An Equitable International Legal Framework: The Grotian Heritage

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Abstract

The conservation of underwater cultural heritage (UCH) requires not only an understanding of the physical environment in which an object is located but also its legal environment needs to be considered. For example, what is the legal position with regard to claims on submerged wrecks and what are the guiding philosophical principles underpinning modern international sea law and UCH law? The doctrine of 'freedom of the seas', encompassing the natural law principles of consensus, equality, equity, reason and fairness, was advocated by the Dutch jurist, Hugo Grotius, at the beginning of the 17th century. During this period, Europe was plagued by war and religious schisms as well as economic division arising from the rivalry between dominant maritime powers for the right to establish exclusive overseas trading empires in East Asia and the Americas. The volatile economic and political environments, along with the collapse of the Holy Roman Empire hegemony, created the need for rules of conduct between a large international community. The scholarly debates of the 17th century, often referred to as the 'battle of the books', provided a wealth of jurisprudence on international law, including settling ocean governance in favour of an 'open sea' policy as opposed to a 'closed sea' policy in respect to trade and navigation. Grotius' writings on 'consensus' and the 'social interdependence' of nations are relevant in the 21st century as his writings expound the modern idea of State[2] 'cooperation' whilst advocating navigational freedom. In promoting cooperation among States, the Grotian doctrine represents an effective means to combat transnational crime and commercial exploitation of underwater cultural resources. This paper concludes that the writings of Grotius on 'consensus' in decision making and interdependence of States are of increasing relevance, given that the global community is entering a period when questions are being raised over the role of international law concerning the conservation of UCH and the philosophical frameworks which shape ocean governance polices.

The soul of the past is in deep water
Phillipe Diole.

Introduction

The preservation of a shipwreck *in situ* is dependent upon the physical environment in which the wreck is located. A wreck which lies exposed on the seabed is affected by physical factors such as water currents, the chemical composition of surrounding water, the water's oxygen content and temperature levels as well as microorganisms within the water. Apart from the physical environment, the legal environment in which a wreck is located is just as important for site preservation. In other words, apart from considering how best to protect a wreck from natural threats, one needs to consider how to protect the wreck from direct human impact, such as looting and commercial salvage, together with indirect interference arising from human activities including marine scientific research, deep seabed mining and marine genetic

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[2] The word 'State' is used to denote an international entity such as Australia or the United States.

bioprospecting[3]. The legal environment in which the wreck is located will determine a State's ability to safeguard the site from both legal and illegal human activities. Therefore, knowledge is required of the governing international legal framework (international law) and jurisdictional issues, in particular, the maritime zones established under the *1982 United Nations Convention on the Law of the Sea* (UNCLOS III) and related treaties such as the *United Nations Educational, Scientific and Cultural Organisation (UNESCO) 2001 Convention on the Protection of Underwater Cultural Heritage* (UNCPUCH). The UNCLOS III partitions the ocean into various legal environments, otherwise known as maritime zones. These zones are measured in distance from the coastal State's shoreline. Depending on whether or not the wreck is located beyond national jurisdiction, its location will affect not only a State's ability to legally protect the site from traditional threats, such as commercial salvage and criminal looting, but the distance from the shore will also determine the legal mechanisms that a coastal State is obliged to adhere too. Apart from formal treaties, another source of international law is customary international law. Under this law, provisions of treaties may become binding upon States not party to an agreement if there is evidence that a State has acquiesced to the legal rule. Furthermore, the juridical debates of the 16th and 17th centuries are paramount to ocean management together with the protection of UCH. Importantly, these debates continue to shape modern ocean customs, laws and State practices. Furthermore, the philosophy underpinning ocean governance policies can strengthen or weaken the existing legal framework, firstly by influencing the provisions in formal treaties, and secondly, by shaping customary state practices, thereby contributing to the growth of customary international law – this, in turn, can be used to supplement international treaties.

UNCLOS III has been described as the 'constitution of the ocean'[4]. It creates maritime zones in which differing rights and obligations exist in respect to living resources and non-living resources of the ocean. The purpose of the maritime zones is to define rights and obligations of coastal States, prescribe law making and law enforcement powers of coastal States over foreign vessels and nationals, define rights of foreign States, and define the rights of the international community. Under UNCLOS III, there are three categories of maritime zones: (i) zones under sovereignty of States; (ii) zones under sovereign 'rights' of States; and (iii), zones not subject to sovereignty or sovereign 'rights' of States. The first category includes the Internal Waters, Archipelagic Waters and the Territorial Sea (including the buffer zone, known

[3] 'Bioprospecting' 'involves collecting samples of marine species from the ocean and screening them for properties that may be of commercial value' (Mossop 2007:286). As Louise Angelique de La Fayette (2009:228) states: 'while there is no official definition, this contraction of 'biological' and 'prospecting' is generally understood as the scientific investigation of living organisms for commercially valuable genetic and bio-chemical resources'. Leary (2007:158-163) outlines the emergence of the biotechnology industry and the unique genetic and chemical properties of specific marine organisms and bacteria associated with hydrothermal vents. Mossop (2007:285) explains that scientists are interested in researching organisms in the deepest parts of the ocean due to their ability to survive extreme conditions and live from chemosynthesis (i.e. create food from chemicals rather than light). Also, see Beslier (2009:335) and Warner (2007:411) for an outline of the use of resulting patents.

[4] Shingleton 1983:34.

as the Contiguous Zone). The Exclusive Economic Zone (EEZ) and the Continental Shelf fall within the second category, whilst the High Seas and the Area (deep seabed) fall within the remaining category. In respect to UCH, UNCLOS III failed to stipulate how States should protect UCH beyond their contiguous zone, apart from declaring that all States had a legal obligation to cooperate[5]. The UNCPUCH adopts the maritime zones created by UNCLOS III and builds upon the UNCLOS III foundational norm of State cooperation in maritime affairs. The UNCPUCH successfully employs the mechanism of 'State cooperation' to overcome jurisdictional problems arising from the lack of sovereignty or sovereign rights within specific maritime zones, hence, an understanding of the law of the sea is necessary.

Ocean Stakeholders

As Robin Churchill and Vaughan Lowe (1999:3) claim, 'the development of the law of the sea is inseparable from the development of international law in general'. In fact, the law of the sea is one of the oldest components of international law, given that nations have been relying on the ocean for resources, transport, trade and commerce for centuries. Humankind's reliance upon the sea is evident in ancient texts and writings by Greek and Roman historians, ancient laws from kingdoms spanning the Mediterranean, ancient mosaics from Roman villas, and tomb paintings in Egypt[6]. Whether text based, such as the Rhodesian Maritime Law or the Justinian Institutes, or physical objects, such as Egyptian tomb paintings or figurine carvings, archaeological excavations demonstrate the existence of ships, seafarers, maritime traders and pirates very early in the history of ancient civilisations. As McGrail (2003:2) points out, there were 'sailors before farmers and navigators before megalith designers'. Even in Neolithic times, archaeological evidence from campsites and caves located near protective bays and harbours indicate that groups of humans lived together and relied daily upon

[5] UNCLOS III Article 303(1).

[6] See Lavery (2010:17-18) for photos and illustrations (i.e. a painted Athenian vase depicting the Greek hero, Heracles, traveling in a river craft and Athenian coins commemorating the Greek victory in the Battle of Salamis, 480BC. Also, 18th century tomb reliefs from Thebes, in Egypt, often depict the deceased and family hunting or 'fowling' on a papyrus-reed raft on the Nile Delta (Lavery 2010:11). Evidence of ancient maritime laws include: The Code of Hammurabi (about 2200 BC) which contains rules regarding collisions at sea and the requirement for compensation of the injured party (rule 240); the ancient Rhodesian Maritime Law and the Law of Salvage which were inherited by the Romans; (Lobingier 1935). A passage in Polybius' *Histories* makes reference to a treaty concluded between Carthage and Rome in 509-508BC in which the Historian states: 'The Romans and their allies not to sail with long ships beyond the Fair Promontory unless forced by storm or by enemies: it is forbidden to anyone carried beyond it by force to buy or carry away anything beyond what is required for the repair of his ship or for sacrifice, and he must depart within five days (Polybius Book III, 22). Also, the text of the jurist, Marcianus, (2nd century AD), preserved in the Digest of Justinian, refers to the sea and its products (fish) being common property for all (Fenn 1925:716). For historical accounts referring to trade, fishing and/or piracy, see the *Homeric* tales and voyages which highlight the Mycenaean sea power and might. See also the writings of Thucydides; the Historian states: 'But after Minos had organised a navy, sea communications improved; he sent colonies to most of the islands and forced out the notorious pirates' (Book I:8). Pliny writing in the 1st century AD states: 'that cohorts of archers were carried on boats engaged in trade as protection against pirates' (Natural History, VI, 23).

the ocean for food and for their spiritual beliefs[7]. As the sea covers approximately 70% of land mass and holds natural resources such as fish stocks, minerals and oil, as well as being a highway for commerce and trade between nations, some form of rules governing the relationship of ocean users needed to evolve from very early on in history. Human ability to harness the sea's resources for economic gain increased over the centuries, to the point where nations today are undertaking off-shore drilling for oil and dredging of the seabed for magnesium nodules; sophisticated rules, such as international treaties, have had to evolve as society's use of the sea became more advanced. As the numbers of ocean stakeholders and interest groups increased, a central concern for contemporary ocean governance is State cooperation[8]. The need for nations to reach consensus upon diverse matters rising out of the varied uses of the world's oceans is a growing concern for international sea law as evident in the increasing number of ocean regulations[9]. In responding to these increasing challenges, international law must continue to develop regulatory frameworks that are equitable and are based upon consensus between ocean users, rather than dictated by power-imbalances and exploitative political agendas. The need for an equitable international framework governed by consensus among nations (cooperation) is vital in safeguarding UCH in waters beyond national jurisdiction. Apart from dealing with issues of conservation and protection of the ocean and its natural resources, international sea law must also devise regulatory rules for commercial activities undertaken in international waters such as deep seabed mining and marine genetic bioprospecting. In order to secure consensus among the international community of States, the formulated rules must divide natural resources fairly and equitably among all nations. A further problem for drafters of modern international sea law is the potential for conflict between ocean stakeholders in comparison to earlier times. The lure of lucrative patents and intellectual property rights based upon discovered organisms in the depths of the oceans have the potential to create tension between different stakeholders. In respect to UCH, there is a potential conflict of interests between the activity of *in situ* management of UCH located around seamounts and ocean vents, and pharmaceutical companies undertaking genetic bioprospecting.

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[7] Curry 2006:1535; Johnson 2000:21-22; Galili & Rosen 2010:306.

[8] Morell 1992:10; 23. For example, Morell (1992:10) points out that despite the need to meet the challenges presented by the increasing number of nations utilising existing ocean rights and the increasing uses and users of the ocean, international rivalries and long standing diplomatic practices have been detrimental to progressive ocean policy development. Rothwell and Stephens (2010:1) refer to a number of emerging challenges such as climate change, regional management of strategic ocean spaces such as the South China Sea and bioprospecting to find new pharmaceutical products. Also, Rothwell and Stephens (2010:26) in discussing matters arising from climate change suggest that it may be necessary for nations to be prepared to renegotiate on existing treaties and be willing to negotiate new treaties to reflect the change in the environment.

[9] Since 1884 more than 60 treaties have been enacted to cover a vast range of ocean governance issues ranging from navigation, sailors' working conditions, and the slave trade, to more recent agreements pertaining to environmental protection and the protection of underwater cultural heritage (Elia 2000:43). Smith and Couper ((2003):25) identify three categories of ocean uses: (i) transport and communications including military and naval activities; (ii) fishing and resource uses; and (iii) leisure, marine research and education, and conservation.

Today, the use of the sea continues to increase and a growing number of stakeholders are competing within the marine environment. Also, with the increased use of the sea, so the levels of pollution have increased along with waste disposal and exploitation of natural resources including minerals and living organisms. Therefore, it is important to understand not only the legal mechanisms and philosophical principles that the drafters of international sea law are utilising, but also the origins of specific regulatory tools adopted within UNCLOS III and the 2001 UNCPUCH. As international law is required to respond to diverse interests in the ocean as well as promote a more equitable distribution of natural resources, it is suggested that the writings of the jurist and philosopher, Huigh de Groot Hugo (Hugo Grotius) (1583-1648) are still relevant today.

An Equitable International Legal Framework

Hugo Grotius believed that ocean governance should be incorporated under an equitable international framework of natural law underpinned by 'mutual consent' in decision making by States (State cooperation) based upon the ideal of 'equality' between all States[10]. It is suggested that a move away from the Grotian tradition towards that of a closed sea regime or national enclosure, in which States legally own vast tracks of the ocean and seabed, has the potential to increase conflicts and discourage State cooperation[11]. Grotius' doctrine of 'freedom of the sea' was not designed for the management of exhaustible natural resources such as living marine organisms and non-living resources including mineral deposits on the deep seafloor. Also, Grotius' doctrine has the potential to create a finder's keepers

[10] Hugo Grotius lived through the religious and economic upheavals of Europe during the 17th century and witnessed first-hand the horrors that the power-imbalances between empires and principalities caused both in terms of destruction of property and loss of life. Hence, Grotius was aware of the need to create a new world order no longer based on power-imbalances which existed during the medieval and feudal periods. In respect to 'consent', Grotius (1625: para.16) writes: 'for the very nature of man, which even if we had no lack of anything would lead us into the mutual relations of society, is the mother of the law of nature. But the mother of municipal law is that obligation which arises from mutual consent; and since this obligation derives its force from the law of nature, nature may be considered, so to say, the great-grandmother of municipal law'. Grotius (1609: para17) continues: 'but just as the laws of each state have in view the advantage of that state, so by mutual consent it has become possible that certain laws should originate as between all states, or a great many states; and it is apparent that the laws thus originating had in view the advantage, not of particular states, but of the great society of states. And this is what is called the law of nations, whenever, we distinguish that term from the law of nature'.

[11] The 1982 UNCLOS III in its creation of the 200 mile Exclusive Economic Zone is a move towards a closed sea policy (inconsistent with the Grotian heritage). However, Article 87 of UNCLOS III retains customary freedoms of the high seas such as trade and navigation and other high seas freedoms. The Convention is an intricate balance between coastal state sovereignty and sovereignty rights and high sea freedoms such as navigation. Zacher & McConnell (1990) provide an overview of the three major guiding principles underlying ocean law from the 17th century to the late 20th century: (i) freedom of the seas; (ii) national enclosure (zones of economic jurisdiction, or 'national lakes'); and (iii) common heritage of mankind. Zacher & McConnell (1990:78) suggest that the Grotian principles of freedom of navigation predominated over national enclosure from the 17th to the early 20th century. Despite the rise of national enclosure philosophy and its incorporation into UNCLOS III there remains issues of inequalities with the doctrine (Zacher and McConnell 1990:91,95 & 97).

mentality in respect to UCH. However, provided that a narrow interpretation is given to the doctrine of 'freedom of the seas', including defining the doctrine's parameters to the twin purposes of navigation and trade, the argument for an 'open sea' is persuasive. Apart from Grotius' advocacy for freedom of navigation on the high seas, he was committed to the idea of the interdependence of States concerning trade and security matters together with territorial sovereignty and the legal equality of States[12] - all of these concepts remain relevant today in the 21st century. The advantage of having an equitable international legal framework based upon ideals of justice, legal equality, and consensus in decision making between all States, is that it assists to counter State sovereignty and potential power imbalances. That is, an equitable international legal framework assists to prevent the development of an isolationist approach towards ocean governance, and furthermore, it affords a means to hold in check rogue States which may challenge formal international agreements by arguing legal loopholes[13].

Hugo Grotius is credited with being the founder of the 'science' of international law[14]. The 'Grotian tradition' refers to Hugo Grotius' idea of a 'society of States'[15]. He envisioned a 'society of States' bound by law and existing on an equal footing to how humans existed under the law of nature[16]. His starting point was with the Law of Nature (or the dictate of right reason). Within the framework of natural law, Grotius devised principles such as legal equality, territorial sovereignty, and the doctrine of interdependence of States[17] which are all current key components of contemporary international law. Grotius highlights the political and economic power imbalances of the period and blames the exploitation of politically weak nations by powerful rulers of hegemonic empires as contributing to religious and civil unrest of the period. Grotius argues, that in nature there are no power imbalances, and hence, the exploitative practice of Spain and Portugal in monopolising trade in the 'New World' by restricting navigational rights was against the law of nature.

Freedom of the Seas

Why did Grotius desire to promote the freedom of the sea? The answer lies in the historical events of the preceding century. In 1492 Christopher Columbus discovered the Americas on behalf of Spain. This led to claims and counter-claims over colonies which ultimately fuelled conflict between the two leading

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[12] See generally Grotius' writings on '*The Freedom of the Seas'* and '*Law of War and Peace'*. See also Hershey 1912:32.

[13] For example, as technology advances and treaties become dated there is the potential for legal loopholes to arise from technical interpretations of definitional clauses contained within treaties. For example, is marine genetic bioprospecting the same has marine research? The UNCLOS III failed to consider the issue of marine genetic bioprospecting, however, it does provide a regulatory system for marine research (Warner 2008:412).

[14] Hershey 1912:30.

[15] Christov 2005:564.

[16] Christove 2005:564 states: 'it is in Grotius' commitment to the idea of a society of states that lies the distinguishing mark of what has been duly termed the "Grotian tradition"'. See also Grotius (1609: Preface, pp.1-2) '[God] had not separated human beings, as He had the rest of living things, into different species and various divisions, but had willed them to be one race and to be known by one name….He had drawn up certain laws….these law were binding on great and small alike…..'

[17] Hershey 1912:32.

maritime powers of the day, Spain and Portugal. These two nations approached Pope Alexander VI to make a ruling on ownership of discovered territories. In 1493 Pope Alexander drew a demarcation line to define the sphere of Spanish and Portuguese possessions in the New World - the line was 483 km west of Azores and Cape Verde Islands. The decision was enacted in the *1494 Treaty of Tordesillas*[18]. As Fulton (1911:5) notes, 'it was those preposterous pretensions to the dominion of the immense waters of the globe that caused the great juridical controversies regarding *mare clausum* and *mare liberum*, from which modern international law took its rise'. These juridical debates are known as the 'battle of the books'[19].

Mare Liberum's purpose is to secure free trade between States and to counter arguments of a 'closed sea' in terms of trade and navigation. However, due to social and political conditions, including the rise of colonial empires, a wider interpretation has often been applied to Grotius' concept of 'freedom of the sea'. This doctrine is not a general theory of 'freedom of the seas', but one confined to freedom of navigation and trade. The doctrine emerged as a response to the Church of Rome's partitioning of the oceans between Spain and Portugal. Therefore, it would be a fallacy to view the doctrine as promoting a 'free for all approach' to ocean governance. If the doctrine of *Mare Liberum* is read in conjunction with Grotius' commitment for an international 'community of States', in which all states are bound by the law of nations, as opposed to hegemonic rule, then the twin principles of trade and navigation emerge. For Grotius, the ocean is viewed as representing a highway between independent sovereign States and any efforts to restrict access to the 'highway', such as the attempt by Pope Alexander in 1492 to divide the world between Spain and Portugal, was an affront to natural law[20]. Grotius, in his argument against enclosure of the world's ocean, draws a distinction between the regime of the 'open sea' and the sea under national jurisdiction. Clearly, the doctrine is not advocating open ended freedom of the seas which could be perceived today as being counterproductive to ocean governance, especially in respect to fisheries and enforcing the protection of UCH. In order to establish the principle of freedom of trade, Grotius recognises a principle which he relates to Roman law, that the sea is for use by all. Grotius argues that neither the sea itself, nor the right of navigation, can become the exclusive possession of a State. Grotius (1609:7) declares, 'every nation is free to travel to every other nation, and to trade with it'. That is, by the law of nature, the sea is *res communis,* meaning the common property of all and not subject to unilateral appropriation. In putting forward an open sea policy in respect to commerce, Grotius is advocating the contemporary idea of

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[18] The *Treaty of Tordesillas* increased Portugal's rights in the area which is now modern Brazil. However, opposition soon arose from other states. For example, Sir William Cecil (later Lord Burleigh) the Elizabethan statesman, told the Spanish Ambassador to England in 1562 that 'the Pope had no right to partition the world and to give and take kingdoms to whomsoever he pleased' (Williams, 1970:72). For a detailed historical account see Morell 1992:186-188; Steinberg 1999:255; Williams, 1970:72; Zacher & McConnell 1990:76-77).

[19] Rothwell 2010: 3; see generally Vieira (2003) for an outline of the literary exchanges pertaining to sea policy of the period.

[20] Grotius (1609: VI, 46) states: 'it is a fact universally recognised that the Pope has no authority to commit acts repugnant to the law of nature. But it is repugnant to the law of nature, as we have already proved beyond a doubt, for anyone to have as his own private property either the sea or its use'.

State equality. Furthermore, in his remarks pertaining to nations having a right to freely trade with one another, there is evidence of the contemporary idea of interdependence of nations[21]. Of particular interest is Grotius' sanctioning of the practice of nations forming binding agreements in order to protect or secure jurisdiction[22]. Furthermore, his writings sanction a number of international dispute resolution methods which are still used today including court judgments, damages and discussions (negotiations)[23].

State Cooperation

Under UNCLOS III and the UNCPUCH, States are obliged to 'cooperate'. The mechanism of State cooperation, contained in Article 2 of the UNCPUCH and the UNCPUCH's foundational norm itself, can be traced to Article 303(1) of UNCLOS. Arguably, Article 303(1) can trace its origins to the ideas promoted by Grotius some four centuries earlier with his advocacy of consensus in decision making between nations and the concept of 'territorial sovereignty'. If States are deemed to be equal under the law, plus possess territorial sovereignty, then, the only way to legally change the status quo is through 'consensus' in decision making (i.e. State cooperation). Although contemporary international law expressly advocates the legal mechanism of 'State cooperation' (the obligation to cooperate) together with the principle of 'equality' between States in respect to the 'resources' of the 'Area', there is also, under the UNCLOS III, a move towards a partitioned or closed sea. The UNCLOS III grants increased sovereignty rights to coastal States through the creation of the 200 nautical mile EEZ whilst allowing coastal States sovereign rights over their continental shelf, however, the UNCLOS III has also maintained the traditional Grotian freedoms of the high seas. In addition, the UNCLOS III has provided for a more equitable distribution of wealth resulting from seabed exploration in the 'Area'. The advantage of an open sea policy based upon natural law principles of equality between nations and consensus in decision making between all States, as opposed to a closed sea policy, is that it promotes State 'cooperation' separate to the existence of any 'positive' law stipulating the obligation to 'cooperate'.

Conclusion

In conclusion, the conservation of UCH requires not only an understanding of the physical environment in which an object is located but also its legal environment needs to be ascertained. The legal environment includes formal

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[21] 'there is no State so powerful that it may not some time need the help of others outside itself, either for purpose of trade, or even to ward off the forces of many foreign nations united against it' (Grotius:1625: 22). A modern example of an international declaration illustrating the idea of the inter-dependence of States is the 1974 Declaration on the Establishment of a New International Economic Order. The preamble declares: 'based on equity, sovereign equality, inter-dependence, common interest and cooperation among all States'……It is important to note that one of the aims of UNCLOS is the implementation of the New Economic Order.

[22] Grotius 1609: V, 35. Grotius is referring to agreements between States in respect to piracy, however, this reference indicates an early awareness of using bilateral and multilateral agreements for the purpose of protection and extending sovereign rights beyond national waters. Importantly, Grotius goes on to state that any such agreement does not make the delimited area of the sea the private property of anyone.

[23] Grotius 1609: XIII, 75.

treaties, customary international law and the underlying philosophies of ocean governance. As previously discussed, the natural law concepts, such as equity, consensus and equality, are still relevant foundation norms for rules governing a contemporary international society of States. The UNCLOS III is a balance of the Grotian tradition of freedom of the high seas with that of increasing coastal state sovereignty and sovereign rights. Basically, coastal States are given increasing rights as the distance from the shore decreases, and conversely, flag States are given increasing freedoms as the distance from the shore increases[24]. However, the problem is that the use of the ocean is not static, but instead, it continues to evolve. Therefore, the challenge for international sea law is to balance the increasing and diverse interests within the marine environment whilst maintaining the traditional freedom of the sea.

Since Grotius' times, nations are more reliant upon one another in matters of ocean management. Undoubtedly, the 21st century will be a time when underwater discoveries will proliferate as advances in marine technology allow for greater exploration of the outer Continental Shelf and the 'Area' itself. The growth in marine technology, combined with an increasing need for nations to source natural resources, such as minerals and genetic organisms from the marine environment, will see increased marine scientific research, ocean floor mapping and exploration on the deep seabed. There is an increased potential for conflict in ocean governance given the diverse and conflicting interests within the marine environment. In particular, there is the potential for conflict between *in situ* preservation of wrecks and marine genetic bioprospecting[25]. In the past, the management of underwater sites had only to contend with traditional threats such as looting, salvage and pollution. However, an emerging threat is marine genetic bioprospecting with its potential to generate patents and intellectual property rights for pharmaceutical companies. When the UNCLOS III was drafted during the 1970s, a lot of the marine technology required for deep sea exploration and exploitation was not available. Furthermore, there was little awareness that the oceans held a wealth of genetic biodiversity. Hence, during the negotiations of UNCLOS III, no consideration was given to the activity of marine genetic bio-prospecting on seamounts, cold seeps, thermal vents and ocean ridges. However, given the potential for shipwrecks to be located in deep ocean trenches or around seamounts which sustain diverse genetic organisms, the potential for tension and conflict between these opposing maritime activities is likely to occur in the future. It is important to note, that under the UNCLOS III, there is an obligation to carry out marine research in the 'Area' in a manner which is not a threat to the overall marine environment. However, genetic bioprospecting is technically not marine research, and

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[24] Koschtial 2008:69; UNCLOS III, Article 8(1) *Internal Waters*; Article 33 *Contiguous Zone*; *Article 56 Exclusive Economic Zone (EEZ); Article 77 (1) Continental Shelf; Article 87 High Seas; Article 136 The Area.*

[25] Warner (2008:16) indicates that marine bioprospecting to find new patentable pharmaceutical products is already underway (unlike seabed mining (exploitation) in the 'Area' which is yet to commence). Furthermore, Warner (2008: 16) states that 'bioprospecting has already eclipsed commercial interest in deep seabed minerals'. Leary (2007:229), whilst speaking in respect to the need to protect the genetic resources of the deep sea associated with hydrothermal vents, acknowledges the conflicting interests and diverse stakeholders in the ocean: Leary (2007: 16) states: 'any future legal regime will need to accommodate multiple and at times conflicting uses and interests'.

therefore, may not be regulated by the UNCLOS III under its provisions for marine scientific research. Therefore, in order to ensure the continued protection of UCH and to prevent legal loopholes arising from technical interpretations of international agreements, an effective mechanism will be one of 'State cooperation' and the continuing adherence to an equitable international legal framework.

Bibliography

Beslier, S., 2009	'The Protection and Sustainable Exploration of Genetic Resources of the High Seas from the European Union's Perspective' in *The International Journal of Marine and Coastal Law* Vol. XXIV, pp. 333-341.
Churchill, R. & Lowe, A., 1999	*The Law of the Sea,* 3rd ed, Manchester University Publishing, Manchester.
Christov, T., 2005	'Liberal Internationalism Revisited: Grotius, Vattel, and the International Order of States', in *The European Legacy* Vol. X, No.6, pp. 561-584.
Colombos, C.J., 1959	*The International Law of the Sea*. 4th ed. Longmann, Green and Co Ltd, London.
Curry, A., 2006	'A Stone Age World beneath the Baltic Sea', in *Science*, Vol. 314, No. 5805, pp.1533-1535.
Elia, R.J., 2000	'US Protection of Underwater Cultural Heritage Beyond the Territorial Sea: Problems and Prospects', in *The International Journal of Nautical Archaeology,* Vol. XXIX No.1, pp.43-56.
Elias, T. O. , 1980	'The Doctrine of International Law', in *The American Journal of International Law,* Vol. 74, No 2, pp. 285-307.
Fenn, P.T., 1925	'Justinian and the Freedom of the Sea', in *The American Journal of International Law*, Vol. 19, No. 4, pp. 716-727.
Fulton, T., 1911	*The Sovereignty of the Sea,* Blackwood, Edinburgh.
Galili, E. & Rosen, B., 2010	'Preserving the Maritime Cultural Heritage of the Mediterranean, a Cradle of Cultures, Religions and Civilisations – the Holy Land Perspective' in *Journal of Coast Conservation* 14 (4) pp. 303-315.
Grotius, H., 1609	*The Freedom of the Seas - or the right which belongs to the Dutch to take part in the East Indian trade.* Edition, J. Brown Scott, Trans. R. V. D. Magoffin, 1916 rep. Oxford University Press, New York.
Grotius, H., 1625	*Prolegomena to the Law of War and Peace, tr.* F.W.Kelsey,1925, rep. 1957, Bobbs-Merrill, Indianapolis.
Guerin, U. and Egger, B., 2010	'Guaranteeing the Protection of Submerged Archaeological Sites Regardless of their Location: The UNESCO Convention on the Protection of the Underwater Cultural Heritage (2001)', in *Journal of Maritime Archaeology,* Vol. 5, pp. 97-103
Hershey, A.S.,	'History of International Law Since the Peace of

1912	Westphalia', in *The American Journal of International Law* Vol. 6, No. 1, pp. 30-69.
Hershey, A. S., 1911	'The History of International Relations During Antiquity and the Middle Ages', in *The American Journal of International Law,* Vol. 5, No 4, pp. 901-933.
Homer	*The Odyssey,* transl. R. Fagles, 1996, Penguin Books, New York
Johnson, C., 2000	'For Keeping or For Keeps? An Australian Perspective on Challenges Facing the Development of a Regime for the Protection of Underwater Cultural Heritage', in *Melbourne Journal of International Law* Vol. 1, pp. 19-34.
Juda, L., 1979	'UNCLOS III and the New International Economic Order', in *Ocean Development and International Law Journal,* Vol. 7, No. 3, pp. 221-255.
Koschtial, U., 2008	'The 2001 UNESCO Convention on the Protection of the Underwater Cultural Heritage: advantages and challenges', in *Museum International*, Vol. 60, No. 4, pp.63-69.
Leary, D.K., 2007	*International Law and the Genetic Resources of the Deep Sea,* Martinus Nijhoff, Leiden.
Leino, M., Ruuskanen, A.T., Flinkman, J., Kaasinen, J., Klemela, U.E., Hietala, R. & Nappu, N., 2011	'The Natural Environment of the Shipwreck Vrouw Maria (1771) in the Northern Baltic Sea: an assessment of her state of preservation', In *The International Journal of Nautical Archaeology,* Vol.40 No.1, pp.133-150.
Lobingier, C.S., 1935	'The Maritime Law of Rome' in *Juridical Review*, Vol. XLVII, No. 1, pp. 1-32.
Louise, Fayette de La., 2009	'A New Regime for the Conservation and Sustainable Use of Marine Biodiversity and Genetic Resources Beyond the Limits of National Jurisdiction', in *The International Journal of Marine and Coastal Law,* Vol. 24, pp. 221-280.
Norton, T., 2000	*Stars Beneath the Sea. The Extraordinary Lives of the Pioneers of Diving,* Arrow, London.
McGrail, S., 2003	'The Sea and Archaeol*ogy'*, in *Historical Research,* Vol.76, No.191, p1.
Morell, J. B., 1992	*The Law of the Sea: The 1982 Treaty and Its Rejection by the United States.* McFarland, Jefferson.
Mossop, J., (2007)	'Protecting Marine Biodiversity on the Continental Shelf Beyond 200 Nautical Miles', in *Ocean Development and International Law* Vol. 38, No.3, pp. 283-304.
Pinto, M.C. W., 1983	'Introductory Statement', *In the International Law and the Grotian Heritage. A Commemorative Colloquium held at The Hague on 8 April 1983 on the occasion of the fourth centenary of the birth of Hugo Grotius,* published (1985) by T.M.C Asser Institute – The Hague.
Polybius	*The Histories*, transl. by W.R. Paton, 1922, Harvard

	University Press, New York.
Rau, M., 2002	'The UNESCO Convention on Underwater Cultural Heritage and the International Law of the Sea', in *Max Planck Yearbook of United Nations Law,* Vol. 6, pp.387-472.
Rothwell, D. and Stephens, T., 2010	*The International Law of the Sea,* Hart Publishing, Oxford.
Scovazzi, T., 2004	'Mining, Protection of the Environment, Scientific Research and Bioprospecting: Some Considerations on the Role of the International Seabed Authority', in *The International Journal of Marine & Coastal Law,* Vol.19, pp. 383-410.
Shingleton, B., 1983	'UNCLOS III and the Struggle for Law: The Elusive Customary Law of Seabed Mining', in *Ocean Development and International Law Journal,* Vol.13, No.1, pp.33-63.
Smith, H.D., and Couper, A.D., 2003	'The Management of the Underwater Cultural Heritage', in *Journal of Cultural Heritage,* Vol. 4, pp. 25-33.
P. Steinberg 1999	'Lines of Division, Lines of Connection: Stewardship in the World Ocean, in *Geographical Review*, Vol. 89, No. 2, pp.254-264.
Tanaka, Y., 2008	'Reflections on the Conservation and Sustainable Use of Genetic Resources in the Deep Seabed Beyond the Limits of National Jurisdiction', in *Ocean Development and International Law,* Vol. 39, No.2, pp.129-149.
Thucydides	*History of the Peloponnesian War, transl. R. Warner, 1972 reprint, Penguin Books, London.*
Vieira, M.B., 2003	'Mare Liberum vs. Mare Clausum: Grotius, Freitas, and Selden's Debate on Dominion over the Seas', in *Journal of the History of Ideas,* Vol. 64, No. 3, pp. 361-377.
Warner, R., 2008	'Protecting the Diversity of the Depths: Environmental Regulation of Bioprospecting and Marine Scientific Research Beyond National Jurisdiction', in *Ocean Yearbook,* Vol. 22, pp. 411-443.
Williams, E., 1970	*From Columbus to Castro: The History of the Caribbean,* Andre Deutsch Limited, London.
Zacher and McConnell 1990	'Down to the Sea with Stakes: The Evolving Law of the Sea and the Future of the Deep Seabed Regime, in *Ocean Development and International Law'*, Vol. 21, pp. 71-103.
Zenmanek, K., 1999	Was Hugo Grotius Really in Favour of the Freedom of the Seas?, in *Journal of the History of International Law,* Vol. 1, pp. 48-60.