full Fathom Five: Wrecks of the Spanish Armada*. New York: Viking.
- McGuire, R. 1992 *A Marxist Archaeology*. Orlando, Academic Press.
- McManamon, F.P. 2005 The Public Interpretation of America’s Archaeological Heritage. *SAA Archaeological Record*, 22–23.
- Mirabal, A. 2008. *Archaeological Survey Report of Wreck Sites Located in the Areas of Baginda and Belvedere Reefs and Belitung Island during 2007 Season*. Jakarta: Arqueonautas Worldwide.
- _____. 2011 *Expedition Report of the “BUDPAR-Arqueonautas. Project in the Area of Bangka-Belitung during 2009-2010 Seasons (from 13/11/2009 to 30/11/2009 and 23/05/2010 to 22/10/2010)*, Jakarta: Arqueonautas Worldwide.
- Muckelroy, K. 1978 *Maritime Archaeology*. Cambridge University Press, Cambridge.
- _____. 1977 "Historic Wreck Sites in Britain and Their Environments. *International Journal of Nautical Archaeology* 6(1) :47–57.
- [Nautical Archaeology Society](#). 2009. *Underwater Archaeology: The NAS Guide to Principles and Practice* – 2nd edition. Amanda Bowens (ed.). United Kingdom: John Willey & Sons Ltd.
- Oelrich, C. 2010 Treasure Hunts Yield Valuables in Indonesia. In *New Directions in International Heritage Management Research*. Pg no Unpublished PhD Thesis, Anthropology, University of Minnesota, Minnesota.
- Oxley, I. 2002 "Making the Submerged Historic Environment Accessible—Beyond the National Heritage Act." In *Managing the Marine Cultural Heritage. Defining, Accessing and Managing the Resource*. CBA Research Report 153 (2007):87–95.

- Piercy, R. 2005 *The Tragedy of the Santo Antonio de Tanna: Mombasa, Kenya*. In G. F. Bass (ed.), *Beneath the Seven Seas*, pp. 172–179. London: Thames & Hudson.
- Pluciennik, M. 2001 *The Responsibilities of Archaeologist: Archaeology and Ethics*. Lampeter Workshop in Archaeology 4. BAR International Series 981. Oxford: Archaeopress.
- Pringle, H. 2009 *Why I Oppose Commercializing Underwater Wrecks*. (Accessed 06 May 2016). Available at: <http://www.archaeology.org/blog/archive/Why-I-Oppose-Commercializing-Underwater-Wrecks>.
- _____. 2013. *Troubled Waters for Ancient Shipwrecks*. in *SCIENCE* Vol. 340, May 17, 2013. Available at: <http://www.sciencemag.org>.
- Prown, J.D. 1982 *Mind in Matter: An Introduction to Material Culture Theory and Method*. *Winterthur Portfolio* Spring 17(1): 1-19
- Ravelli, L. 2006 *Museum Texts: Communication Frameworks*, London: Routledge.
- Reichelt, G. 1985 International Protection of Cultural Property. *Uniform Law Review* (1): 43–153.
- Roscoe, P. 2008 The Comparative Method. *Religion Compass* 2/4/2008. Runyan, T. 2011 Management of Maritime Cultural Resources: An American Perspective in *Beyond the Site*, Ch. 41:942–966.
- Sheaf, C. and R. Kilburn. 1988 *The Hatcher Porcelain Cargoes: The Complete Record*. Oxford: Phaidon.
- Smith, D.H. and C.D. Alastair. 2003 The Management of the Underwater Cultural Heritage. *Journal of Cultural Heritage* (4):25–33.
- Sudaryadi, A. 2011 The Belitung Wreck Site After Commercial Salvage in 1998. In *Asia-Pacific Regional Conference on Underwater Cultural Heritage Proceedings: (Accessed 20 August 2015) Available at .http://www.themua. org/collections/items/show/1230*

- Staniforth, M. 2001 Assessing the Significance of Twentieth Century Underwater Cultural Heritage. *20th Century Heritage: Our Recent Cultural Legacy*. D.S. Jones (ed.), pp.145-149. Conference Proceedings: The University of Adelaide and the ICOMOS Secretariat.
- _____. 1996 Tracing Artefact Trajectories following Chinese Export Porcelain. *Bulletin of the Australian Institute for Maritime Archaeology*, 20(1): 13-18.
- _____. 1987 The Casks from the Wreck of the *William Salthouse*. *Australasian Journal of Historical Archaeology* 21-28.
- Taylor, P.M. 1993 Futures Past and Futures Present: A Quincentennial View of the Role of the Future in Natural History Collections of Columbus's Day. In *Libro del congreso= Congress book [del] Simposio Internacional sobre Preservación y Conservación de Colecciones de Historia Natural* (pp. 263-273). Dirección General de Bellas Artes, Archivos y Bibliotecas.
- Thomas, J. 1996 *Time, Culture, and Identity: An Interpretive Archaeology*. London: Routledge.
- Thomas, J. 2004. *Archaeology and Modernity*, London: Routledge
- Throckmorton, P. 1990 *The World's Worst Investment: The Economics of Treasure Hunting with Real Life Comparisons*. Florida: Nova University.
- UNCLOS. 1982 *The Law of the Sea*. Jamaica.
- UNESCO. 2001 *Annex of the UNESCO Convention on The Protection of Underwater Cultural Heritage*. Paris.
- UNESCO. 1976 *Recommendation Concerning the Safeguarding and Contemporary Role of Historic Areas*. Nairobi.
- UNESCO. 1972 *Underwater Archaeology: A Nascent Discipline*. Paris.

- UNESCO. 1970 *Convention on the Means of Prohibiting and Preventing the Illicit Import, Export, and Transfer of Ownership of Cultural Property*. Paris.
- UNESCO. 1968 *Recommendation Concerning the Preservation of Cultural Property Endangered by Public or Private Works*. Paris
- Utomo, B.B. 2008 10th Century Shipwreck at North of Java Sea, Cirebon. Unpublished Report, The National Shipwreck Committee, 1st edition, Jakarta.
- Viduka, J.A. 2012 Material Culture Analysis. *Training Manual for the UNESCO Foundation Course on the Protection and Management of Underwater Cultural Heritage in Asia and the Pacific*. Thailand: UNESCO Bangkok. Pg no
- Wallace, S. 2011 *Contradictions of Archaeological Theory: Engaging Critical Realism and Archaeological Theory*. London and New York: Routledge.
- Wicks, R.S. 1992 *Money, Markets, and Trade in Early Southeast Asia: The Development of Indigenous Monetary Systems to AD 1400*, pp. 219–228. New York: Cornell Southeast Asia Program Publications.