



Weaknesses in the Law Protecting the United Kingdom's Remarkable Underwater Cultural Heritage: The Need for Modernisation and Reform

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Abstract

Despite the United Kingdom (UK) having been regarded as one of the richest hotspots for underwater cultural heritage (UCH), its policy and practice regarding its protection has displayed some areas of weakness. This paper makes a case to review the legal framework and its overall administration in the UK, in order to protect and preserve any remaining UCH before it is further lost or damaged. First, we introduce some of the flaws in the UK's legal system protecting UCH, demonstrating how it has led to a considerable loss of cultural heritage and underlining how it is in need of modernisation. This includes discussion of issues raised in a number of recent cases, including the proposed *Victory* (1744) recovery project, the proposed Goodwin Sands dredging licence and various cases relating to the illegal recovery of material. We then map out how policy is implemented in practice and the role played by various institutions involved with its administration, where we find a schism between what policy intends and what it is achieving in practice. This takes us towards a broader discussion on how legislative reform might look, including a more proactive and ambitious approach to the future management and enjoyment of the UK's impressive UCH. Here we argue the need for better engagement at the global and regional negotiating table, as well as in favour of adopting a unified and consistent policy which aims to be more sustainable, precautionary, proportionate and inclusive.

Keywords Underwater archaeology policy · Heritage management · United Kingdom · Marine management · UNESCO Convention on the Protection of the Underwater Cultural Heritage

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Introduction: The Need to Protect the United Kingdom's Underwater Cultural Heritage

The waters around the United Kingdom (UK) are perhaps the world's richest in terms of underwater cultural heritage (UCH). As an island nation, with thousands of years of continuous seaborne migration, trade, exploration and warfare, along with a continental shelf once traversed by Europe's early hunter-gatherers, its waters are home to an immense archaeological record (Dromgoole 2006a, 313–314; Firth 2011). It is also a nation which could fairly regard itself as having been a pioneer in the field of underwater archaeology, producing many of the world's most influential organisations and researchers (Firth 2014, 18). However, as a result of fragmented legislation which has not kept in line with contemporary challenges, or which has traditionally tolerated or incentivised the removal of and interference with UCH, large numbers of the heritage assets found in UK waters have since been damaged or destroyed (e.g. Tomalin et al. 2000, 32; Rednap 1990, 23–30; Parham et al. 2013, 403–438).

A recent example is provided by the controversial case of *Victory* (1744), relating to an application to the UK's Ministry of Defence (MOD), by the US-based treasure hunting company, Odyssey Marine Exploration, Inc. (OME), to permit a purportedly archaeologically-compliant recovery project on the *Victory* wreck, resting in the English Channel. It was clear among many in the archaeology community that OME and the UK government were motivated largely by the financial reward available from salvaging the estimated £500 million worth of gold and silver coins believed to be on board (Joint Nautical Archaeology Policy Committee 2010). This is evidenced, for example, by a letter obtained by a Freedom of Information request, written from Lord Lingfield, responsible for setting up the Maritime Heritage Foundation (MHF) to manage the proposed archaeological project on *Victory*, to the then-Defence Secretary, Michael Fallon, expressing his hope that OME are successful in salvaging all the gold (Letter from Lord Lingfield 2014).

It appears as if MHF act merely as a charitable proxy for OME, with work undertaken for MHF by individuals who also work for OME.¹ It eventually required individual members of the UK's archaeology community to take personal risk through a judicial review procedure, in order to ensure that the government's provisional approval was reversed. Indeed, prominent within the 'Rules concerning activities directed at underwater cultural heritage' ("Annexed Rules"), contained in the UNESCO 2001 Convention on the Protection of the Underwater Cultural Heritage (UNESCO 2001)—which the UK government has agreed to adopt as standard practice (UK National Commission for UNESCO, 3)—is the need for an unambiguous, well-designed, robust and self-funded archaeological project plan, which includes a prohibition on the commercial exploitation of recovered materials.

A further concern has been recently raised with regard to the robustness of the UK's marine licencing process. This can be seen in the UK government's decision to award a licence to the Dover Harbour Board (DHB) to dredge up to 3 million tonnes of sand in an area known as the Goodwin Sands and widely viewed as a remarkable UCH hotspot and a

¹ Reynolds, R., (2019), 'Judicial review undertaken for HMS *Victory* salvage', *Institute of Art & Law*, 10 April 2019, <https://ial.uk.com/judicial-review-undertaken-for-hms-victory-salvage/>; accessed 25 April 2019. Review the case at MMO's Marine Licence Public Register (<https://marinelicensing.marinemanaagement.org.uk>), case reference: MLA/2014/00597, accessed 4 June 2019.

proposed Marine Conservation Area.² A look in detail at the Consent Decision Report published with the award given by the Marine Management Organisation (MMO) in July 2018 (MMO 2018), as well as the supporting Environmental Statements and Written Scheme of Investigation submitted by DHB (Dover Harbour Board 2016a, b, c, 2017), demonstrates that the environmental impact assessment procedure resembles a relatively unidirectional process, where predominant value is given to the evidence and arguments compiled by the licence applicant and their selected expert consultants.

A more effective planning system should clearly empower a heritage champion whose role is to provide a robust counter-perspective, ensuring that the licencing decision is subject to robust scientific scrutiny and thoroughly engages with wider social and ecological concerns. In the UK, this counter-view is intended to be provided by the Government's appointed heritage advisor, Historic England (or devolved equivalents in Scotland, Wales and Northern Ireland). However, the Goodwin Sands case has perhaps demonstrated some of the limitations that come from relying on a government-appointed advisor, whose powers are not clearly defined, to the constrain the same government in the attainment of national economic objectives. For example, despite their utility in contemporary archaeological survey work and the clear cultural significance of the Goodwin Sands, Historic England were content to dispense with magnetometer surveys during the heritage impact assessment process in 2015.³ This delivered a result of just six features representing surface expressions across a 4 km² area (such expressions proud of the surface are often referred to as 'anomalies'). However, following considerable public pressure, Historic England were finally forced to require a magnetometer survey from the developer in 2017, delivering a result of 315 anomalies across the same area (MMO 2018, 19; Dover Harbour Board 2017, 31–32).

Nevertheless, the proposed mitigation strategies for the remaining 29 anomalies in the selected dredge zone were felt to be satisfactory by the heritage advisors and the licence was awarded in 2018. This was despite some remaining public anxiety about the proposed dredging and a concern in the local community about impacts on the cultural and ecological value of the Goodwin Sands.⁴ For example, while DHB have agreed to create a 25-m 'Archaeological Exclusion Zone' around the remaining anomalies of 'uncertain origin of potential archaeological interest', there are widely held concerns that this may not be a sufficient distance, given the difficulty of accurately identifying dispersed fields of archaeological materials or human remains using current geophysical survey technology. There are also questions remaining about the impact on the local seal habitat; the impact of removing 2.5 million cubic metres of sand at a 2-m dredge depth on important benthic ecosystems;

² See Goodwin Sands SOS (www.goodwinsandssos.org; accessed 4 June 2019); *The Pipeline*, 'Legal Challenge Under Consideration as MMO Grant Goodwin Sands Dredging Licence', 27 July 2018, <http://thepipeline.info/blog/2018/07/27/legal-challenge-under-consideration-as-mmo-grant-goodwins-sands-dredging-licence>; accessed 4 June 2019; *The Pipeline*, 'Goodwin Sands Row: MMO Director of Licensing Held Unminuted Meeting with Port of Dover CEO', 30 January 2018, <http://thepipeline.info/blog/2018/01/30/goodwin-sands-row-mmo-director-of-licensing-held-unminuted-meeting-with-port-of-dover-ceo/>; accessed 4 June 2019.

³ Magnetometer surveys detect the aberrations in the earth's magnetic field caused by ferrous material. Unlike multi beam bathymetry and side scan sonar (which only detect anomalies with a surface expression), magnetometers can detect material buried under the surface of the seabed.

⁴ See *The Times*, 'Sandbank dredging angers conservationists', 28 July 2018, www.thetimes.co.uk/article/sandbank-dredging-angers-conservationists-gg7hmqnwd; accessed 4 June 2019; *BBC News*, 'Goodwin Sands dredging plans 'disgusting'', 26 July 2018, <https://www.bbc.co.uk/news/uk-england-kent-44971642>; accessed 4 June 2019.

the loss of land defences from rising seas; and about the lack of detailed appraisal of alternative sites, such as the area known as ‘Area 501’, in the Outer Thames Estuary.

Legislation in the UK has also found it difficult to effectively police illegal recovery or souvenir hunting, which is as much a challenge in the UK as elsewhere around the world. Indeed, it is possible to locate evidence of much of the destruction in the UK, by examining the present status of many of the wreck sites found in its shallow waters.⁵ The issue is perhaps most clearly evidenced by the fact that when the UK Receiver of Wreck (ROW) offered a 3-month amnesty in 2001, agreeing to refrain from any prosecutions after any unreported objects illicitly removed from UK wreck sites were brought forward, it received notification of over 30,000 objects which had been illegally retrieved and not reported by divers (Dromgoole 2006a, 320). Yet, as human activity increases in the offshore environment and as the technology for accessing the seabed and excavation becomes increasingly affordable and available, the heritage assets in the UK’s offshore region (between 12-nautical miles to the outer limit of the UK’s exclusive economic zone at 200-nautical miles) are now also facing a similar threat of interference. It is therefore vital that action is taken to significantly strengthen the UK’s policy across all of these areas, before further heritage is lost or damaged.

This paper will highlight and explain some of the weaknesses which remain in the UK’s legal system regulating the protection and enjoyment of UCH and then will make aspiring recommendations for areas of potential reform. Section 2 introduces the legal context for UCH protection in the UK, highlighting some key areas where the law has displayed weakness, such as through the application of commercial salvage to archaeological sites and objects, as well as relying heavily on the prior identification and designation of the most significant sites of archaeological or historical interest. Section 3 goes further by exploring how government policy is translated into practice and exploring the weaknesses in the actual administration of UCH protection, such as the lack of investment in its protection and enjoyment, the lack of a heritage champion promoting the values of UCH protection, and the need for a greater commitment to archaeological practices and values within the governance framework.

Sections 4 and 5 then proceed to examine the possible ways forward. Section 4 explores ideas for a more coherent and consistent policy, leading from the front in global and regional relations, and utilising the public values obtained by protecting UCH. Section 5 argues that numerous environmental principles—such as sustainable development, precautionary management and public participation—should be meaningfully enshrined within broader UK heritage policy. Section 6 then finally concludes, arguing that a case exists for a considerable review and overhaul of existing legislation. Given the lack of funding for recording and protecting the UK’s submerged cultural record (see Sect. 3), there is an unfortunate lack of empirical evidence on which to base much of the following analysis. As a result, some arguments in this paper have had to rely in places upon the personal experiences of the authors, personal communications with experts and stakeholders across the field, as well as various other forms of undocumented evidence where necessary.

⁵ A perusal of the www.wrecksite.eu website (accessed 4 June 2019), for example, would demonstrate the present status of wrecks around the British Isles after decades of unregulated diving and trophy hunting. See, e.g., www.wrecksite.eu/checklist.aspx (accessed 4 June 2019) for the site’s suggested equipment list which leaves no doubt as to the widely adopted practices of some sectors of the marine community. For an illustration of pro-salvage and anti-preservationist attitudes remaining among a number of people in the UK diving community, see also the ‘Spidge Diver Magazine’ Facebook page (<http://www.facebook.com/SpidgeDiverMagazine>; accessed 4 June 2019).

Weaknesses in the Law Protecting the United Kingdom's Underwater Cultural Heritage

(a) The International Legal Context

It is beyond the purview of the present paper to give a detailed legislative history on the national, regional and international legal rules protecting UCH.⁶ However, a basic introduction to the legal context shall be provided. It is relatively well-known that, at the international level, as with global environmental law more generally, it has been challenging to produce effective treaties which can curtail national economic development and drive forward UCH protection among states. For example, the UN Convention on the Law of the Sea (United Nations 1982), hereafter 'UNCLOS', was drafted during a period immediately prior to considerable improvements in diving technology and before the threats to submerged archaeology were widely appreciated or understood. As such, UCH was only dealt with hastily and unsatisfactorily in the final text, in just two of its 320 articles and nine annexes: Articles 149 and 303. Apart from appearing to expand coastal state jurisdiction over UCH outwards to the contiguous zone (up to 24-nautical miles),⁷ Article 303's only real achievement was perhaps in producing a merely 'hortatory' (Blumberg 2005) agreement that states had a 'duty to protect objects of an archaeological and historical nature found at sea and [to] cooperate for this purpose.'⁸ Article 149 was also severely limited, in that only applied to rare UCH found on the deep seabed.

This failure of the UNCLOS to address mounting threats to UCH, beyond good faith statements of intent, meant that it fell particularly to national and regional regulation to provide crucial UCH protection. An important legal instrument in this regard in the European context has been the 1992 European Convention on the Protection of Archaeological Heritage (Council of Europe 1992), hereafter 'Valletta Convention', which has driven forward standards of in situ management and preservation for archaeological heritage.⁹ However, the Valletta Convention was quite limited by its focus on archaeological site management, as well as its arguable application to just the territorial seas of states parties (up to 12-nautical miles). As a result, the United Nations Educational, Scientific and Cultural Organization (UNESCO) commenced negotiations on a new international treaty in the late 1990s, culminating in the signature in 2001 of the UNESCO Convention on the Protection of the Underwater Cultural Heritage (UNESCO 2001), hereafter 'UNESCO Convention', which came into force in 2009. Better reviews of the UNESCO Convention have been carried out elsewhere (e.g. Garabello and Scovazzi 2003; Dromgoole 2013; O'Keefe 2014). However, it is reasonable to conclude that certain aspects of the UNESCO Convention struggled to go much further than existing international practice, such as by merely reinforcing existing agreements on in situ preservation as a first option, moving UCH further away from commercial exploitation, and creating an arguably complex system of cooperation for states to come together in the protection of UCH.

⁶ For such an overview, looking particularly at the public and private international level, we recommend Dromgoole 2013.

⁷ Ibid, Article 303(2).

⁸ Ibid, Article 303(1).

⁹ Ibid, Arts. 4(ii) and 5(iv).

For a number of reasons (see Sect. 4), the UK was among a number of maritime powers and flag states who initially rejected the UNESCO Convention and refused to ratify. Over time, however, various European flag states of particular significance have either joined the treaty, e.g. Croatia (2004), Spain (2005), Portugal (2006), Italy (2010), France (2013), or appear imminently likely to join, e.g. Netherlands, Germany and the Republic of Ireland. Following the Convention, however, a large number of states, including the UK, were content to adopt the Annexed Rules (UNESCO 2001; DCMS 2005, 2014) in the alternative. Drafted by archaeologists, these rules provide an important level of detail in the manner and means by which identified UCH sites should be managed or recovered in accordance with archaeological best practice. However, they are limited to activities ‘directed at’ UCH sites, i.e., recovery plans, archaeological studies or salvage agreements. The result is that many of the laws protecting and managing UCH around the world are still predominantly driven forward by national and regional policy; the effectiveness of which varies considerably across different states and systems.

(b) The Law Protecting Underwater Cultural Heritage in the United Kingdom

A high-level policy document, *Our seas—a shared resource: High level marine objectives* (Department for Environment, Food and Rural Affairs 2009), gives the impression that UCH is taken very seriously by the UK government. It contains phrases such as ‘[t]here will be appropriate protection for, and access to, our marine heritage assets’ (Department for Environment, Food and Rural Affairs 2009, 5) and ‘[p]eople appreciate the diversity of the marine environment, its seascapes, its natural and cultural heritage and its resources and act responsibly’ (Department for Environment, Food and Rural Affairs 2009, 6). This appears to suggest that the tools for protecting the UK’s rich maritime heritage assets will be at hand and properly administrated and resourced. However, as has been alluded to by policy experts for many years (e.g. Joint Nautical Archaeology Policy Committee 1989, 2000; English Heritage 2004), the UK arguably possesses the unusual record of being a world leader in the discipline of underwater archaeology, while at the same time failing to benefit from its potentially vast submerged cultural resource. Indeed, as Parham once put it, the UK’s policy for UCH could perhaps be viewed as ‘active neglect’ (Gribble et al. 2009, 23). Many of the most important laws in the UK—such as those contained in the Protection of Wrecks Act 1973 (PWA), Ancient Monuments and Archaeological Areas Act 1979 (AMAA), Merchant Shipping Act 1994 (MSA), Protection of Military Remains Act 1986 (PMRA), and the Marine and Coastal Access Act 2009 (MCAA)—are therefore in need of considerable reform.

For example, by specifically focusing on the long-term protection of submerged wrecks, the PWA is meant to be a key part of the legislative framework. However, as with the AMAA and PMRA, it received Royal Assent several decades ago, long before the modern technical challenges of protecting UCH were properly understood. Furthermore, this legislation was only ever intended to a temporary ‘stop-gap’ while more effective UCH protection measures could be developed (Firth 2014, 2). Indeed, some of its key weaknesses include: a focus upon narrow threats to UCH; a lack of provision for long-term conservation of sites; an inclusive approach to salvage; as well as a pre-eminent focus on prior identification and designation of sites of significant historical interest, leaving other sites with no protection (House of Lords 2001). Its definition of heritage also only focuses on “shipwrecks”, thus neglecting many wider forms of UCH sites and objects, as well as being limited to the territorial sea (up to 12-nautical miles) around the UK. For example,

the equivalent Act to the PWA in Australia—the Historic Shipwrecks Act 1976¹⁰—was already regarded as more effective to the UK’s Act in a number of areas, including a clearer and wider definition of UCH, as well as the utilisation of a blanket-based cover for non-designated sites (see subsection (d)). Even still, however, Australia also recently benefited from a complete overhaul and period of modernisation of its more refined UCH laws, culminating in Australia’s Underwater Cultural Heritage Act 2018.¹¹ This is just one example of where the UK, who should be at the forefront of policy developments in this field, have been thoroughly left behind.

The remainder of this paper will therefore explore various weaknesses with laws, policy and practice in the protection of UCH in the UK. For example, two particular concerns explored in the remainder of this section are: the remaining legacy of a commercial salvage regime which still inappropriately views submerged sites and artefacts, whether consciously or unconsciously, as objects of commercial reward; as well as the predominant focus on protecting only those pre-selected sites designated as of special and particular significance. The section that then follows looks at some of the weaknesses inherent in the actual *administration* and *implementation* of government policy.

(b) Outdated Rules on Commercial Salvage

A key issue at the heart of the UK’s legal system appears to be the maintenance of a tradition supporting commercial salvage, such that it continues to be inappropriately applied to submerged archaeological heritage. Despite many of the world’s major nations seeing UCH as outside the purview of commerce and thus the law of salvage—a doctrine traditionally providing financial reward for the raising and resale of wrecked vessels and cargo—the UK remains a member of a decreasing number of states who suggest that archaeological sites can be salvaged for commercial gain (UK UNESCO 2001 Convention Review Group 2014, 73–75; English Heritage 2004, 7–8). Indeed, even the majority of nations joining the 1989 Salvage Convention entered the reservation allowing them to remove archaeological heritage from the private law of salvage (Forrest 2009, 371), with the UK even being among those entering the reservation. Unfortunately, however, it has yet to implement any effective regulation to achieve this protective position.

The UK has long promoted a commercially expansionist view of salvage for perhaps two reasons. First, as a one-time maritime superpower, it still possesses a salvage industry with a few companies registered and operating from the UK. For example, the International Salvage Union is based in London (ISU 2017). However, it is worth noting that most of these commercial salvage companies are quite different to the clandestine ‘treasure salvors’ who present a more salient threat to UCH. Second, perhaps more importantly and yet less recognised, is the historic influence of Cornish wrecking. As is well known, West Country ‘wreckers’ in the eighteenth and nineteenth centuries became increasingly ruthless in their hunt for wreck washed up on the shore, by taking to the killing of shipwreck survivors who may lay witness to any looting (Pearce 2010). In response, the UK government introduced reforms which legally incentivised the salvage of wrecked goods, provided that sailors’ lives were prioritised and merely requiring that all gathered goods were reported to the ROW (Wiswall 1970, 43–44).

¹⁰ Historic Shipwrecks Act 1976, Act No. 190 of 1976 (Australia).

¹¹ Underwater Cultural Heritage Act 2018, Act No. 85 of 2018 (Australia).

It is important to recognise that the commercial ‘salvage’ of wreck is a concept which goes back centuries, even to the ancient Rhodian maritime law from ca. 800 CE (Schoenbaum 2012, 208). However, professional maritime salvage focusing upon the recovery of recently lost vessels and materials is not usually a concern of the archaeology community. Rather, what is needed is for the law to distinguish “historic” wreck of archaeological interest and to take it outside of salvage rules, as the UNESCO Convention sought to do by only covering UCH which is over 100 years old (UNESCO Convention, Art. 1(1); Forrest 2009). Furthermore, the law must operate to alter social attitudes which normalise trophy hunting or profit-seeking among amateur divers and coastal communities. However, UK law and practice appears to even incentivise such activities. This failure to really shift societal attitudes manifested itself recently, for example, when MSC *Napoli* beached on the South Devon coast and was set upon by hundreds of local scavengers, all citing their legal entitlement to rewards for “salvaging” the goods (Lowther et al. 2008).

Two hundred years later, these rules of archaic origin, which are now found in Part IX of the MSA, therefore continue to offer potential financial reward to anyone who disturbs or dismantles newly discovered archaeological sites and brings artefacts to the notice of the ROW. After such a report, the Receiver has the task of seeking out potential owners with the Crown possessing title in lieu of a claim. In most cases—given that artefacts are entirely separated from their original context, are sometimes over a century old and have owners who are unaware of the historic chain of title—owners do not appear (Ransley and Satchell 2014, 189–190). The result is that finders of archaeological heritage in the UK are often rewarded by the Crown with the full title to their finds or, where the artefact is so valuable that it is sold to a public museum, with an award commensurate with its value (Dromgoole 2006a, 318–321; English Heritage 2004, 10–11). The tired argument that this incentivises the reporting of finds should perhaps now be accepted as misguided, given how it is ‘well known that this is as much honoured in the breach as in the observance’ (Joint Nautical Archaeology Policy Committee 1989, 19). For example, a comparative study by The SHIPS Project for the Plymouth Sound area, assessing actual finds catalogued against those that had been reported to the Receiver, suggested that only around 10% or less of finds recovered are actually reported by divers (pers. comm. Peter Holt).

Given this widespread assimilation of UCH as objects for private collection and reward, the removal of archaeological and historical material, both legally and illegally, therefore appears to occur frequently. Recent headline cases relaying the looting of SS *Cheerful* (1885), HMS *Hermes* (1914) and SS *Harrovian* (1916)¹² provide just some examples of the real threat of illegal recovery. In terms of the yet more concerning ‘legal’ salvage, it is well-known that the ROW receives reports of thousands of historic objects lifted from UK waters, a few of which can be found through the Marine Antiquities Scheme,¹³ and which will inevitably become the subject of commercial salvage awards or awarding title of the objects to their finders. The majority of salvage is marked as ‘Confidential’ when reported to the ROW and there is therefore no requirement for that department to report historic finds to the Heritage Agencies nor make information about them publicly available. As a result, they are effectively lost from the national consciousness. There is also concern about the targeting of archaeological sites with considerable quantities of treasure

¹² See supra Note 8; Press Association, ‘Pair jailed for looting shipwreck’, *MailOnline*, 22 June 2018, <https://www.dailymail.co.uk/wires/pa/article-5875585/Pair-jailed-looting-shipwreck.html>; accessed 25 April 2019.

¹³ See <http://www.marinefinds.org.uk>; accessed 4 June 2019.

or valuable cargo on board, with a risk of deals being made without public scrutiny and without recourse to the Annexed Rules of the UNESCO Convention. For example, as well as the previously noted *Victory* (1744) case,¹⁴ another well-known controversy was *Sussex* (1694), where the UK government awarded a treasure salvage contract to OME in 2006 (Dromgoole 2004). Paradoxically, this occurred at around the same time that the government adopted the Annexed Rules as best practice, which contains a prohibition against any activities targeting UCH which represent commercial exploitation. Another example is *SS Gairsoppa* (1941), which sank with the loss of 85 lives in 1941. Despite its significance and value as a military gravesite, the ship's cargo of silver was tendered as a salvage opportunity by the government to OME in 2010, leading to the recovery of an estimated £137 million worth of silver.¹⁵

(c) Reliance on Prior Identification and Designation of Significant Assets

Legislators in the UK have remained consistently in favour of focusing upon listing-based methods for protecting UCH, as has been commonly adopted for heritage on land. This system essentially leaves all sites open to the trophy hunting or private exploitation discussed above, save for the few dozen wrecks which are assessed as possessing such archaeological importance to be designated protected sites under the PWA, or the few dozen listed as protected places under the PMRA, or those very few sites, particularly in the coastal and intertidal region, listed under the AMAA.¹⁶ There are various difficulties with such a listing-based approach (Henderson 2001; Firth 2011). For example, the lack of protection for the thousands of unlisted and as yet unknown or poorly understood sites of interest; the inability to effectively and accurately assess site significance; the likelihood that sites are looted or damaged before designation; as well as the disproportionate assignment of resources to just a few sites while others receive no protection.

Elsewhere, by contrast, several countries have been arguably more successful by operating a blanket-based method of protection which regulates *all* activities of any nature which *might* incidentally impact the national cultural record (see generally, Dromgoole 2006b). Such systems can still include a listing mechanism to protect sites of most significant archaeological or historic interest (e.g. Protection of Shipwrecks Act 1976 (Australia), s. 7; and National Monuments Amendment Act, 1987 (Ireland), s. 3). This has proved effective in similar jurisdictions (UNESCO 1997, Annex I, para. 12) and has not, despite previous suggestions (e.g. English Heritage 2004, 153–154), required significant investment in additional monitoring and enforcement resources. Scotland did recently improve upon the UK's extant listing-based system. However, the development of Historic Marine Protected Areas under the Marine (Scotland) Act 2010 formed simply another system of prior scheduling of only those assets considered to be of 'national importance'.¹⁷

In terms of UK terrestrial heritage, a listing-based approach has worked well. However, this is likely to be because of comprehensive underlying domestic law which protects all

¹⁴ See several articles available at www.thepipeline.info; accessed 25 April 2019.

¹⁵ Davies, L., 'Atlantic wreck set to yield £150 m haul', *The Guardian*, 26 September 2011, <https://www.theguardian.com/world/2011/sep/26/atlantic-wreck-150m-silver-gairsoppa>; accessed 25 April 2019.

¹⁶ Although the latter has many benefits, such as making listing easier and promoting a 'look but don't touch' attitude toward those listed sites (Joint Nautical Archaeology Policy Committee 2003, 18), it has only been used for a few Welsh and Scottish sub-tidal sites.

¹⁷ Marine (Scotland) Act 2010, Section 73(1).

the thousands of other *unlisted* sites and monuments on land from disturbance, damage or theft, including well-developed planning laws, property laws and laws against trespass and vandalism (Dromgoole 1989, 114). In the marine environment, however, the underlying legal framework is still founded on the MSA and its historic mechanism for incentivising removal, interference or reward-hunting. Crucially, therefore, the MCAA was passed in 2009 and the Marine (Scotland) Act in 2010, which both finally create an underlying protection for unlisted UCH from incidental activities by imposing stricter marine licensing rules. This has been very important in providing the coveted activity-based protection, placing a requirement upon marine operators to obtain a licence from the MMO before engaging in certain threatening activities up to 200-nautical miles from the coast, including laying pipes and cables, dredging, building installations, or lifting objects from the seabed with the use of a vessel.

Putting aside questions about whether this development contradicts the UK's own previous position with regard to 'creeping jurisdiction' of coastal states over UCH in the EEZ/continental shelf (on this concern, see Dromgoole 2006a, 342; UK UNESCO 2001 Convention Review Group 2014, 36–38), the MCAA and Marine (Scotland) Act only cover formal salvage operations which are undertaken with the use of a vessel. However, lifting objects by hand is still open to the rules on obtaining commercial rewards. What is more, when determining whether to allow offshore operators to demolish or remove UCH which is in the way of their operations, the MMO when determining licences to remove UCH are surely mindful that, upon lifting the UCH to the surface, operators would be entitled to bring it back to shore and claim a generous award (or even claim title where outside territorial waters—see Sect. 4). Decision-makers, such as the MMO, are therefore unlikely to 'value' the UCH in situ, as demanded by international standards, and are likely to be under greater pressure to view UCH as merely an obstacle to development or as artefacts to be salvaged. Furthermore, as explored further below, there are questions about the rules and systems which the MMO rely on to carry out licensing assessments, as well as the available expertise to champion cultural and natural heritage protection in the decision-making process.

That said, recent court cases provide evidence that the MCAA has considerably improved the regulatory landscape, by at last giving the courts something with which to penalise unsanctioned recovery of important, but unlisted, UCH.¹⁸ Northern Ireland has slightly improved the situation, by introducing further additional activity-based controls which require anyone to report discoveries of new archaeological materials in NI's territorial waters, as well as prohibiting the search for archaeological materials with the use of detecting devices or by excavation of land without obtaining a prior licence.¹⁹ Yet again, however, there is still a lack of reliable activity-based regulation which can pre-empt inadvertent or incidental damage to UCH.

(d) Self-Imposed Jurisdictional Limitations

¹⁸ Marine Management Organisation, 'Man found guilty of marine licensing offences relating to salvage of shipwreck', 23 May 2016, <https://www.gov.uk/government/news/man-found-guilty-of-marine-licensing-offences-relating-to-salvage-of-shipwreck>; accessed 20 April 2018; Marine Management Organisation, 'Master and owner charged for illegal salvage of sunken vessel', 7 August 2018, <https://www.gov.uk/government/news/master-and-owner-charged-for-illegal-salvage-of-sunken-vessel>; accessed 20 April 2018.

¹⁹ Historic Monuments and Archaeological Objects (Northern Ireland) Order 1995, Sections 29, 41 and 42.

The legislation in the UK has focused too much on regulating the ownership of UCH found in the territorial seas (up to 12 nautical miles), but has yet to provide any effective legal mechanism for the protection of UCH within the additional contiguous zone permitted for UCH regulation (between 12 and 24 nautical miles) or upon its Exclusive Economic Zone (EEZ) and continental shelf (up to 200 nautical miles). This is compounded by the judgment in *Pierce v. Bemis* (1986),²⁰ which provides that any unclaimed UCH brought into the UK territory shall be *res nullius* and open to appropriation by its importer.

Similarly, while heritage agencies provide general advice relating to matters beyond the 12-mile territorial sea limit to government departments, such as the Department for Culture, Media and Sport (DCMS), MOD and MMO (and any devolved equivalents in Scotland, Wales and Northern Ireland), their remit in terms of heritage protection strategy exclusively focuses on UCH assets within the 12-mile limit. This demarcation of responsibility does not adequately reflect the distribution of significant submerged cultural remains across the wider UK marine area. It is true that the UK has been pioneering in the development of certain extraterritorial rules protecting military gravesites, such as within the PMRA, which can apply to all British flagged vessels and nationals, regardless of locale. However, this is a fraction of what could be done to protect UCH around the world falling under the purview of British jurisdiction, outside of the narrow band of territorial sea, which is otherwise quite poorly protected and consistently falls out of the UK's wider heritage strategy.

Weaknesses in the Administration of Policy Protecting the United Kingdom's Underwater Cultural Heritage

(a) A Lack of Investment in our Future

As a major world economy (ranking the second largest in Europe and the fifth largest in the world) (CIA 2017), the UK should have reasonable resources at its disposal to secure its archaeological and historical cultural heritage. Tourism, much of it revolving around the UK's historic cultural heritage, accounts for £126bn, or 9%, of gross domestic product (Historic England 2016a, b). According to a recent study, the heritage sector brings in an estimated £29bn annually and investment in heritage drives long-term economic growth through tourism, employment, commerce and global services (Historic England 2018). These are not insignificant figures and the sector continues to show strong annual growth. However, there appears to be little meaningful investment by government to capitalise on these statistics when it comes to the UK's world-class marine heritage. For example, English Heritage, having once been the conservation authority of last resort with a £100 m grant aid budget in 2014, is now expected to be self-financing by 2023. Similarly, Historic England itself—which once formed a part of English Heritage before they were split in 2015—has seen a significant cut in funding since the 2007–2008 global recession and will be cut a further 10% in real terms over the 4 years from 2016/17 (UK Government 2015).

For the marine environment, the balance of resources afforded to research, protection and planning in the tidal and sub-tidal zones appears to be disproportionately low. As an

²⁰ *Pierce v. Bemis* 1 QB 401 (1986).

example, protection of the approximately 50,000 square miles in Historic England's terrestrial remit generates a listing team of around 80 employees, a planning team of around 320 employees and around 136 researchers. This can be starkly contrasted with the roughly 21,000 square miles of English territorial waters, where there are merely two employees on the listing team, three on the planning team and no dedicated marine researchers at all (Historic England 2016a, b). This is especially surprising as the baseline of historic environment knowledge is far lower in the marine environment than it is in the terrestrial environment. This discrepancy in resourcing UCH protection is seemingly inequitable, making it clear that the marine historic environment is under-represented and undervalued in government policy. Previously, a large part of the problem has been ensuring that the wider public can maximise their enjoyment and utility of distant UCH. However, this has improved dramatically and continues to do so, by advancing diving technologies, new means of media and digital consumption, an emerging awareness of broader social and environmental benefits, and a growing number of options for enjoying and accessing UCH in situ by virtual means (Firth 2015, 9).

Looking at other nations, however, it is clear that the historic environment can form an important and integrated part of marine policy. For example, Australia uses a system of well-resourced state curators, linked with museums who specialise in UCH and have the resources to investigate within their areas of operation (Anderson et al. 2006, 141). It is also well-known how countries across the Asian peninsula are increasingly turning towards the study of UCH and diverting millions of dollars towards its protection and research (e.g. Jing and Li 2019). The UK's closest neighbour, France, which ranks lower than the UK in world economic rankings, manages to fund a team that deals exclusively with UCH in French waters, including out to the contiguous zone (up to 24-nautical miles). A look at the work of France's *Département des recherches archéologiques subaquatiques et sous-marines* (DRASSM 2010) highlights a well-funded, well-equipped and focused team of experts dealing with UCH management. It is supported by 37 full-time staff, two research vessels, its own laboratory facilities and a library. In contrast, UK heritage agencies have endured successive redundancies and resource reductions, with further cuts to come.

Resultantly, there is a perceived lack of regard for heritage issues below the high-water mark, with a marked difference of policy and an obvious discrepancy in the way heritage assets on land and below water are regarded and protected. For example, of the two major excavations of at-risk UCH carried out in UK waters in 2017, the only excavation funded by the UK was on HMS *Invincible* (1758). However, the £2 million used for this was funded by the Chancellor of the Exchequer out of receipts from fines imposed following a banking scandal and was not the result of any investment from heritage agencies.²¹ By contrast, the Dutch Cultural Heritage Agency (Rijksdienst voor het Cultureel Erfgoed) spent more than all UK heritage agencies together, putting in £1.7 m into the excavation of *Rooswijk* (1740) off the Goodwin Sands.²²

Part of the problem also appears to be the lack of visibility on the social or cultural benefits of in situ UCH preservation and enjoyment. Indeed, there are many widely-agreed

²¹ HM Treasury, 'LIBOR fines to be used to support military charities and Royal Voluntary Service', 12 July 2016, <https://www.gov.uk/government/news/libor-fines-to-be-used-to-support-military-charities-and-royal-voluntary-service>, accessed 4 June 2019.

²² Milmo, C., '300-year-old Dutch bullion ship wrecked off the Kent coast to be subject of £1.7 m excavation', 21 April 2017, <https://inews.co.uk/news/uk/300-year-old-dutch-bullion-ship-wrecked-off-kent-coast-subject-1-7m-excavation/>, accessed 4 June 2019.

social, economic, political, educational, recreational and moral arguments which make it incumbent upon states to properly protect the marine historic environment for the benefit of their citizens and wider humanity (Firth 2015; Hall 2011). However, government strategy tends to increasingly prioritise investment into heritage which is more commercially self-sustaining and which provides a short-term return-on-investment, thus leaving the heritage community to compete aggressively over limited sources of finance, such as National Lottery funding and private donors. However, a particular difficulty with such a market liberal model is that it drives a limited amount of public budget towards promoting or protecting the most profitable and ‘obvious’ assets, such as the world-famous *Mary Rose*, *Cutty Sark*, *SS Great Britain* and *HMS Victory* museums,²³ while the paying public become increasingly detached from the vast majority of unknown or unresearched assets that receive no coverage and public awareness.

The effects of this might be seen as self-enforcing, wherein decreased visibility of lesser known sites leads to decreased investment, leading to even less public engagement, thus leading to less profitability and investment in such sites (e.g. Gribble, Parham & Scott-Ireton, 23). However, there is a fair counter-argument that the more popular museum sites increase the overall visibility and sense of importance of UCH, particularly if the archaeological value of such sites is included as an aspect of the museum experience (pers. comm. Ulrike Guérin). The difficulty with this contradistinction between varying public concern for visible and invisible assets can perhaps be illustrated, however, by the public anxiety over the proposed Goodwin Sands dredging, when many other marine landscapes further offshore rarely ever capture such public interest and emotion.

(b) A Lack of Heritage Champion

A number of different agencies are implicated in the administration of UCH protection in the UK. Policy is principally devised by the government through the DCMS, with some aspects falling to other departments, such as the Department for the Environment Farming and Rural Affairs (DEFRA) or the MOD. The MCAA in 2009 established the MMO as a new government body, who have assumed wide-ranging responsibility for marine planning in England, with similar non-departmental public bodies in the devolved governments (UK Government 2011). Marine Scotland is equivalent of the MMO for the Scottish territorial waters and wider marine area, introduced by the Marine (Scotland) Act 2010, and undertaking a similar role in terms of marine planning and administration of national policy. By having regulatory responsibility for the licensing and planning of offshore activities, these organisations play a pivotal role in the management and protection of UCH. Finally, and just as importantly, heritage agencies (e.g., Historic England, Historic Environment Scotland, Cadw in Wales and the Historic Environment Division in Northern Ireland) provide technical advice to the government departments and planning regulators in respect of the application of policy.

The resulting triumvirate system—between government, administrator and technical advisor—has the potential to work well, on the proviso that such agencies are given full autonomy and meaningful influence within what is intended to represent a *separation of*

²³ The *HMS Victory* Museum houses the later *HMS Victory*, Nelson’s flagship of Trafalgar fame, which sits in a dry dock in Portsmouth. Not to be confused with the second-rate ship of the line and Admiral Balchen’s earlier flagship vessel, *Victory* (1744), which was built in 1737 and sank in the English Channel in 1744.

powers. Policy can be enshrined into high level documents regarding environmental issues and these policies trickle down to planning and listing practices. Guidance documents can underpin the framework in which planning and designation decisions are made. However, there remains uncertainty about the expertise, resources, autonomy and actual power that heritage agencies have when heritage is threatened by development or in need of a public protector.

Thus, no one in the policy framework is effectively *championing* UCH protection and its in situ enjoyment in the UK. The need for such a champion in the UK's system of governance, whose role is to invest public resources and energy into defending and promoting the interests of the UK's remarkable cultural heritage across the wider marine environment, has become ever-presently clear as the challenges of achieving effective implementation have become increasingly manifest. Indeed, given that responsibility for UCH is increasingly fragmented across a complex panoply of overlapping government departments, it has created the perfect environment for regulators to habitually 'pass the buck' on their responsibilities (pers. comm. Peter Marsden). Remarkably, all of this is despite the fact that some of the world's leading NGOs and private organisations championing the international protection of UCH, such as the *Joint Nautical Archaeology Policy Committee* (JNAPC) and the *Nautical Archaeology Society* (NAS), are based in the UK.

The UK also possesses vague, hortatory planning policies which, although they sometimes refer to a need to consider UCH in any planned marine activity across the 200-nautical mile zone, do not provide any firm rules by which the UCH should be valued or under which a failure to consider its interests can be enforced (e.g. UK Government 2011, s. 2.6.6). Instead, therefore, much of the marine planning legislation in the UK relies upon legally non-binding and recommendatory rules (so-called 'soft law'), such as industry protocols and codes of conduct, to uphold the broader public interest in protecting the historic environment (e.g. Joint Nautical Archaeology Policy Committee 2006; The Crown Estate 2010). While such soft law provides flexibility and better technical interoperability, the lack of legal firmness in the most important rules contained within them also weakens the capacity of any agency or public protector to enforce or implement such protection.

The lack of heritage champion also means that there is no public enforcer, who can campaign to dedicate resources towards the detection, investigation and prosecution of marine heritage crime. It is known that clandestine recovery of submerged cultural sites has increased with the development of diving technology. Some war graves subject to UK ownership and jurisdictional immunity have been increasingly subject to looting which has gone unchallenged. For example, it has been observed that 65% of the sovereign immune British and German Battle of Jutland wrecks have been targeted for their condenser units and propellers and that the rate of metal theft from them has increased substantially in the last 15 years (McCartney 2017, 196–204). Yet, even though HMS *Queen Mary* (1916) was salvaged over a period of time when the Dutch-owned perpetrators were known to the authorities, little action has been taken until recently, after significant public pressure was mounted on the MOD and other responsible agencies.²⁴

²⁴ See *The Pipeline*, 'Exclusive: Named—The Salvage Company Which Looted Jutland War Graves as MOD Fails to Act', 22 May 2016, <https://thepipeline.info/blog/2016/05/22/exclusive-named-the-salvage-company-which-looted-jutland-war-graves-as-mod-fails-to-act/>, accessed 4 June 2019; Booth, R., 'Battle of Jutland war graves 'vandalised' by illegal metal scavengers', 18 September 2016, *The Guardian*, <https://www.theguardian.com/world/2016/sep/18/battle-jutland-war-graves-hms-warrior-metal-scavengers-royal-navy>; accessed 4 June 2019.

(c) A Lack of Archaeological Focus and Proficiency in Decision-making

The regulatory framework for dealing with UCH in the course of marine developments has, in contrast with terrestrial equivalents, not moved the understanding of the marine historic environment forward a great deal since the 1990s. This is because in a marine setting, there is often the option—due to a lack of constraints—to simply avoid any potential heritage asset, despite a higher level of ‘intangible’ impact (where impacts are too ephemeral, subjective or distal to measure, but cumulatively may be significant). No offsetting of intangible impact is required by the regulator and remedial mitigation is rarely required where impacts have been evidenced. In addition, in an attempt to be proportionate and avoid incurring what would be considered disproportionate costs to the developer, a generally far lower level of ‘sampling’ or ‘groundtruthing’ of anomalies and potential UCH is adopted in marine work than would be acceptable in an equivalent terrestrial development project, where between 1 and 5% evaluative (intrusive) sampling is the norm on sites, averaging around 2.5% by area (Wilkins 2012, 59). Referring back to the case of the Goodwin Sands, for example, more groundtruthing would likely have improved understanding about potential archaeological anomalies and the design of mitigation strategies (3H Consulting 2018), as well as help to assuage public anxiety about the potential risks.

As an industry, therefore, marine archaeological consultancy has not significantly improved its understanding of how best to discriminate anomalies and potential UCH during work for offshore developers. Nor has it significantly strengthened and consolidated its understanding of the marine environment and disseminated it to a wider business, research and public audience. Until there are senior, marine-specific, policy-level roles within the relevant government departments and within the heritage agencies, employing persons equipped with the experience and actual technical knowledge of the challenges facing UCH, it is difficult to see the situation improving. Furthermore, policymakers have been limited in their ability to understand and assess impacts on and changes to the marine historic environment in UK waters, meaning that they are forced to rely on third parties with expertise in marine geophysics and UCH assessment and management to support their own understanding. This is probably a cost-effective model to adopt, but the flip-side is the danger that policymaking bodies may accumulate only a limited, partial or siloed understanding of the real issues affecting UCH.

Another recent phenomenon affecting the heritage agencies is a shift away from what many archaeologists would consider ‘core’ protection activities (such as scheduling), to more nebulous performance indicators based around communication and engagement, or concepts such as ‘creating impact’ (see for example Heritage Lottery Fund 2017), which will inevitably gravitate toward social media and online impact as a default. Whilst most heritage professionals would recognise the importance of outreach, engagement and education, it would be difficult to justify the prioritisation of media-led output over tangible heritage protection. Without exception, the heritage agencies include ‘protection’ as one of their principal aims (Historic England 2017: 5; Historic Environment Scotland 2016: 8; Cadw 2014: 10; Northern Ireland Environment Agency 2016, 8). However, there seems to be limited concern about mechanisms for actual protection of UCH (such as scheduling or intervention) than there is for engagement, communication of events and other activities in connection with UCH. The engagement and public awareness that this generates is important and beneficial, but it is not alone sufficient to provide protection. This can be observed in the reluctance by some heritage agencies to

use scheduling below the low water mark, despite there being around 20,000 terrestrial scheduled sites in England (DCMS 2010).

Prioritising 'impact' would be acceptable if there were not pressing anthropogenic and natural threats to UCH, only being reinforced by a salvage law that rewards activities that remove UCH in the most archaeologically incompatible way. Indeed, at present, both low-level deleterious effects caused by amateur salvage and trophy hunters, and salvage operations by well-organised international salvage outfits, appear to be tolerated by the heritage agencies provided that they comply with the UK's historic salvage law. The damage that policies like this have had on the marine historic environment, over the past 40 years or so, has been significant (Strati 1995, 12–19; Darrington 2002, 371).

The Need for a More Proactive, Coherent, Ambitious and Outward-Looking Policy

As a nation so rich in UCH and as a leader in underwater archaeology, the UK should now focus on becoming a global leader in the effective protection, preservation and public enjoyment of in situ and ex situ UCH. This would include undertaking a complete and comprehensive review of the collection of rules protecting UCH, which presently appear to be scattered across different statutes, regulations, codes and guidelines, developed over several decades. Such a wide-ranging review could be led by the government ministers and the Civil Service, including a lengthy public consultation, so as to build expansively upon similar legislation mapping efforts undertaken by academics in the past (e.g. English Heritage 2004; UK UNESCO 2001 Convention Review Group 2014).

This new legislation could be more ambitious, cutting-edge, driven by practical research, and focused on maximising public enjoyment of UCH. It would involve a more predictable and consistent system for managing marine licensing, currently only provided by one small section of the MCAA 2009 (s. 66) or Marine (Scotland) Act (s. 21). As part of this, it would include a detailed set of guidelines and rules, for use by the MMO, as well as other government departments, heritage agencies and devolved equivalents, for carrying out heritage impact assessments or making decisions with regard to both direct and indirect activities surrounding the marine historic environment. New legislation should also finally provide for a more joined-up approach across government, with all government departments more efficiently operating using a shared and centralised UCH strategy, where the DCMS and appointed heritage agencies are responsible for ensuring that the correct rules and procedures are disseminated, interpreted and enforced consistently across government and by the public.

Such leadership could also provide the coveted voice for the heritage itself, providing a platform for more effectively and meaningfully incorporating the plurality of views and values from the wider community. Naturally, it will need to also incorporate scientific and archaeological values into its overall methodology. Such a multivocal and scientifically-undergirded system would also include a clearly set out multiple-value understanding and justification for UCH preservation, where short-term reward-seeking and focus on private commercial gain would be extracted from existing policies and practices. Part of this championing process might also be the provision of clearer and more structured systems of responsibility and accountability, accurately reflecting the custodianship of decision-makers over multiple heritage values for present and future generations. It would also require a tilting of the focus of heritage agencies, away from focusing heavily on impact

and engagement, towards a broader and more ambitious set of scientific, economic, social and cultural objectives involving UCH.

New legislation would also provide a clearer and more inclusive definition of marine heritage, within a wider integrated land-coastal-marine cultural heritage strategy, where all forms of UCH sites and objects would be experienced through a predictable and cyclical process of protection, preservation and enjoyment. It could establish a more outward-looking and globally-oriented strategy, providing further focus on the many important heritage assets found in the UK's contiguous zone (12–24-nautical miles), the EEZ and continental shelf (up to 200-nautical miles), in British Overseas Territories, in other states' territorial waters, in the high seas, and in areas beyond national jurisdiction, such as the polar regions. This should also include a widening of the remit of heritage advisors and the DCMS over heritage found to the outer edge of the UK's EEZ, while expanding their role towards the actual regulation and development of strategy for the UK's worldwide heritage far beyond the narrow territorial sea. Rules could also be more effectively distributed between hard and soft law, to provide optimum enforceability and flexibility, while clearly distinguishing between different management options for ex situ and in situ heritage, as well as direct and indirect forms of activity.

An outward-looking approach would also recognise growing voices across the UK calling for the ratification of the UNESCO Convention. There is little plausible argument left against the ratification of this international treaty which continues to grow its membership and influence among many maritime states. As with many other significant objecting states, the previous fears of the UK government over the treaty's treatment of sovereign immune wrecks (i.e., warships sunk while on service and receiving special protection under international law); or its potential to drive coastal state creeping jurisdiction; and the perception that the instrument requires the fullest protection of every potential wreck in UK territorial waters; have each now been shown to fall short of reality (e.g. UK UNESCO 2001 Convention Review Group 2014; González et al. 2009, 57; Roberts 2018). Furthermore, the Convention's definition of UCH falling within its purview—being objects of an archaeological character having been submerged for 100 years or more—leaves many modern-day wrecks which could maintain a commercial salvage industry (UNESCO 1997, Add. 1 and 5), of course excepting significant sites such as World War II wrecks.

Instead, the treaty would stimulate marine heritage legal reform in the UK by promoting the in situ preservation and non-commercialisation of UCH in territorial waters and in areas beyond, as well as particularly strengthening the international protection of all British wrecks found in maritime zones around the world (Dromgoole 2011). States could feasibly still hold an influential and effective global strategy outside of the UNESCO treaty framework (pers. comm. Mike Williams). For example, the Netherlands have signed numerous strategic Memoranda of Understanding with coastal states representing former colonies throughout the world, operating in the shadow of the Convention (Maarleveld 2006, 183). However, doing this through the UNESCO treaty framework would serve to raise baseline standards, bring stronger commitments into harder legal form, impose stronger expectations and projected limitations upon both flag and coastal states, and provide a suitable platform for establishing cooperative relations between all states and non-state actors. Indeed, this is one of the key reasons why the Netherlands and Germany are now joining the treaty, as well as why other former flag powers having already signed up, such as France, Spain and Portugal (pers. comm. Martijn Manders). However, in October 2017, much to the distress of the marine heritage community, the UK government announced its decision to indefinitely defer its recent promise to review the UK's non-ratification of the Convention (UK Parliament 2017). Given the stark findings of this paper, as well

as the findings of the UK UNESCO Policy Brief and the UNESCO Convention Impact Review—which both effectively defended the Convention in the context of UK objections (UK National Commission for UNESCO 2015; UK UNESCO 2001 Convention Review Group 2014)—this decision is regrettable.

Nevertheless, a more outward-looking and global approach can and should also embrace the important potential and role of many other forms of bilateral and regional agreements, which would significantly strengthen the international protection of British heritage in key regions throughout the world, such across European seas, as well as in the Americas, Africa, Asia, the Pacific, and the polar regions. Such transnational and multilateral frameworks should provide equally effective platforms for collaboration, resource-pooling, standard-raising, and sharing of best practices, while also driving forward wider membership and active participation in global regimes such as the UNESCO Convention framework. Indeed, Article 303(4) of the UN Convention on the Law of the Sea and Article 6 of the UNESCO Convention both place an expectation on states that they will create and implement further regional agreements that may provide for ‘better protection’ than is possible by an international treaty between nearly 200 negotiating interests. Finally, a more transparent, holistic and long-term investment strategy would also properly capitalise on the multiple and long-term social, economic and cultural values available from the UK’s larger marine heritage industry, by providing more public finance to free up the wider potential for heritage tourism, jobs and industry. This all feeds perfectly into the UK’s emerging global soft power strategy, by capitalising on the UK’s extant global reputation and influence as a maritime superpower (pers. comm. Robert Yorke).

The Need for a Sustainable, Precautionary, Inclusive, Transparent and Proportionate Policy

It is not just the underlying policy which needs reform, but the overall attitude and approach towards the preservation and management of UCH. With the widespread adoption of the annexed Rules to the UNESCO Convention as best practice for activities directed at UCH, it appears that many states are aligning themselves with an international movement to recognise the public value and social fulfilment available by enjoying and appropriately experiencing submerged cultural heritage, both in situ and ex situ. The UNESCO Convention itself acknowledges ‘the importance of underwater cultural heritage as an integral part of the cultural heritage of humanity’ and calls upon states to preserve UCH ‘for the benefit of humanity’ (UNESCO 2001, Preamble and Art. 2(3)). It is reasonable to assume, therefore, that UCH forms what has increasingly been referred to as a ‘common concern of humankind’. This principle has been increasingly linked to international treaty regimes—such as relating to cultural heritage, the environment, or human rights—which emphasise the universality, *intra*-generationality and *inter*-generationality of the global public goods in question and the need for meaningful international accountability (Weiss 2015). Indeed, previous commentary has expressed the need to adopt a ‘multiple-use’ perspective of UCH (Nafziger 1999; Varmer 1999; Fletcher-Tomenius and Forrest 2000), which also lends itself further to the suggestion that UCH should be preserved as a globally reusable and sustainable resource for long-term research, education, tourism, community value and enjoyment.

Understandably, in the alternative, all marine policy decisions taken by the UK need to take into account the social and economic interests of its own citizens. There will therefore always be competing interests which will need to be considered, such

as the cost borne to the taxpayer by investing in UCH protection and management, or the opportunity-cost from prohibiting commercial salvage or offshore mining, fishing, dredging or development (Flatman 2007, 144; Evans et al. 2009). One of the most germane trade-offs is between the socioeconomic gains made by increasing renewable energy production by the development of large offshore wind farms and power grids, balanced against the potential proximate cultural and environmental damage caused by such activity (e.g. Flatman 2012). As such, all decisions relating to the protection and long-term management of UCH therefore also need to be proportionate and to recognise the multiple ‘values’ in different options.

Yet, while legislation has introduced a broad duty to consider interests of the historic environment in any offshore activity, it remains unclear how such a commitment is to be carried out or the means by which decision-making can be monitored or scrutinised by the ‘concerned humankind’. As noted above, most of the offshore management of UCH during economic activity is based on advisory and ‘soft law’ protocols and codes of conduct. Furthermore, the public has little reliable information on how national heritage agencies charged with responsibility for deciding on the potential cultural impact carry out their responsibilities. It is certainly discernible that those nations which protect UCH with greater enthusiasm and resources, such as Italy, South Africa, France, Greece and China (see e.g. Dromgoole 2006b), inherently treat and interpret UCH as a valuable resource in which the whole public have an engaged interest and sense of cultural pride and ownership. By contrast, in those states which view UCH as a hobby for niche recreational, academic and commercial interests, such as the UK and United States, the public appear to view UCH in economic terms—whether as a *pathway* or an *obstacle* to economic advancement—and have little sense of communal ownership or cultural enjoyment.

Viewing UCH as a common concern of humankind would require it to be governed in the future with less of an exclusive focus on national economic advancement. This would interpose a number of additional environmental and general principles, such as sustainable development, precautionary management, polluter pays principle, public participation, transparency, and intergenerational and intragenerational equity. However, while such well-meaning principles are too often cited in government strategy documents, policy white papers, and heritage objectives; whenever the choice between prioritising the social interests of future generations *or* the economic interests of the present generation are faced off, short-termism always appears to prevail. It is unfortunately beyond the remit of this study to address all these principles and explore their application in detail, but some examples might suffice.

For example, the fact that policy too often prioritises economic advancement over concerns for the natural and cultural environment demonstrates a misunderstanding of the very purpose and meaning of “sustainable development”. Commonly referred to as ‘development that meets the needs of the present without compromising the ability of future generations to meet their own needs’ (World Commission on Environment and Development 1987), sustainable development has come to be preferably viewed as a requirement that ecological and social (including cultural) concerns should be promoted to each carry as much weight as economic concerns; thus, ensuring strategies are all *equally* distributed across the social, ecological and economic domains (Slaper and Hall 2011; Flint 2013, 27–37). However, too often it is treated in a generalised manner by legislation and practice, with little meaningful observance or normative interpretation. The result is that governments often say they are acting ‘sustainably’ by *focusing* on economic growth, in a manner that demonstrates that they have merely *considered the interests* of the social and ecological vectors.

This same contamination can be found across the other guiding principles for sound long-term environmental protection. A vivid example can be witnessed than in the case of “precautionary management”, which is continuously referred to by UK agencies and is often found at the heart of existing strategic and decision-making guides. For example, the UK’s Marine Policy Statement (UK Government 2011)—which at Section 2.6.6 commits to protecting the UK’s marine historic environment—declares that decision-makers will ‘need to apply precaution with an overall risk-based approach, in accordance with the sustainable development policies of the UK Administrations’ (Section 2.3.1.2). This includes the need to ‘ensure that appropriate weight is attached’ to considerations such as designations, public concerns and conservation interests. Although the precise definition and meaning of “precautionary management” has shifted over the years (Manson 2002; Stewart 2002), it would be difficult to argue that policy and practice in the UK has kept up with the definitions preferred by the concerned humankind. For example, the Marine Policy Statement and the MCAA appear to have understood such precautionary management as merely the undertaking of *proportionate mitigative measures*. For example, the footnote attached to Section 2.3.1.2 in the Marine Policy Statement says of the precautionary approach that when ‘risks from an activity are uncertain preventative measures may be required.’

However, a proper interpretation of precautionary management and the more sustainable approach would be to require that within all policy and planning decisions, the decision-makers should anticipate the most extreme—yet still plausible—levels of prejudice to long-term social and ecological vectors from a proposed activity (Gullett 1998; Kriebel et al. 2001). This also includes, for many, an actual (and not cosmetic) shift in the burden of proof to be upon the developer or licence applicants. In many planning decisions and policy decisions over the years, therefore, the possibility that UCH *might* be affected and the need to provide a sufficient margin of safety to prevent adverse outcomes has been neglected under this heading. For example, during the recent Goodwin Sands case, even though the MMO and heritage agencies assured the public that they were adopting precautionary principles, concerns are still being expressed by many about the proximity of dredging activities to potential UCH objects. Effective precautionary management should therefore shift the burden more strongly on to developers, to reassure the community that effective and powerful protective strategies can be put in place. This might likely include a higher proportion of groundtruthing or more detailed consultations on planned mitigation or avoidance strategies. It would also increase the incentive for developers to more thoroughly consider alternative sites or methods, where social and ecological concerns can be addressed more effectively (Tickner and Geiser 2004). Adopting such a precautionary approach would also pay adherence to other guiding principles for managing common concerns, such as intergenerational equity and sustainable development.

Another guiding principle, for example, could be improved *transparency* and *public participation* in any decision-making which impacts upon UCH. When heritage agencies are requested to provide value assessments to the MMO, DCMS or MOD, or their devolved equivalents, there should be much greater thought and attention into how that advice is crafted. First, heritage agencies need to be given enough financial resource to carry out these assessments effectively on behalf of the regional and international community who may possess a greater interest in the site in question. Second, all assessment decisions should be fully on the public record (Tenney et al. 2006).

Finally, the method by which heritage value assessments have been made by government departments and their advisors needs to be more widely disseminated and understood. This would improve the ability of the wider regional community to scrutinise value assessments, as well as to become involved, as much as practicable, with the decision-making

processes themselves. Most of all, it would prevent the process from being unfairly weighted in favour of developers or those who view UCH recovery as a private enterprise, by ensuring the voice of the public and wider community is centre-stage. All of this was integral within the *Victory* (1744) case, where detailed and public scrutiny of MHF's proposed archaeological project plan was vital in saving the wreck from unnecessary salvage. Of course, there is a reasonable counter-argument that such processes need to avoid unnecessary bureaucracy and to remain cost-effective and streamlined. However, it is possible for an inclusive system to also be balanced and holistic in design, ensuring that public input and scrutiny is viewed as a positive and necessary element to achieving efficient and wide-spread implementation.

Conclusion: A Case for Modernisation and Reform

This paper has sought to provide evidence and establish the case that the UK government needs to dedicate more effort, regulation, and resources towards protecting the UK's submerged cultural heritage, before the heritage that remains is further damaged or lost. This includes better resourcing for the heritage and other agencies charged with protecting UCH, as well as more time and energy being spent on how to more effectively coordinate agencies and ensure security in the marine environment. It also includes a comprehensive modernisation of legislation, to repeal the harmful elements of the Merchant Shipping Act and, in particular, the archaic rules for rewarding the removal of historic wreck. This would send a clear message to the public that UCH should start being preserved and enjoyed in situ as the first and best option in all cases, except where circumstances demand a publicly supervised and socially-beneficial intervention or removal of heritage. This would also anticipate a greater investment in public engagement with the in situ value and means for enjoyment of UCH, beyond viewing it as an economic commodity, including a process to properly calculate its many recreational, archaeological, historical, cultural, social, and existence values.

Further, the UK must adopt a more holistic policy, which is sustainable, precautionary, transparent and proportionate. Many changes would also be welcome in terms of underwater heritage management practice. For example, a culture shift towards a more protective outlook towards its impressive maritime cultural record and the value of its UCH, might have prevented the UK government from engaging treasure hunters in the *Victory* (1744), *Sussex* and *Gairsoppa* cases. Furthermore, a more precautionary, sustainable and cautious approach might have created a greater incentive to crafter clearer mitigation strategies or consider alternative dredging zones within the Environmental Statement in the Goodwin Sands dredging licence application. A higher percentage of groundtruthing of anomalies might also have put the public's mind at ease about the proposed aggregates dredging.

It also must be recognised that the decision taken in the national referendum in June 2016, to unravel the UK from the European Union (so-called "Brexit"), has led to a sense of considerable political instability and economic foreboding. One of the unfortunate results is that the tightening constraint on public administration and on the national budget appears to be leaving a number of vulnerable policy areas, such as natural and cultural heritage protection—which were already at critically under-funded levels—under an even graver threat. Indeed, the recent announcement that the urgently needed review of the UK's non-ratification of the UNESCO Convention will be shelved, bears the dishearteningly distinctive hallmarks of this policy distraction. The decision to hold off the review must be

sincerely regretted in the present climate, given that the Convention could effectively provide the UK with complementary heritage protection through the strengthened preservation of UCH assets around the world, as well as provide the UK with a valuable role at the global UCH policy level (UK UNESCO 2001 Convention Review Group 2014).

If any of the government bodies or agencies responsible for heritage protection in the UK are serious about preventing continued damage to the UK's diminishing UCH, they should be vociferous and implacable on ensuring the complete removal of 'historic' wreck and other UCH from the salvage regime, as well as in the timely ratification of the UNESCO Convention. They should also commence discussion on a detailed and comprehensive overhaul of legislation, in order to make it more coherent, proactive, ambitious, globally-oriented, precautionary, transparent, and enforceable. All of this would resolve the core weakness right at the heart of the UK's policy, which appears to propagate the wisdom that UCH is merely an obstacle or pathway to economic advancement, rather than a fundamentally important public resource for perpetual research, remembrance, identity, communal engagement and social fulfilment.

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Compliance with Ethical Standards

Ethical Standards Both authors are members of the Joint Nautical Archaeology Policy Committee. Josh Martin is also a member of the Nautical Archaeology Society and Toby Gane of the Chartered Institute for Archaeologists. Both authors also work for respective employers, but the opinions expressed herein are solely the views of the authors alone and are not at all affiliated with their employing organisations or any of their professional colleagues.

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