The Social and Economic Benefits of Marine and Maritime Cultural Heritage

Towards greater accessibility and effective management

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The UK’s marine and maritime heritage is unique. Geographical position and an outward-looking history mean that we have a very dense cultural heritage associated with our coasts and seas.

This heritage is extraordinarily long – perhaps even a million years. The earliest site of human occupation in North West Europe lies on a beach in Norfolk, whilst 200,000 year-old artefacts are being investigated off the coast of Great Yarmouth. Some of our most enigmatic prehistoric sites are to be found on today’s coastline, hinting at what still is to be found offshore.

Almost every period of history is represented by the remains of boats and ships around the UK. Bronze age seafarers, Romans and Vikings have all left traces of their craft around our shores. Historic ships – whether they are the striking remains of the Mary Rose, the preserved Cutty Sark or replicas like the Matthew – provide a tangible link to art and iconography in collections both national and local. Museums all around the country exhibit maritime imports of every age, both fabulous and every-day, as well as the rich material culture of shipbuilding and seafaring. The features that give character to many of our ports and seaside towns are based on their centuries-old relationship with the sea, whether you look inland towards waterfront houses, pubs and warehouses; or out towards the shipping channels and sea-lanes.

Maritime endeavour has brought the UK to the world and the world to the UK. Ships built in the UK covered the globe, connecting UK ports to places large and small on every continent. Crews and passengers moved with these ships, adding to the uncountable links between people and the UK’s maritime heritage. The UK’s maritime connections also encompass many conflicts, both within sight of our shores and further afield. Naval warfare connects museums to dockyards and fortresses, and to many of the historic wrecks that have been protected around the UK. There are probably more wrecks sunk in military action in the First and Second World War around the UK than in any other country’s waters. Their significance lies not just in hardware but in the links they embody between families and communities, between past and present.
The UK’s relationship with the sea over many thousands of years has yielded a rich, intimate and challenging legacy. It is a fantastic heritage. But do we really know how much we benefit from it?

This report refers to ‘marine and maritime cultural heritage’ to cover both cultural heritage that is in the sea (including non-maritime Underwater Cultural Heritage (UCH) such as submerged prehistoric archaeology and historic air crash sites) and cultural heritage that is to do with the sea (but may not be in or close to the sea itself). The intention is to encompass all cultural heritage that people might regard as related to the sea.
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Executive summary
The UK has a diverse and important marine and maritime cultural heritage that needs to be conserved for the future as a facet of the historic environment. This heritage generates understanding of the past and public appreciation in the present. The rationale for managing marine and maritime cultural heritage is valid in itself and has public support, irrespective of whether it is framed in monetary terms. However, this report shows that there are good reasons – drawn largely from parallels in other aspects of culture, cultural heritage and the marine environment – to conclude that marine and maritime cultural heritage also gives rise to a series of social and economic benefits beyond its own immediate value. These social and economic benefits are already occurring but they are obscured or unrecognised; and they have potential to be enhanced.

This report makes the case for much greater attention to be directed at the social and economic benefits of marine and maritime cultural heritage, understood in its broadest sense, offshore and on land. The report also stresses the range of people who can engage in marine and maritime cultural heritage as participants, as visitors, or as inhabitants of environments shaped by that heritage.

The report explores literature that is relevant to marine and maritime cultural heritage but often originates in other sectors. The application of ecosystems services and of wellbeing approaches to marine and maritime cultural heritage are outlined. The report also sets out several strands of activity through which the social and economic benefits of marine and maritime cultural heritage can be better understood and promoted. Each strand will add to the effective management of this aspect of the past and all its potential benefits, driving much greater accessibility to marine and maritime cultural heritage across the whole of society.
The 5,000 year old village at Skara Brae is one of a series of Neolithic monuments that make up a World Heritage Site. Then, as now, connections with the sea would have been ever-present in Orkney. The remarkable preservation of artefacts at Skara Brae shows how important marine resources were to daily life. Image © AJ Firth / Fjordr.
The report draws the following conclusions:

- Marine and maritime cultural heritage should receive much greater attention as a facet of culture and heritage generally, and as a facet of the marine environment. Its presence is pervasive even far from the sea and its importance to people economically and socially warrants specific consideration. Its absence from debates and from policy should be remedied. Marine and maritime cultural heritage is not a minority concern; participation and economic activity can already be measured in millions.

- The value of marine and maritime cultural heritage in social and economic terms should be regarded as an accompaniment to its value as a component of the historic environment. Conservation of marine and maritime cultural heritage is warranted for its own sake, but it makes sense also to pursue the social and economic benefits that it accords.

- It is essential that the breadth and diversity of marine and maritime cultural heritage is recognised, and that this becomes a driver for a joined-up approach to identifying and increasing social and economic benefits. The ‘offer’ of marine and maritime cultural heritage will be much greater if traditional boundaries between disciplines and environments are overcome.

- Further research, including quantification, should be carried out on the social and economic benefits of marine and maritime heritage, equivalent to the research and quantification that is being carried out for culture and heritage on land and for the marine environment. Marine and maritime heritage should be identifiable in periodic surveys of, for example, visitor numbers, participation, and spending.

Although framed with respect to the UK alone, the results of this review and the directions it suggests can be expected to resonate in many other places around the world where the marine and maritime past forms a vibrant part of the cultural heritage.
Introduction
Sustainable Development is recognised both internationally and in UK Government policy\(^1\) as having three pillars: environment, economy and society. Protection of marine and maritime cultural heritage, and cultural heritage generally, is usually approached as an aspect of the environment, as reflected in the use of the term ‘the historic environment’ in much UK policy and practice. Marine and maritime cultural heritage is commonly characterised in environmental terms, as a fragile, finite non-renewable resource that should be safeguarded for future generations.

Regarding marine and maritime cultural heritage as a facet of the environment is essential not only to further conservation, understanding and public engagement with respect to the historic environment in its own right, but also to benefit the natural environment. As reflected in the European Landscape Convention 2000, many landscapes are a result of the action and interaction of both natural and human factors. Recognising the role of people in the environment across the millennia is central to understanding our own epoch as the ‘anthropocene’, and to our capacity to ameliorate human impacts.

However, a focus on marine and maritime cultural heritage principally as a facet of the environment has been accompanied by neglect in terms of the other two pillars of sustainability: economy and society. This neglect is unfortunate because configurations of ‘the environment’ in policy and law do not always fully encompass the historic environment, as has been the case with the highly important Marine Strategy Framework Directive.\(^2\) Perhaps more importantly, however, the benefits of marine and maritime cultural heritage in economic and social terms are largely unrecognised.

The neglect of marine and maritime cultural heritage in social and economic terms is part of a wider weakness to recognise the social and economic benefits of cultural heritage generally.

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\(^2\) Directive 2008/56/EC.
However, far more attention is now being directed to the social and economic benefits of heritage both in the UK and internationally, driven at least in part by changing attitudes in governments across the world in response to the financial crisis in 2008. Hence, it is increasingly recognised that cultural heritage has social and economic value as well as being a component of the environment. The environmental perspective has not fallen away, but it is being joined by economic and social perspectives such that the contribution that cultural heritage makes to all three pillars of sustainable development is being made apparent.

In parallel, the refocussing of government policies coupled with the Millennium Ecosystem Assessment have prompted an increased focus on the social and economic benefits of the marine environment (Alcamo, Bennett, and Millennium Ecosystem Assessment (Program) 2003). Consequently, the literature on social and economic benefits in respect of the marine environment – as well as cultural heritage – has grown in recent years.

As a subset of both cultural heritage and the marine environment, marine and maritime cultural heritage can be seen to create social and economic as well as environmental benefits, and its contribution to all three pillars of sustainability can be promoted and enhanced. This may seem obvious, but it is not self-evident in the growing literature on sustainable development and related concerns. The literature on the social and economic benefits of cultural heritage generally focusses overwhelmingly on cultural heritage on land and, in parallel, on arts and culture; little reference is made to marine or maritime topics. Equally, the increasing literature on the social and economic importance of the marine environment makes little direct reference to cultural heritage, even though it is implicit in much of the discussion of recreation, tourism and the distinctiveness of coastal places.

Although discussion about social and economic benefits is currently widespread in the (land-based) cultural heritage sphere and in the marine environment sphere, the discussions are distinct and rarely coincide. It is easy to assert that marine and maritime cultural heritage gives rise to social and economic benefits, but the supporting evidence is largely diffuse or
tangential. There seem to have been very few attempts to pin down the social and economic value of marine and maritime cultural heritage itself, either ‘in principle’ or quantitatively. Rare instances include Scotland’s Marine Atlas (Scottish Government 2011) and its supporting study (ABP Marine Environmental Research Ltd 2010); the Nautical Archaeology Society’s valuation of local economic benefit of a protected wreck (Beattie-Edwards 2013); and Claesson’s introduction to the concepts and terminology of valuation methods and their potential application to maritime cultural heritage (Claesson 2011).

These few examples do at least indicate that marine and maritime cultural heritage already generates actual economic and social benefits. These social and economic benefits are real rather than estimations of value, and probably more extensive than people realise because they are so rarely quantified. Once identified, the social and economic benefits of marine and maritime cultural heritage are also capable of being augmented. There is scope, therefore, to consider how enhancement can enable marine and maritime cultural heritage to make a transparent and increasing contribution to sustainable growth.

The marine and maritime cultural heritage community does not have at its disposal either a well-developed account of the social and economic benefits of marine and maritime cultural heritage, or quantitative or qualitative data to support its case. Although references are certainly being made in policy to social and economic benefits of cultural heritage and the marine environment both domestically and in Europe (see Appendix), the marine and maritime cultural heritage community is currently unable to present an evidence-based rationale to support policy-makers or heritage practitioners.

The apparent absence of quantified benefits attributable to marine and maritime cultural heritage could preclude its consideration in the current wave of discussion. Such disregard is obviously undesirable from the point of view of safeguarding marine and maritime cultural heritage; but more importantly, it will result in opportunities being missed through which marine and maritime cultural heritage could make a wider contribution to economic growth and societal wellbeing. Opportunities to improve
A Palaeolithic handaxe recovered from archaeological investigations during marine aggregate dredging by Hanson Aggregates Marine. Despite its pristine appearance, this handaxe was made over 200,000 years ago by our Neanderthal predecessors, at a time of low sea when the River Yare in East Anglia extended far into today’s North Sea. Image © Wessex Archaeology.

Malvern Archaeological Diving Unit surveying a wreck that is thought to be the schooner Rover, lost in a gale in December 1886 on Marros Sands in Carmarthenshire whilst bound for Wexford in Ireland. The wreck is surrounded by the dark peat of a much earlier landscape, which formed over 5,000 years ago when sea level was lower. Flint tools from this time – the Mesolithic – have been found nearby. Image © Malvern Archaeological Diving Unit.
the effectiveness of heritage management and to increase accessibility could be lost.

The aim of this report is, therefore, to provide a firm basis for promoting the social and economic benefits of marine and maritime cultural heritage in the UK and internationally. The report presents a concise summary of the social and economic benefits of marine and maritime cultural heritage. It is based on a review of literature on social and economic benefits arising in four areas: arts and culture; land-based cultural heritage; the marine environment; and marine and maritime cultural heritage, where available. Possible sources of data relating to the social and economic benefits of marine and maritime cultural heritage are identified, and the scope to enhance social and economic benefits arising from marine and maritime cultural heritage is reviewed.

The focus of this report on valuing marine and maritime cultural heritage in relatively new terms does not mean that marine and maritime cultural heritage currently lacks value. Marine and maritime cultural heritage has value in itself that arises from its role in understanding the human past, from its material presence both now and in the future, and from its capacity to evoke a range of responses from the public. As noted above, marine and maritime cultural heritage is also a facet of the environment: a finite, fragile and non-renewable resource that should be safeguarded for future generations. Marine and maritime cultural heritage is recognised as being beneficial in itself in law and policy both in the UK and internationally, as well as by the public. However, the value of marine and maritime cultural heritage in itself is not diminished by also considering its social and economic benefits. The evaluation of economic and social benefits can guide decision-making within heritage management and across government, business and society. In particular, quantification can help to test assumptions underpinning the management of marine and maritime cultural heritage, and to identify new opportunities for conservation, understanding and greater public accessibility.
Who can benefit?
A key finding of this review has been the need to dispense with a narrow view of who benefits from marine and maritime cultural heritage, centred on underwater cultural heritage and those who access it by diving. Clearly, the introduction and expansion of diving – both recreational and professional – has had a revolutionary effect on marine and maritime cultural heritage over the last half-century or so. The physical accessibility of the seas and oceans has opened minds and often entranced the public with new discoveries and perspectives. But the importance of physical accessibility might imply that the benefits of marine and maritime cultural heritage arise only for those for whom physical access is possible. This has never been the case. Public interest in the marine and maritime past predates the introduction of scuba diving and is more broadly-based, as evidenced by maritime museums with roots in earlier centuries that attract large numbers of visitors.

Notwithstanding, a further revolution is occurring that is significantly extending the reach of social and economic benefits beyond the diving public. The technological capacity to gather information from the seafloor, to access and investigate maritime collections and assemblages held on land, and for the public to examine the outcomes through myriad devices all over the world, necessitates a fundamental change in how we think about marine and maritime cultural heritage and its impact. Physical access is no less important – whether by diving, visiting a museum or touring a historic port – but what is physically accessible is now much richer in content by virtue of all the related information that is becoming accessible through technology.

The social and economic benefits that arise from the marine and maritime historic environment can be addressed according to the way in which the historic environment is experienced. The structure suggested here is simply an aid to assessment: the categories are not exclusive or bounded abruptly and in many cases represent a continuum, not least because people’s experiences can assimilate multiple, diverse inputs that have occurred over considerable time.

A distinction (Box 1) can be drawn between people’s direct and indirect experience of marine and maritime cultural heritage, where direct indicates physical contact or proximity to the cultural
heritage itself and indirect implies experiencing cultural heritage at a distance.

Another distinction can be drawn between cultural heritage that is in its primary location ("in situ"), little-moved from where it was constructed, placed or deposited when it was in use in the past; and cultural heritage in a secondary location, where its current location does not reflect its principal use in the past. Cultural
heritage can take many, often complex routes from primary to secondary locations, encompassing combinations of processes that may be partly natural or partly human. Although these routes may be fascinating, they are not really of concern here.

A distinction is worth noting between human processes that are indifferent to the status of material as cultural heritage, and human processes that are mindful of this status, that is to say where cultural heritage has been curated. For example an old cannon may be recovered from the seabed in a trawl, which is a human but unintentional process; whereas bringing the cannon and putting it on the quayside so it can be seen is effectively curation. The cannon has been ‘cared for’ because of its character as heritage, irrespective of the standard of care that has been applied. Clearly, cultural heritage in primary locations may also have been curated, that is to say cared for in situ on account of its character as heritage. Whether in a primary or secondary location, the fact that cultural heritage has been curated at some point does not mean that it will continue to be curated: the old cannon may corrode and crack; an historic maritime building that was once valued may become ‘at risk’.

People can directly experience marine and maritime cultural heritage in both primary and secondary locations, curated and non-curated, in a variety of environments and circumstances: including material that is wholly submerged; material in intertidal areas; material onshore at the coast; and material further inland. Marine and maritime cultural heritage also encompasses vessels in preservation and replicas that are afloat or aground, or in a special dock, for example.

So far the discussion of direct experience has focussed on tangible heritage – physical things like artefacts, sites, buildings and ships. People can also have direct experience of intangible marine and maritime cultural heritage: traditional activities; skills; stories; language; songs and so on. Again, this direct experience can take place at or close to the sea, or some distance from it.

People’s experience of marine and maritime cultural heritage can also be divided analytically between unmediated and mediated experience. If it is unmediated, then awareness of marine and
maritime cultural heritage arises from or accompanies people’s own situation within the environment; if it is mediated then they are in an environment provided or shaped by others. Examples of unmediated experience might include sea anglers over a wreck, walkers on a coastal path overlooking a wreck site, or people at work within a historic port. Examples of mediated experience could include people in a museum, a visitor attraction or a school; people viewing, listening to or reading broadcast media such as television, video, radio or newspapers; content on websites and factual books; and creative content in artworks, theatre, fiction and poetry. These different kinds of media are increasingly blurred, and indeed the boundary between mediated and unmediated is blurred where people’s experience of their environment is shaped by what they have seen or read elsewhere (and vice versa), and by prompts in the environment such as signage, explanatory panels and information on mobile devices. The key point here is that experience of marine and maritime cultural heritage – and hence its social and economic benefits – may be widespread and pervasive.

Direct experience of marine and maritime cultural heritage requires physical access. Physical access raises all sorts of issues even to cultural heritage far inland or onshore at the coast; but clearly there are additional constraints when cultural heritage is in a hazardous intertidal area or fully submerged. Whatever the specific difficulties of access to marine and maritime cultural heritage, the social and economic benefits that arise from direct experience are not restricted only to those who can achieve physical access through diving.

The fact that experience is indirect does not mean that it need be any less intense than direct experience: the impact of a television programme on individual viewers could be as great as if they have had direct access to the site themselves. It should not be assumed that indirect experience is inferior to – or less beneficial in economic or social terms than – direct experience.

One reason that may provide an advantage to indirect, especially mediated experience is the facility to add interpretation. All experience of cultural heritage involves a degree of interpretation, as simply regarding something as being ‘heritage’ indicates that
it has been elevated from the everyday by the addition of context and meaning. Nonetheless, direct experience of uncurated cultural heritage relies largely upon what people themselves bring to it: the experience of diving on a wreck can be striking and direct in its authenticity; but the experience can also be confusing and ambivalent if there is little sense to be made of the remains. For both direct and indirect experiences, the degree to which interpretation is provided and the manner in which it is provided are likely to have a considerable effect on economic and social outcomes.

Having considered these characteristics, it is worth noting again their permeability, the capacity to mix different elements, and even to substitute them entirely in addressing potential economic and social benefits. Specifically, indirect experience of marine and maritime cultural heritage can be an important end in itself for very large numbers of people for whom direct access may be impractical. The revolution in digital access also means that audiences for cultural heritage that is itself localised can be global in extent. These factors are important not only in considering the current economic and social benefits of marine and maritime cultural heritage, but also their potential for enhancement.

Before proceeding, it is also worth recalling that economic and social benefits accompany other benefits that are being sought through the management of cultural heritage, including understanding, conservation and public accessibility. Increased social and economic benefits will not necessarily outweigh these other benefits. Preservation in situ will be warranted for reasons of conservation and overall sustainability even if removal of artefacts to a museum might increase the number of people who could have direct access; keeping an anchor on a waterfront may be better for maintaining public accessibility than placing it in a historic property where it might contribute to income.

Finally, differences can be identified in the scope of people’s discursive engagement with the cultural heritage they experience – in other words the degree to which they are aware of or sensitised to cultural heritage. Three different nodes of engagement are referred to here: participants; visitors; and inhabitants.
A diver on Admiralty steam drifter John Mitchell lost off Christchurch, Dorset in November 1917 and recorded as part of the Maritime Archaeology Trust’s HLF Forgotten Wrecks of the First World War project. Image © Maritime Archaeology Trust.

• Participants are highly and persistently engaged with the historic environment, including people who are employed in the cultural heritage sector, volunteers, individual ‘enthusiasts’, and members of cultural heritage-themed associations and societies.
• Visitors may have a deep but occasional interest in cultural heritage, and are engaged for the duration of their visit – which may be a physical visit to a monument or museum, or a virtual visit whilst viewing a television programme, reading a magazine article or browsing a web site.
• Inhabitants may not actively seek out engagement with cultural heritage but can experience it nonetheless through living or working in a historic environment: cultural heritage may be experienced diffusely through ‘sense of place’ in the streetscape or at a wedding venue.

These different nodes could be regarded as three audiences, although ‘audience’ does not entirely capture the active, two-way relationship between people and their historic environment. The distinctions are in any case permeable and analytic; no ranking is implied, nor any notion that people should be encouraged to move ‘up’ from one level to another. They are, nonetheless, useful categories for thinking about how economic and social benefits arise, and how they can be quantified.

In sum, the economic and social benefits of marine and maritime heritage extend much more widely than the consequences of divers visiting wrecks. They encompass people on land who may be barely aware that the character of a place in which they have chosen to live, work or shop is attributable to marine or maritime cultural heritage. Conceived of in these terms, the economic and social benefits arising from the continued presence of the past relating to the sea may be pervasive even if they are not widely acknowledged; not only in a place like Britain where nowhere is further than 45 miles from the sea, but in many countries across Europe and the Mediterranean. It is therefore surprising that so little work appears to have been directed to measuring what these benefits might be.
How benefits are identified
The discussion of social and economic benefits in the cultural heritage and marine environmental spheres exhibits a range of different perspectives and intentions. These different views are, of course, inter-related and may overlap. Two broad approaches can be discerned: first, perspectives that are generally concerned with valuing the assets themselves; and second, perspectives concerned with values / benefits arising from human activity associated with assets. In the first, predominantly financial values are generated for the assets to serve as proxies for those assets in policy-making and decision-taking; whereas the second is concerned with actual values that include monetary values but also other measures.

The relationship between proxy and actual value may be very close. For example, one economic valuation method is known as ‘willingness to pay’ by ‘revealed preference’, where the actual cost that people expend in accessing a heritage asset is used as a proxy for the value that they place on the heritage asset itself. Revealed preference is an indirect measure of the value of the heritage asset itself; but it is a direct measure of the value of the human activity associated with the asset. That is to say, the cost of travel is a proxy for the value of the asset, but the cost of travel is also a real contribution to the income of petrol stations, ticket offices and so on that can be attributed to cultural heritage.

The two broad approaches can be divided into four perspectives:

Valuing Assets

- Calculating (monetary) values as a proxy so that assets are promoted / not disregarded by policy-makers;
- Calculating (monetary) values as a proxy so that options can be compared in decision-taking;

Valuing Asset-related Activity

- Calculating alternative benefits that arise from an asset
- Calculating benefits that accompany an asset
Proxy values to promote

The first perspective is broadly that of placing a value on something that does not have a conventional market value so that it can feature in policy-making dominated by economics. This approach is expressed in the framework developed for the Millennium Ecosystem Assessment: ‘Ecosystems form part of the total wealth of nations … but many ecosystem services are not traded, and hence their values are not captured in the conventional system of national accounts’ (Alcamo, Bennett, and Millennium Ecosystem Assessment (Program) 2003, 130–131).

In both the marine and cultural heritage spheres, the literature can generally be seen as an attempt to quantify value in a way that enables assets to be ranked against value arising in other sectors, using economic valuation methods. The purpose of rendering heritage in quantitative, especially financial terms, is to achieve recognition for the sector in senior levels of government, business and society: the assumption being that unless the value of heritage is expressed in financial terms it will be disregarded.

Proxy values to compare

The second perspective is apparent in UK Government decision-making, as set out in The Green Book: appraisal and evaluation in central government (HM Treasury 2011), which seeks to use monetary value as a common index when appraising public policies, programmes and projects. Values are calculated to ensure that non-market factors can be included in cost-benefit analysis. Quantification can allow comparisons within the sector, informing prioritisation for example, or for modelling and monitoring different scenarios, including ‘before’ and ‘after’ assessments. Again, the heritage assets themselves are regarded as having value as ‘goods’, rather than value being considered to reside in human activity associated with those assets.
The East Pier Lighthouse at Whitby, North Yorkshire. When this light was built in 1854, Whitby was an important port for trade, shipowning and shipbuilding. Its character today is shaped by past and current maritime activity. Image © AJ Firth / Fjordr.
Alternative benefits

The third perspective is sometimes described as an ‘instrumental’ approach, where the benefit of cultural heritage in itself, for example, is set aside whilst development or investment is justified on the basis of the other tangible benefits to which it gives rise. In this case, the intention is to demonstrate the contribution that heritage makes to different sectors of economic and social life irrespective of any value it might have ‘for its own sake’.

The notion that the benefits of heritage were being debated only in terms other than heritage was addressed in a report to the HLF in 2004 (Holden and Hewison 2004), drawing a parallel with an essay by the then-Secretary of State Tessa Jowell. Jowell had written ‘too often politicians have been forced to debate culture in terms only of its instrumental benefits to other agendas – education, the reduction of crime, improvements in wellbeing – explaining, or in some instances almost apologising for, our investment in culture only in terms of something else … There is another story to tell on culture …’. The authors of the 2004 report suggest that it would be possible to substitute the word ‘heritage’, for ‘culture’ without changing the argument: heritage should be debated in terms of its own benefits, not its contribution to alternatives.

Accompanying benefits

The fourth perspective is also concerned with tangible benefits arising from the environment or heritage, for example, where these might be seen as incidental (though very important) consequences, such as income generated by visitors. In considering the benefits that accompany cultural heritage, marine and maritime cultural heritage is regarded as giving rise to value in its own right rather than as an instrument for achieving ‘other’ social and economic benefits. This elaboration is worth making because the same measures might be used as in a more instrumental approach, but in this case the benefits need not be seen as alternatives but as accompaniments.
These distinctions in how value is identified can be illustrated by the hypothetical example of a historic wreck that has been calculated to generate £50,000 each year from tourism. In terms of a proxy value to promote marine and maritime cultural heritage, the historic wreck would be considered to be worth £50,000 to society and therefore should be valued as an asset in policy-making across Government. In terms of a proxy value for comparison, investing public funds to facilitate tourism on a historic wreck could yield £50,000 compared to equal investment on a coastal footpath that could yield £40,000 (for example). In neither case need the £50,000 be real – it serves only as a common index. In terms of an alternative benefit, the historic wreck should be managed not for its significance or sensitivity, but because it creates an actual financial return (to local business etc.) of £50,000. In terms of an accompanying benefit, the historic wreck should be managed for its archaeological value, but it also has an economic value of £50,000 that should be recognised and potentially enhanced. These are not different values that can be summed; they simply illustrate different approaches to valuation.
Discussion
This report emerged from a review of a rapidly expanding literature about social and economic benefits. To help organise this review, a series of distinctions was made to enable the respective focus of each paper to be considered relative to others. By mapping diverse papers to each other in this way, literature becomes relevant and applicable even if it is not directly concerned with the social and economic benefits of marine and maritime cultural heritage (Box 2). Once this mapping has been carried out, it can be seen that there is already an extensive literature – conceptual, methodological and quantitative – upon which to draw.

Box 2: Categorisation of relevant literature to establish relevance to marine and maritime cultural heritage
The following discussion is informed by the literature review based on these distinctions but does not address each category. Rather, the discussion focuses on a series of key points about the social and economic benefits of marine and maritime cultural heritage, prompting suggestions about practical steps towards more effective management and greater accessibility.

Participants

At an individual level, the greatest immediate benefits arising from marine and maritime cultural heritage might be expected to accrue to people who are active participants, as employees or volunteers for example. There appear to be no figures for the number of people employed in marine and maritime heritage in the UK, either at a point-in-time or as a time series that would indicate growth or contraction. Having been closely involved in the rapid expansion of marine archaeology in the UK from the mid-1990s, it appears to the author that there are more people in such posts in the UK than in most other countries; but this can only be an assertion for the time being. Broadening the point to consider all those employed in marine and maritime cultural heritage as a sector, including major museums and attractions, could add up to a considerable figure. Aside from the contribution of personal income to GDP, marine and maritime cultural heritage employees as a sector might prove to have a critical mass relative to such sectors abroad; perhaps still small in national terms but internationally significant as a source of expertise and export services.

Quantifying employment and its benefits in cultural and heritage sectors is certainly possible. Employment figures are included amongst the indices used in Heritage Counts (English Heritage 2014) each year, derived from a number of sources in which the marine or maritime component is not distinguished. Oxford Economics suggested that there were 134,000 jobs arising directly from heritage-based tourism in the UK (El Beyrouty and Tessler 2013). Marine and maritime cultural heritage contributes to such figures, but by how much?
Participation can also be gauged from membership of societies and associations specialising in marine and maritime cultural heritage, nationally and locally. Specific interest in marine and maritime cultural heritage might also be gauged amongst membership of organisations with a more general focus, such as the National Trust. A further form of participation that it would be helpful to gauge is academic engagement in marine and maritime cultural heritage across disciplines such as history and archaeology, encompassing teaching and research. Again, this is an area where numbers may be small in national terms relative to other subjects, but significant in a globalised economy.

There is strong interest in the quantity and consequences of volunteering in the UK. Numbers of volunteers are included in the statistical releases of Taking Part (Department for Culture Media and Sport 2015), and the HLF has conducted research on the social impact of volunteering both on individuals and their communities (Rosemberg et al. 2011). Volunteering is also highly valued and closely regarded by museums, including major maritime museums (SS Great Britain Trust 2014; Royal Museums Greenwich 2014). Volunteers play a central role in monitoring and investigating designated wreck sites. Establishing the overall role and benefits of volunteering in marine and maritime cultural heritage in the UK would make a significant contribution to understanding – and expanding – participation.

Visitors

Marine and maritime cultural heritage attracts millions of people. Just amongst the members of the Association of Leading Visitor Attractions, visitor figures in 2014 for marine/maritime attractions are as follows:\footnote{3}{www.english-heritage.org.uk/support-us/donate/volunteering/volunteering-policy/licensees-affiliated-volunteers} \footnote{4}{www.alva.org.uk/details.cfm?p=423}
<table>
<thead>
<tr>
<th>Museum/Museum</th>
<th>Visits</th>
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<tbody>
<tr>
<td>National Maritime Museum</td>
<td>1,516,258</td>
</tr>
<tr>
<td>Portsmouth Historic Dockyard</td>
<td>741,142</td>
</tr>
<tr>
<td>Titanic Belfast</td>
<td>644,792</td>
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<tr>
<td>Merseyside Maritime Museum</td>
<td>631,710</td>
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<tr>
<td>Mary Rose Museum</td>
<td>398,228</td>
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<tr>
<td>HMS Victory</td>
<td>391,840</td>
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<tr>
<td>HMS Belfast</td>
<td>346,331</td>
</tr>
<tr>
<td>Cutty Sark</td>
<td>265,202</td>
</tr>
<tr>
<td>The Royal Submarine Museum</td>
<td>107,914</td>
</tr>
</tbody>
</table>

To take another major maritime attraction, the SS Great Britain had 173,520 visitors in 2013; its income from day membership and trading was £3.7m (SS Great Britain Trust 2014).

One key example of quantitative data relating directly to underwater cultural heritage is the Nautical Archaeology Society study of local economic benefits (Beattie-Edwards 2013). It focussed on 1700 visits to the dive trail on the Coronation (offshore) wreck in 2011 and 2012, concluding that the dive trail was worth over £42k to the local economy in 2012, or £60 per visit. Diving on dive trails on designated wreck sites is, however, a tiny fraction of the amount of diving conducted on wrecks in the UK, where the wrecks themselves are preponderantly historic in character (i.e. dating to the Second World War or earlier).

An assessment of the economic value of Marine Protected Areas (MPAs) (Kenter et al. 2013) estimated a UK diving population of 150,000 to 200,000 making an average of 17 visits to nominal MPAs. The study focussed on the value of
ecosystems, but included wrecks by virtue of their role as seabed features that might be valued by divers and sea anglers. Wrecks were identified as one of the most valued elements of diving, marked by a high ‘willingness-to-pay’. However, given the study’s overall focus on ecosystem services, the heritage component of the importance of wrecks to divers was not explored. The same study showed that sea anglers – numbering between 1.1m and 2m in the UK – also gave a moderately high value to wrecks. It might be assumed the role of wrecks in aggregating fish is the major factor, but it is conceivable that a historic setting may play some part in overall enjoyment. Quantitative information on the contribution of heritage to the value of wrecks, on a similar scale to the Marine Protected Areas study, would be very timely.

Heritage-based tourism as a whole is estimated to be worth £14bn, and half of all inbound tourists visit heritage sites (English Heritage 2014). Visiting heritage sites has been shown to have a significant positive relationship with life satisfaction, exceeding even the contribution of playing sport or participating in the arts (Fujiwara, Cornwall, and Dolan 2014). VisitBritain’s GREAT Britain programme emphasises heritage, culture and countryside amongst the UK’s unique selling points. Their research refers to the need to combine these strengths with surprise and excitement (VisitBritain 2010). Addressing marine and maritime cultural heritage as a specific theme in tourism campaigns could combine adventure and discovery with heritage and culture, engaging thousands of additional domestic and foreign tourists.

As noted above, digital engagement can also be equated with visiting. Taking Part records that 27% of adults in England visited a heritage website in 2014; almost half of them were using websites to learn about history or the historic environment (Department for Culture Media and Sport 2015). As well as websites, the blurring of boundaries suggests that viewing figures for broadcast media – including downloadable video and audio content – might also be quantified for marine and maritime cultural heritage. Social media is also clearly having an impact on levels of engagement with marine and maritime cultural heritage, and again could be encompassed within an assessment of social and economic benefits.
Inhabitants

A large part of the UK population lives or works in the immediate surroundings of marine and maritime heritage on land or just off the coast, even though they may not participate or visit. Recent research for English Heritage compared how visitors and local people valued heritage assets, expressed in monetary terms. Locals were selected on the basis of their not having visited the site in question during the previous 12 months. Although valued more highly by visitors, the non-visiting locals indicated a distinct willingness to contribute to the upkeep of heritage assets to maintain the sites for future generations and ‘to do their bit’, but also because the assets were important to them personally even if they did not visit (eftec 2014). In this case, the people questioned were expressly aware of the assets in question, but recent research has also sought to establish whether simply the number of historic buildings in the area where people live affects their sense of place and the social outcomes that result. The researchers concluded that the historic built environment had a positive and statistically significant relationship with people’s level of social capital (Bradley et al. 2009). Such studies suggest that just the presence of marine and maritime cultural heritage could have benefits for inhabitants, and that benefits can arise even if those assets are not especially apparent to the population.

When considering the benefits of marine planning to coastal communities, attention has been drawn to the importance of the local environment, quality of place and local distinctiveness in delivering economic benefits: attracting knowledge workers and high technology firms for example, and creating ‘brand identities’ for specific coastal communities (Roger Tym & Partners and OCSI 2011). The contribution of culture and heritage is rarely addressed outright in such studies but is noted in passing, amounting to a clear if implicit recognition of the role that marine and maritime heritage plays in the creation of vibrant places to live and work. This in turn echoes a great deal of work by English Heritage and others on the important role of historic buildings and places in regeneration (e.g. English Heritage 2013), which sometimes includes waterfronts but does not necessarily focus on the distinct contribution of their maritime past. Obtaining a clearer understanding of how marine and maritime cultural heritage
is perceived by and contributes to coastal populations is an important area for further research.

Ecosystem services

The ecosystems services approach to representing the natural environment in monetary terms has been a major focus of activity over the last decade, both internationally and in the UK, including in the marine sphere. The inclusion of ‘cultural services’ – specifically encompassing cultural heritage – as one of the four principal categories of ecosystem service might be seen as an opportunity to integrate benefits arising from the marine and maritime historic environment within the overall approach, and indeed this is implied in some studies. However, the relationship between heritage and ecosystem services is ambiguous. Although it is included in the ecosystem services framework, cultural heritage is rarely elaborated and its focus appears to be largely upon the cultural values that arise from features of the natural environment, such as totemic species and sacred groves. The implication is that value travels in one direction, from nature to culture. Researchers using this approach have found it difficult to find sufficient quantifiable data on the contribution of nature to cultural heritage, so the cultural services aspect of ecosystem valuation has remained underdeveloped (Gonzalez-Alvarez 2012; Beaumont et al. 2007; Wallace 2007).

Several researchers have, however, tried to bridge the gap by advocating the use of heritage assessment methods in ecosystems services (Tengberg et al. 2012; Schaich, Bieling, and Plieninger 2010), building on the idea that landscapes are commonly regarded as being a product of both natural and human processes, as codified in the European Landscape Convention 2000.

Using heritage assessment methods to improve the ecosystems services approach does not, however, appear to increase the usefulness of the ecosystems services approach to heritage, which already has a number of more direct means of establishing its value socially and economically. The exception is, perhaps, where ecosystem services approaches are predominating in informing the
management of an environment to the exclusion of other valuation approaches. In such cases, the invisibility of the value of cultural heritage within assessments based on ecosystems services leads to the *de facto* invisibility of cultural heritage in the management of that environment. Policy commitments to ecosystem-based management informed by an ecosystems services approach are, therefore, potentially a concern unless parallel commitments are also made to managing marine and maritime cultural heritage in its own right, as is the case in the UK Marine Policy Statement (HM Government 2011).

Further work on the relationship between marine and maritime cultural heritage on one hand, and cultural heritage as conceived of in the ecosystems services approach on the other, could be a productive avenue in higher level assessment in the UK and internationally. A key consideration would be how to recognise, in ecosystems services approaches, the role that people play not only in attributing value to the natural environment, but also in shaping the character of the environment itself. That is to say, ecosystem services approaches need to thoroughly integrate two perspectives within their core: an appreciation that culture contributes to the identification and perception of cultural services and benefits, even if the environment is ‘natural’; and that some of the valuable characteristics of marine and coastal ecosystems are attributable to cultural activities rather than natural processes.

A recent case study of Plymouth Sound to Fowey illustrates the need for reorientation, showing that some people’s deep connection to the coastal and marine environment arises from its historic character, i.e. that some cultural ecosystem services arise from the cultural inputs of previous centuries, rather than from natural processes (Willis *et al*. 2014). However, it does not go as far as acknowledging the predominant ‘heritage’ view, that the values appreciated by people are attributed, not intrinsic, to the environment. Places have innate physical characteristics, whether they result from natural or human factors – or a mixture of the two; but their cultural values – the cultural services they generate – are not inherent, they arise from the people that perceive the value (de la Torre 2013), even if the place is ‘natural’.
The need for reorientation is set out very eloquently in an AHRC study conducted in support of the UK National Ecosystem Assessment (UK NEA) (Coates 2014). The AHRC study is reflected in the UK NEA report to which it is appended, at least with respect to cultural ecosystem services on land (Church et al. 2014), but even this report seems to default to a preoccupation with opportunities for contact with ‘nature’ rather than the thorough integration of perspectives for which the AHRC study calls. More unfortunately, the advances made by the UK NEA with respect to cultural services are entirely absent from the accompanying report on coastal and marine ecosystem services (Turner et al. 2014). Adding economic weight to the rationale for reducing or remediating human impacts on the environment could be more effective if the nature/culture dichotomy is removed from the sea as well, acknowledging the time-depth of humanity’s role in shaping and valuing today’s coastal and marine environments. An ecosystems services approach may be more convincing if the flow of cultural services is seen to travel in both directions, at sea as well as on land.

Wellbeing

The rise in interest in using ‘wellbeing’ to measure social and economic benefits is even more recent than ecosystem services and has an important political dimension, as it is being taken up increasingly as an overall index of society\(^5\) and as a driver for specific policies.\(^6\)

The relationship between cultural heritage and wellbeing is perhaps more self-evident than with ecosystem services, so there have already been a variety of studies re-working existing data or undertaking fresh research that is highly relevant to marine and maritime cultural heritage.

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\(^5\) e.g. the Happy Planet Index. www.happyplanetindex.org; www.neighbourhood.statistics.gov.uk/HTMLDocs/dvc146/wrapper.html

\(^6\) www.gov.uk/government/publications/wellbeing-policy-and-analysis
HMS *Caroline* is one of only three Royal Navy ships that has been preserved from the First World War, and the only RN warship still afloat that saw action at the Battle of Jutland. HMS *Caroline* has been a part of Belfast’s landscape since 1924 and is undergoing a multi-million pound restoration as a public museum. Image © Trevor Moffet, courtesy of National Historic Ships UK.
Reference has already been made to the Heritage and Wellbeing report for English Heritage establishing a significant positive relationship between visiting heritage and life satisfaction (Fujiwara et al. 2014). This relationship has been expressed in monetary terms using wellbeing valuation to the effect that visiting heritage is equivalent to an additional income of £1,646. The same study provides wellbeing valuations for a range of different heritage sites. It also looked at how the impact of visiting heritage varied between different population groups, and at the factors affecting the likelihood of visiting heritage sites. None of the categorisations chosen are distinguishable in terms of a marine or maritime component.

Heritage Counts 2014 (English Heritage 2014), for which the Heritage and Wellbeing study was commissioned, also sets out a number of other measures relating to wellbeing, including subjective measures such as personal ‘happiness’ amongst people who had engaged with heritage activities, and mental health amongst heritage volunteers. Depending on whether wellbeing is regarded as being specifically associated with health, or as a broader social measure, quantitative and qualitative evidence set out in Heritage Counts 2014 points to there being an important relationship between heritage and wellbeing for both individuals and communities. Parallel reviews relating to arts and culture report similar important relationships that remain relevant even if they do not refer to cultural heritage as such (Mowlah et al. 2014). In a more directly political context, it is worth noting that arts and culture is one of four policy areas used by the All Parliamentary Group on Wellbeing Economics to demonstrate the potential that wellbeing offers in both national and local government (Berry 2014).

If a relationship between heritage and wellbeing is increasingly being recognised, what difference does it make if the heritage is related to the sea in some way? It might be sufficient to mobilise just the general relationship between heritage and wellbeing, rather than seeking an additional component relating to marine and maritime cultural heritage. However, the sea is also regarded as contributing to wellbeing, as made plain in the study of Plymouth Sound to Fowey referred to above: ‘the environmental spaces of Plymouth Sound to Fowey are
associated with a range of culturally valued attributes and activities that give rise to many and diverse cultural, health and well-being benefits’ (Willis et al. 2014). The benefits of the sea recorded in this report include references to its historic character. Together with the heritage studies oriented towards land, this suggests fruitful avenues for exploring the heritage contribution to marine-related wellbeing, and the marine and maritime component of heritage-related wellbeing. As the examples cited in this report show, wellbeing is an approach that could be tailored to understanding the specific benefits of marine and maritime cultural heritage to participants, to visitors and to inhabitants.

Making it count

Figures already referred to above suggest that current engagement with marine and maritime cultural heritage in the UK can be counted in millions of people whilst economic activity can probably be counted in tens of millions of pounds. At the moment, however, these figures are imprecise. Although engagement and activity specifically relating to marine and maritime cultural heritage can be quantified in principle, based on parallels, such quantification does not appear to have been attempted except on a small scale.

In contrast, there is a reasonable amount of quantitative data becoming available about heritage more generally. This data sometimes includes information about marine and maritime heritage, but the marine and maritime component is rarely identified or counted separately. As the distinct contribution of marine and maritime heritage is obscured, there is no assessment or analysis of this component nor can any policy directions be derived.

Although the assertions above should be tested, it is reasonable to contend that the existing level of engagement and economic activity relating to marine and maritime heritage is probably high. If the existing contribution were to be recognised and developed then it has the potential to be higher still, especially if apparent trends in the growth of tourism prove correct (English Heritage 2014). Baseline data is required to identify existing patterns, to
inform development, and to monitor the cost-effectiveness of heritage spending.

There is, therefore, a strong need to develop either a dataset on marine and maritime cultural heritage, or an accepted means of attributing a proportion of overall national figures to the marine and maritime component of heritage. It would be productive to start assembling such quantitative data as is available relating to the benefits of marine and maritime cultural heritage. It would be even better to introduce questions and categories relating to marine and maritime cultural heritage into existing data gathering exercises, such as Taking Part, major tourism surveys,7 the Monitor of Engagement with the Natural Environment (MENE) (Natural England 2014) and any successor to Charting Progress 2.8

As well as seeking to make more of what is already available or is routinely collected, additional, specific studies should be directed at gathering quantitative data relating to the benefits of marine and maritime cultural heritage. There are plenty of parallels on which to draw and no fundamental difference in the applicability of methodologies and expertise from other quantitative (and indeed qualitative) exercises directed at cultural heritage and/or the marine environment. There is no reason why decision-making with respect to marine and maritime cultural heritage – whether it be in the public, private or third sector – should not have a firm evidence-base.

Engaging in debate

It is clear that marine and maritime cultural heritage has no characteristics that would prevent the application of methods of understanding social and economic benefits that are being pursued with respect to cultural heritage on land and, separately, to the marine environment. Furthermore, there is no reason to suggest that marine and maritime cultural heritage does not have the same kinds of social and economic

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7  www.visitengland.org/insight-statistics/major-tourism-surveys
8  http://chartingprogress.defra.gov.uk
benefits that are being documented for cultural heritage on land and for the marine environment. Indeed, there are reasonable grounds for supposing that marine and maritime cultural heritage is already making a measurable contribution to benefits currently attributed to cultural heritage on land or to the marine environment. It would seem that the only reason that the social and economic benefits of the marine and maritime historic environment are currently obscure is because of a lack of awareness in the disciplines engaged in assessing benefits, and amongst those that commission them.

It is important, therefore, that the role of marine and maritime cultural heritage in generating social and economic benefits is advocated. The ongoing discussion of social and economic benefits is in any case still at a relatively early stage as far as satisfactory methodologies and measures are concerned. In both the marine and the cultural heritage spheres, the assessments reviewed in the course of preparing this report often describe themselves as tentative and in need of further development, for all that they are groundbreaking. In developing its evidence-base, marine and maritime cultural heritage need not languish behind the other fields; it can catch up.

Whilst there is a need to build a provisional evidence-base quite swiftly, the kinds of parallels outlined in this report indicate that a reasonable ‘in principle’ case can be made even now. That is to say, a lack of direct, quantitative evidence ought not be considered reason to defer entering the debate. The number of studies and documents published in just the last few years demonstrates that this is a live topic, as does the number of initiatives that are currently ongoing. Reference has been made already to the All-Party Parliamentary Group on Wellbeing Economics, and to the growing importance attached to annual measures such as Taking Part and Heritage Counts. There is an opportunity, therefore, to participate in debates whilst they are still occurring, rather than waiting and trying to lever-in marine and maritime cultural heritage once they have concluded. Dialogue about marine and maritime cultural heritage should be sought in
connection with the AHRC Cultural Value Project,\(^9\) the debates prompted by the Warwick Commission on the Future Value of Culture,\(^10\) HLF research on heritage value,\(^11\) social and economic research by Historic England (formerly English Heritage),\(^12\) the EU-funded Heritage Values Network\(^13\) and so on.

**Joining-up**

A key message of this study is to develop and advocate a much broader conceptualisation of marine and maritime heritage that includes but is not limited to underwater cultural heritage (UCH). This report has adopted the term ‘marine and maritime cultural heritage’ rather than underwater cultural heritage because a joined-up approach is more likely to maximise social and economic benefits than a segmented approach.

The institutions involved with marine and maritime heritage can appear disjointed: museums; ships in preservation; built heritage; archaeology; archives. The people who gave rise to our marine and maritime past would not have recognised these segments; nor do they necessarily make sense to the public as individuals, communities, or domestic or overseas tourists. A segmented subject is unlikely to deliver maximum benefit, offering barriers rather than connections to people who want to explore. Advances in information technology mean that distinct institutional histories need no longer determine the limits to how marine and maritime cultural heritage is made available. The growing capacity to make links between heritage providers – either by clicking or by physically moving around – should result in an offer that is richer, more engaging, longer in duration and effect, and more likely to be repeated and communicated to others. The whole of our marine and maritime heritage should be capable of yielding benefits much greater than the sum of its parts.

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9  www.ahrc.ac.uk/Funded-Research/Funded-themes-and-programmes/Cultural-Value-Project/Pages/default.aspx
10  www2.warwick.ac.uk/research/warwickcommission/futureculture
11  www.hlf.org.uk/about-us/research-and-evaluation/heritage-research-reports
12  www.historicengland.org.uk/research/current-research/social-and-economic-research
13  http://heritagevalues.net
Volunteers from the Thames Discovery Programme organised by Museum of London Archaeology recording the stern of HM Motor Launch 286. Over 500 Motor Launches were built in the First World War, serving as U-boat chasers and in many other roles. Although mass-produced, ML 286 may be the only surviving example. Having been turned into a recreational craft named *Eothen*, this boat served again as one of the Little Ships at Dunkirk in 1940. Image © AJ Firth / Fjordr.
As outlined already, marine and maritime cultural heritage offers a tremendous spectrum of content that can be experienced and accessed from many different perspectives: documents, photographs and artworks; artefacts, buildings and landscapes; ships and shipwrecks. None are the exclusive domain of one sub-discipline, profession or form of institution. All can be accessed in their original environment, in a display or gallery, and online. Each can be regarded as a point of entry to a wide and varied spectrum that can be enjoyed in its own right but from which broader social and economic benefits also arise.

The need to join-up the consideration of social and economic benefits across marine and maritime cultural heritage should encompass inhabitants, visitors and participants. The little work that has been conducted directly on the (economic) benefits of marine and maritime heritage has focussed on divers on designated wrecks. However, the numbers – and economic impact – of people involved in diving are small relative to numbers visiting historic ships and other maritime attractions. It is important to spread the consideration of the benefits of marine and maritime heritage and society beyond those members of the public involved in the small number of designated wrecks, and beyond those who dive on wrecks around the UK more generally.

Whilst it is already possible to start assembling information on the large number of people who visit major marine and maritime cultural heritage attractions, data on the numerous smaller maritime museums and heritage centres at the coast is likely to prove more difficult to gather, even though their local effect may be considerable. Yet more people might be expected to have informal contact with marine and maritime heritage either through non-managed heritage assets (such as those on open coastland) or because they live or work within the setting of historic harbours or waterfronts, for example. Gauging and enhancing the benefits of such extensive but informal contact in order to achieve a comprehensive approach may be demanding, but it would not be out of keeping with the wide range of studies being directed to other aspects of arts, cultural heritage or the marine environment.
Stimulating research

It follows directly from the discussion above that there is a clear need for further research into the social and economic benefits of marine and maritime heritage, across a diverse range of questions. The scope to collate previous data in a manner that reflects its relevance to marine and maritime cultural heritage has already been noted, as has the need to introduce questions and categories into existing survey programmes. Beyond this, the range of studies being conducted in both the cultural heritage and marine environmental sphere readily suggest equivalent investigations that could be directed towards marine and maritime cultural heritage.

The range of possible studies is very wide. plainly, research should reflect the needs of an overall strategy designed at understanding and enhancing the social and economic benefits of marine and maritime heritage. An important question is what – if anything – makes the benefits attributable to the marine and maritime cultural heritage different from otherwise comparable benefits arising from cultural heritage on land, or from the marine environment. The degree to which marine and maritime cultural heritage is distinctive is important in deciding whether it is possible to draw upon other studies in informing marine and maritime cultural heritage. For example, is the premium in commercial value attributable to historic waterfront properties any more or less than that attributable to designated buildings in other settings (English Heritage 2014) or can the same figures be used? Is marine and maritime heritage different?

One area where there is an apparent difference is in how people experience shipwrecks, which are the most numerous type of physical heritage asset in UK waters. As noted above, a relatively small number of people can access them directly as divers, whilst a larger number may experience them in the course of other forms of recreation, such as sea anglers and recreational boat users. Very many more people visit the coast where wrecks are present, and about which there may be a degree of awareness as a result of guide books and information panels. How shipwrecks are experienced in these different environment – under the water, from the surface of the water, and from the shore – is likely to have a bearing on what types and levels of benefits are identifiable.
Even in the case of divers visiting a shipwreck, the source of benefit may arise from the flora and fauna that inhabit it, or from it being generally ‘scenic’, rather than from its historical interest. Primary research to address such points is a pressing requirement.

It may be productive to look at conducting collaborative research that examines the benefits of marine and maritime cultural heritage alongside the benefits of other assets. Integrated research could be helpful where there are opportunities to extend benefits jointly – for example, investigating tourism directed at the archaeological, ecological and geological heritage of coastal areas could directly inform the displays and event programmes of local visitor centres. Integrated research could also be productive where there is a more fundamental question in common to several sectors, such as addressing ‘sea blindness’ and young people’s awareness of the UK’s dependence on the sea in the present as well as in the past.

Enabling

A better understanding of the social and economic benefits of marine and maritime cultural heritage is helpful only if its enables us to recognise the level of benefits at present, and how they might be increased in future. An appreciation of how the understanding of benefits can be mobilised in a practical sense is therefore important.

New research and results will have an impact if they can be used in the kinds of debates discussed above, to place the benefits of marine and maritime cultural heritage on agendas from which they are absent currently, especially at a national level. Marine and maritime heritage is as capable of generating benefits as any of the other facets of arts, culture, heritage and the marine environment that are now receiving attention.

For those agencies and institutions that are already involved in providing access to marine and maritime cultural heritage – either as their central focus or alongside other assets and resources – then a clearer focus on its social and economic benefits could be

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used directly to inform policies and practices. The advantages of a joined-up approach across the different facets of the marine and maritime historic environment could be especially significant in such circumstances, encouraging either joining-up within an institution, or between institutions to their mutual advantage.

A key question is how to direct some of the economic benefit of marine and maritime cultural heritage back to its further enhancement. Such reinvestment could be done indirectly, by making a cost-benefit case to invest public funds derived from taxation or the Lottery to enhance marine and maritime cultural heritage and thereby increase the benefits it generates. However, it is also worth thinking about more direct approaches, whereby the immediate beneficiaries of marine and maritime cultural heritage are encouraged to invest themselves in its enhancement. The discussion about social and economic benefits is not simply about the distribution of public funds; philanthropy, the third sector and especially the private sector can engage with marine and maritime cultural heritage to see how it can help in achieving their own objectives. If marine and maritime cultural heritage – like other forms of cultural heritage – can deliver an economic premium, then this need only be demonstrated for it to become an incentive to action.

One of the most promising avenues for enabling greater social and economic benefits to accrue from marine and maritime cultural heritage is through the still-recent introduction of marine planning to the UK, and integrated coastal zone management. As noted in the Appendix, the social and economic value of the historic environment of coastal and offshore zones is already recognised in the UK Marine Policy Statement (HM Government 2011). Accordingly, policies on the historic environment that refer to their social and economic value are being included in regional marine plans. Taken as a whole, this means that there is every reason to see the social and economic benefits of marine and maritime cultural heritage being furthered through both plan-making and decision-taking; and it would be entirely apt for the marine planning system around the UK to be monitored for its effectiveness in this regard. Whether it is in broadly encouraging developments that facilitate access to marine and maritime cultural heritage, or in requiring developers to make available to
the public the results of the archaeological investigations that accompany licence applications, the marine planning process could play a central role.

This report has been developed on the premise that the social and economic benefits of marine and maritime cultural heritage are already more than realised, and that they could be greater still. However, it would be counter-intuitive to suggest that marine and maritime cultural heritage does not also have some of the barriers to participants, visitors and inhabitants that have been observed in other sectors (Warwick Commission 2015). Such barriers may be personal, geographical, economic and social. The degree to which these barriers generally affect marine and maritime cultural heritage also, or are distinct and perhaps even greater than in other sectors, warrants research in its own right.

As well as seeking to overcome barriers, practical effort could be directed to exploring whether marine and maritime cultural heritage can help to erode barriers to wider social and economic engagement. The growing role of cultural heritage as a catalyst for dialogue and intercultural interpretation (Dumcke and Gnedovsky 2013) is worth exploring from a marine and maritime cultural heritage perspective because of its intrinsically international character and the role that maritime activity has played in forming the modern world.

In all aspects of enabling greater social and economic benefits to arise from marine and maritime cultural heritage there is a clear need to provide practitioners with case studies and toolkits. Existing benefits could be recognised and enhanced by equipping marine and maritime cultural heritage practitioners with information, concepts and terminology that they can apply themselves in their own context. There is a strong case for developing materials and workshops that embody the articulation of data, research and practical outcomes across the full range of marine and maritime cultural heritage and its audiences.
Conclusion
The UK has a diverse and important marine and maritime cultural heritage that needs to be conserved for the future as a facet of the historic environment. This heritage generates understanding of the past and public appreciation in the present. This rationale for managing marine and maritime cultural heritage is valid in itself and has public support, irrespective of whether it is framed in monetary terms. However, this report has shown that there are good reasons – drawn largely from parallels in other aspects of culture, cultural heritage and the marine environment – to conclude that marine and maritime cultural heritage also gives rise to a series of social and economic benefits beyond its own immediate value. These social and economic benefits are already occurring but they are obscured or unrecognised; and they have potential to be enhanced.

This report has made the case for much greater attention to be directed at the social and economic benefits of marine and maritime cultural heritage, understood in its broadest sense from underwater cultural heritage to archives, offshore and on land. The range of people who can engage in marine and maritime cultural heritage as participants, as visitors, or as inhabitants of environments shaped by that heritage has been stressed. In exploring literature relevant to marine and maritime cultural heritage but often originating in other sectors, the report has outlined the relevance of ecosystems services and wellbeing approaches. A case has been made for acquiring data, engaging in debate, joining-up, stimulating research and enabling outcomes that make more of the social and economic benefits of marine and maritime cultural heritage. Each strand will add to the effective management of this aspect of the past and all its potential benefits, driving much greater accessibility to marine and maritime cultural heritage across the whole of society.

Various practical steps could be taken to recognise and enhance the social and economic benefits of marine and maritime cultural heritage, as follows:

- Marine and maritime cultural heritage should receive much greater attention as a facet of culture and heritage generally, and as a facet of the marine environment. Its presence is pervasive even far from the sea and its importance to people
Many of the UK’s most important historic ships and boats have been discovered through archaeological excavation on land. The Sutton Hoo ship was excavated in the 1930s, demonstrating the vital role of maritime connections between East Anglia and the Continent in the Anglo Saxon period. The spectacular collection of artefacts is a centrepiece of the British Museum whilst the ancient burial site is a major attraction for the National Trust. Image ©The Trustees of the British Museum.
The social and economic benefits of marine and maritime cultural heritage economically and socially warrants specific consideration. Its absence from debates and from policy should be remedied. Marine and maritime cultural heritage is not a minority concern; participation and economic activity can already be measured in millions.

- The value of marine and maritime cultural heritage in social and economic terms should be regarded as an accompaniment to its value as a component of the historic environment. Conservation of marine and maritime cultural heritage is warranted for its own sake, but it makes sense also to pursue the social and economic benefits that it accru
d.
- It is essential that the breadth and diversity of marine and maritime cultural heritage is recognised, and that this becomes a driver for a joined-up approach to identifying and increasing social and economic benefits. The ‘offer’ of marine and maritime cultural heritage will be much greater if traditional boundaries between disciplines and environments are overcome.
- Further research, including quantification, should be carried out on the social and economic benefits of marine and maritime heritage, equivalent to the research and quantification that is being carried out for culture and heritage on land and for the marine environment. Marine and maritime heritage should be identifiable in periodic surveys of, for example, visitor numbers, participation and spending.

Although framed with respect to the UK alone, the results of this review and the directions it suggests can be expected to resonate in many other places around the world where the marine and maritime past forms a vibrant part of the cultural heritage.
References


Coates, Peter. 2014. “Arts & Humanities Perspectives on Cultural Ecosystem Services: Arts and Humanities Working Group Final Report”. UNEP-WCMC.


Appendix: UK and European policy relating to the social and economic benefits of cultural heritage and the marine environment

Policy in the UK

Heritage Policy
The Government’s vision for the historic environment of England is that ‘it is managed … in a way that fully realises its contribution to the economic, social and cultural life of the nation’, noting that ‘our history is reflected equally in … sites beneath our seas’ (HM Government 2010, 1.5). In his foreword to the consultation document for the English Heritage New Model (Department for Culture Media and Sport 2013), Ed Vaizey stated that ‘Our rich and varied heritage … delivers real economic benefits’.

Scottish Historic Environment Policy (SHEP) touches on social benefits in its description of the historic environment (Historic Scotland 2011, para. 1.1):

> It helps give us a sense of place, well-being and cultural identity. It enhances regional and local distinctiveness. It forges connections between people and the places where they live and visit. It helps make Scotland a great place to live and work.

SHEP goes on to state that Scottish Ministers want to:

- **a. realise the full potential of the historic environment as a resource – cultural, educational, economic and social – across every part of Scotland and for all the people**;

- **b. make the best use of the historic environment to achieve their wider aims of economic and social regeneration**;

Securing ‘greater economic benefits from the historic environment’ is a Key Outcome for Scottish Ministers (Historic Scotland 2011, para. 1.13); the document also identifies the historic environment as a vibrant and crucial asset for three sectors (Historic Scotland 2011, para. 1.56 et seq.): tourism; building, supporting and regenerating communities; and for the construction industry.
The appreciation of the social and economic benefits of the historic environment apparent in SHEP is also clear in the recent document *Our Place in Time: the historic environment strategy for Scotland* (Scottish Government 2014). Examples of values and benefits are set out in the early part of the document, supported with quantitative data on attitudes, tourism, employment, volunteering etc., though it also notes that ‘there has been little substantive Scottish research on the wider range of values and benefits deriving from the historic environment’ (Scottish Government 2014, 4).

The *Historic Environment Strategy for Wales* (Welsh Government 2013a) and the accompanying *Headline Action Plan* (Welsh Government 2013b) make a number of references to quantified benefits attributable to the historic environment, and has a specific heading for promoting distinctive regeneration through heritage, and for economy.

In Northern Ireland, the NI Environment Agency states that its vision is ‘that we will have a healthy and well protected environment and heritage in Northern Ireland which contributes to the social and economic wellbeing of the whole community’.15

**Marine Policy**

The *UK Marine Policy Statement* introduces its policies for the historic environment as follows (HM Government 2011, para. 2.6.6.2):

> The historic environment of coastal and offshore zones represents a unique aspect of our cultural heritage. In addition to its cultural value, it is an asset of social, economic and environmental value. It can be a powerful driver for economic growth, attracting investment and tourism and sustaining enjoyable and successful places in which to live and work.

The identification of social and economic value alongside environmental and cultural value is being implemented in the regional Marine Plans for England. In the *East Inshore and East Offshore Marine Plans*, Policy SOC 2 on heritage assets is supported by the following justification (HM Government 2014, para. 150):

> As heritage assets have cultural and social values and can be a driver for economic growth, this policy ensures that marine plans, proposals and management measures that conserve heritage assets, are supported in recognition of their value to society.

15 www.doeni.gov.uk/niea
The recently published *Draft Vision and Objectives for the South Inshore and South Offshore Marine Plan Areas* (Marine Management Organisation 2014) addresses the historic environment as a core issue under the heading ‘maintaining and enhancing social benefits’. The draft notes that ‘existing marine activities coupled with their predicted growth may impact on the historic environment and the goods and services it provides’ whilst ‘the historic environment and heritage assets attract people to an area and drive tourism and some forms of recreation in the South plan areas’. Accordingly, one of the draft objectives is ‘To conserve designated and undesignated heritage assets for their ... socio-economic value for tourism and recreation’.

*Scotland's National Marine Plan* (Scottish Government 2015) recognises that ‘the historic environment can be a powerful driver for economic growth, attracting investment and tourism and sustaining enjoyable and sustainable places in which to live and work’ alongside its General Policy on the historic environment. It also recognises that heritage tourism has an important role in sustaining coastal and island communities. *Scotland’s Marine Atlas* (Scottish Government 2011) addressed the historic environment in a specific section under the chapter heading ‘Productivity’ that included quantitative data on the benefits of the marine historic environment, supported by a more detailed report (ABP Marine Environmental Research Ltd 2010).

Marine Plans for Wales and Northern Ireland are in preparation but have not yet been subject to public consultation.

**European Union**

**Cultural Heritage**

EU recognition of the social and economic role of cultural heritage is expressed in a recent set of conclusions from the Council of the European Union, specifically the Council meeting on Education, Youth, Culture and Sport. The conclusions are titled ‘cultural heritage as a strategic resource for a sustainable Europe’ (Council of the European Union 2014). The preamble emphasises the role of cultural heritage in creating and enhancing ‘social capital’, and its important economic impact. The social and economic benefits recognised in these conclusions are worth enumerating:
Social
a. inspire and foster citizens’ participation in public life;
b. enhance the quality of life and the well-being of individuals and their communities;
c. promote diversity and intercultural dialogue by contributing to a stronger sense of “belonging” to a wider community and a better understanding and respect between peoples;
d. help to reduce social disparities, facilitate social inclusion, cultural and social participation and promote intergenerational dialogue and social cohesion;
e. offer possibilities to develop skills, knowledge, creativity and innovation;
f. be an effective educational tool for formal, non-formal and informal education, life-long learning and training.

Economic
a. constitutes a powerful driving force of inclusive local and regional development and creates considerable externalities, in particular through the enhancement of sustainable cultural tourism;
b. supports sustainable rural and urban development and regeneration as illustrated by initiatives by many European regions and cities;
c. generates diverse types of employment.

Marine Policy
EU marine policy makes little direct reference to cultural heritage in its policies, but the role of heritage in the marine sphere is implied and sometimes expressed. Emphasis is being placed on ‘Blue Growth’ (Ecorys, Deltares, and Ocean Développement 2012), which is a long-term strategy to support sustainable growth in marine and maritime sectors across Europe, recognising that ‘seas and oceans are drivers for the European economy and have great potential for innovation and growth’. Blue Growth is focussing on five sectors that are regarded as having high potential for sustainable jobs and growth, including coastal tourism. The ‘cultural wealth’ of Europe’s coastal areas is acknowledged as a reason for the importance of coastal tourism.

A recent communication from the European Commission on a strategy for growth and jobs in coastal and maritime tourism (European Commission 2014) identified the marine and maritime historic environment as a focus for promoting an innovative, sustainable and high-quality offer to tourists within the EU and from beyond its borders. Amongst other points, the communication encouraged member states, regional and local authorities and industry to ‘develop cultural heritage-based tourism’ and ‘underwater archaeological parks’. The communication
The social and economic benefits of marine and maritime cultural heritage also points to the European Regional Development Fund as a source of support for tourism investments linked to the development of cultural heritage; and to the Creative Europe programme for possible synergies with cultural and nature tourism ‘including on coastal and maritime heritage’.

Council of Europe and the Mediterranean

The Council of Europe Framework Convention on the Value of Heritage for Society (Faro) Convention 2005\(^1\) includes numerous provisions that relate broadly to the social and economic benefits of cultural heritage. It makes no express reference to marine or maritime cultural heritage. Article 10 is directed at cultural heritage and economic activity, stating that parties undertake to ‘raise awareness and utilise the economic potential of the cultural heritage’. The specific character and interests of cultural heritage are to be taken into account in devising economic policies; such policies are to respect the integrity of cultural heritage ‘without compromising its inherent values’.

The Convention for the Protection of the Marine Environment and the Coastal Region of the Mediterranean (revised in 1995), known as the Barcelona Convention,\(^2\) covers most countries of the Mediterranean, including Cyprus, Syria and Lebanon. The Integrated Coastal Zone Management (ICZM) Protocol\(^3\) of the Barcelona Convention came into force in March 2011. The ICZM Protocol contains specific provisions relating to the protection of cultural heritage plus provisions on economic activities that encourage and promote tourism that is sustainable with respect to cultural heritage. The Protocol provides, therefore, a framework within which both protection and economic activity centred on the cultural heritage of the Mediterranean can be balanced.

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About the Honor Frost Foundation

The Honor Frost Foundation’s mission is to promote the advancement and research, including publication, of marine and maritime archaeology with particular but not exclusive focus on the Eastern Mediterranean with an emphasis on Lebanon, Syria and Cyprus. The Foundation also seeks to foster and promote the protection of underwater cultural heritage (UCH).

The Foundation was founded in 2011 with a legacy from the pioneering underwater archaeologist Honor Frost.

www.honorfrostfoundation.org

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