Blue Growth meets Maritime and Underwater Cultural Heritage (MCH / UCH): overview of the situation of preventive archaeology in France

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Abstract: This chapter presents an overview of how France has managed the protection of Maritime and Underwater Cultural Heritage (MCH / UCH) over the last three decades, in relation to the Marine Spatial Planning (MSP) and Blue Growth programmes, through developments in the field of maritime preventive archaeology.

In 2001, the National Assembly adopted a legal framework which defined the application of preventive archaeology on land and under water throughout the French territories. Initial cases were few, isolated and relatively unstructured; but some 10 years later, complex processes had been set in place, and the first official preventive maritime archaeology operation had been launched.

The implementation of MCH and UCH protection in a MSP and Blue Growth context has benefited from the contributions of operational teams, fieldwork means, procedures, technological advances and experience. Effective support of the mission of MCH and UCH protection in a MSP and Blue Growth context is a central objective of the programme in France, but increasing the cooperation, organisation, consideration and interaction among stakeholders is also crucial.

Introduction

The European Union (EU) defines Marine Spatial Planning (MSP) as 'a public process of analysing and allocating the spatial and temporal distribution of human activities in marine areas to achieve ecological, economic, and social objectives which are usually specified through a political process' (Ehler and Douvere 2007: 13). This definition has created the framework within which Maritime Cultural Heritage (MCH) has developed its relationship with MSP. In this context, this chapter provides an overview of the path taken nationally by France over the last 30 years to develop the link between MSP and MCH through its preventive archaeology system and capabilities (within the maritime environment), which is also known as rescue archaeology or development-led archaeology.

The origin and definition of 'Blue Growth'

The term 'Blue Growth' has never had an agreed-upon definition, despite its extensive use, because it has gathered a large and diverse set of meanings and approaches which vary according to context (Eikeset *et al.* 2018: 177). However, the origin of the concept is related to the idea of sustainable development which emerged internationally in the 1960s (Eikeset *et al.* 2018: 177). Following a series of major international conferences centred around this idea since the 1970s, in 2012 after the development of the concept of Green Growth, a similar term focussing on the ocean (Blue Growth) emerged. This term (which was derived from the larger concept of Blue Economy,

an umbrella term for economic activities involving ocean resources) was initially used in Europe as part of the Europe 2020 strategy. The Blue Growth initiative began in 2014 when a directive from the European Parliament and the Council of the European Union established a framework which emphasized the importance of marine areas for innovation and growth in specific sectors and increased the focus on MSP and coastal protection (Legat *et al.* 2015: 13).

General context and limitation

In order to contextualise the activities under consideration, the European Commission identifies five main maritime sectors within the realm of Blue Economy or Blue Growth. These five sectors are renewable energy, mineral resources, aquaculture, tourism and biotechnology.

Unfortunately, from a heritage perspective, these large categories, as defined, make very little-to-no direct reference to the role and contribution of MCH to European Blue Growth (Firth 2015: 10). Indeed, in associating heritage with tourism, the European Commission has not positioned it with sufficient strategic importance. However, the diversity, nature and level of relationship between marine industries and MCH long predates the Blue Growth concept, and accordingly, it has been the subject of multiple mitigation strategies in many EU countries. This includes France, which has created a dense and centralised network with multiple diverse layers of stakeholders. Further, these

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relationships currently continue to evolve as part of the United Nations (UN) Decade for Ocean Science (2021–2030) initiative, which emphasises the importance of ocean science in sustainable development. As part of this multidisciplinary approach, archaeologists can take advantage of a larger and more influential engagement through the wider ocean scientific community in addressing more complex issues.

From global to national, and from terrestrial to maritime

On a global scale, the impact of development on cultural heritage has increased noticeably, and as a result, it started to be taken into account more actively in the 1980s. Within many European countries, regardless of the approach and pace chosen, rescue or development-led archaeology initially focussed on terrestrial cultural heritage, before adapting the terrestrial approach to MCH. In France, a strong legal turning point was provided by the 2001 inclusion of a detailed section on preventive archaeology within the Heritage Codex. Nonetheless, enforcement of the protection of MCH impacted by maritime development has generally been slower, compared to its terrestrial counterpart. The reason for this is simple: beyond the observable impact of maritime development on MCH, such industrial projects have offered and are offering within their geographical context new opportunities to access archaeological contexts, fund fieldwork operations, and make interesting discoveries. In addition to the 2001 legal evolution, the administrative processes surrounding this aspect of the archaeological discipline in France has been considerably strengthened since 2019/2020, allowing the system to function in a more satisfying manner. In addition, from an employment perspective, a steady growth has been observed in the number of professional archaeologists working in maritime preventive archaeology in both the public and private sectors.

The specificities of a French paradigm

General principles

In order to understand how France has tackled the necessary development of preventive archaeology, it is essential to emphasise that the French system for protecting cultural heritage from developmental impacts has been framed by two guiding principles. The first is the 'polluter pays principle', which is largely derived from environmental law. It was adopted by countries from the Organisation for Economic Co-operation and Development (OECD) at the first UN conference on sustainable development in 1972, and ratified by the EU in 1986 through the signing of the European Unique Act. France later introduced this concept into national law by including it in the 1997 Environment Codex. France adapted this notion to preventive archaeology, in order to make the party responsible for damaging the historic environment additionally responsible for paying for the damage done.

The second principle which has guided the development of the French legislative and administrative framework of preventive archaeology is the idea that as a discipline, it is fundamentally anchored to the economic life of the country. Despite multiple concerns and debates around the idea of including preventive archaeology into the realm of MSP, its inclusion was a real breakthrough because it permits archaeologist to participate actively in development projects without slowing them down. Consequently, this system allows archaeologists to study and safeguard cultural heritage as an active step of the economic development and growth. Linking preventive archaeology with the MSP process has provided archaeologists with extensive access to vast areas of investigation, affording the possibility of safeguarding numerous archaeological sites and artefacts for the public and future generations.

Critical juncture

Beyond the principles shaping the foundations of preventive archaeology in France, several additional factors have contributed towards the emergence of a new paradigm in the past several decades, resulting within the French Heritage Codes in the structure and framework of this discipline. These can be listed as follow:

- First, there was a need to end the legal uncertainties associated with the 1941 French law on 'rescue archaeology'. These uncertainties were creating conflict between stakeholders, weakening the entire system of safeguarding cultural heritage and not allowing sufficient opportunities for analysing archaeological results derived from rescue archaeology operations.
- Second, there was an obligation to ensure the stability, compatibility and transformation of the amateur rescue archaeology operational institution entitled Association Française pour l'Archéologie Nationale (AFAN). Since 1973, this organisation has been solely focussed on the implementation of rescue excavations.
- Third, France had the opportunity in 1992 to sign the European convention on the protection of archaeological heritage in order to build upon an agreed set of regulations. This convention was ultimately ratified by the EU in 1995 in Malta.
- Finally, the Competition Council and the Ministry of Culture both published studies on preventive archaeology in 1998. These studies highlighted an unnecessary and unhelpful monopoly situation, as well as the need to improve global heritage protection, public service and scientific objectives.

Legal and financial framework

Combined with the guiding principles mentioned above, these factors allowed for the formalisation of a section in the French Heritage Codex dedicated to creating a legal and administrative framework for preventive archaeology. Upon its adoption in 2001, this framework has shaped French law on preventive archaeology (Delestre 2021), through the creation of Section Five in the Heritage Codex.

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Preventive archaeology is described in the Heritage Codex as a public service mission on land and under water which aims at detecting and preserving or safeguarding by study the elements of the archaeological heritage affected or likely to be affected by public or private development. Preventive archaeology also aims at ensuring the interpretation and dissemination of results obtained and their public release for the benefit and understanding of general audiences.

As a consequence, from a marine environment point of view, the French Ministry of Culture bears scientific responsibility for the study and conservation of MCH sites and artefacts preserved on nearly 18,000 km of coastline and the millions of square kilometres of open ocean (or sea) associated with mainland France and the French overseas territories. In the French maritime space, from coast to abyss, the Département des Recherches Archéologiques Subaquatiques et Sous-Marines (DRASSM) is the service which monitors submerged heritage on behalf of the State.

However, the initial application of the law was beset by several limitations and difficulties, including a high volume of activity, low financial support and insufficient interactions between stakeholders. Accordingly, the law had to be amended to address these issues. An updated version was signed in 2003, and it included the following necessary elements:

- an organisational structure which further detailed the State 's role and control
- a financial structure which established adapted fees and support funds
- a monopoly status of the preventive archaeology operational institution modified to bring it into conformance with EU competition laws

Developing maritime preventive archaeology in France

2001–2003: A new era and new roles

As previously mentioned, the period 2001–2003 marked a crucial and essential turning point in protecting archaeological and cultural heritage impacted by terrestrial and maritime development across the French territories. Despite slow enforcement (especially in the maritime environment), these new rules have represented a positive development because they take into consideration the constraints and obligations of all stakeholders, including the State, local authorities, developers and archaeologists. Moreover, a network of archaeological scientific commissions (both national and regional) has become unavoidable, as the commissions provide essential expertise, advice and decisions at the heart of the French archaeological system, encompassing both planned and preventive archaeological initiatives as two faces of the same coin. In this context, preventive archaeology also has the mission of reconciling the requirements of scientific archaeological research and heritage preservation, without impacting economic growth or terrestrial, coastal or offshore development.

In France, DRASSM is the heart and soul of maritime archaeology. DRASSM was created in 1966 by the writer and intellectual André Malraux, who at the time was the French Minister of Culture. Since 1966, DRASSM has been responsible for archaeological scientific research and administration across the whole of the French maritime territory. This role includes the inventory, study, protection and conservation of all maritime heritage sites and artefacts throughout the world's second largest (after the United States of America) maritime space, an area which measures approximatively 11 million km2. As a consequence of the new framework created in the Heritage Codex, in 2001 the DRASSM formally assumed the new role of ensuring the implementation and execution of its legal obligations in preventive archaeology across the entire French maritime space. This new role implies that DRASSM administratively manages files related to development projects, investigates and analyses associated data and plans, implements scientific and technical control of archaeological operations (and to a certain extent, the conduct of some operations) and oversees the treatment of artefacts, materials and documentations collected.

2011–2021: New start for maritime preventive archaeology

Despite the official inclusion of maritime preventive archaeology within the new legal framework in place since 2001, the reality is that little activity occurred in this sector during the first 10 years. The main reason for this situation was the lack of human and technical resources dedicated to maritime preventive archaeology. However, the 2010 decade would prove to be very different. This was the result of strong structural changes which can be listed as follows:

- 2011: Although a few development projects implying maritime preventive archaeological investigations have taken place in France since the period 2001–2003, one of the first truly important maritime development projects to receive substantial preventive archaeological attention began in 2011. This project consisted of a coastal road built partly over water in La Réunion, an island in the Indian Ocean, which is a French overseas territory. The size of the project raised sufficient concerns from local and national authorities that the decision was made to implement and closely follow the preventive archaeology framework for both the terrestrial and maritime components of the project.
- **2011:** The Institut National de la Recherche en Archéologie Préventive (INRAP), as the national operator, created a section for subaquatic operations. Within the context of the framework established by the 2001 Heritage Codex, this initiative provided a new, sustainable human resource dedicated to maritime preventive archaeology operations, which was the first of its kind to be stood up in France.

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- 2012: The DRASSM launched a new, large-scale (36 m) operation vessel, named the André Malraux, to respond to maritime operational needs for both planned and preventive archaeology. The André Malraux assumed the mission of a previous asset, the old and long-abandoned Achéonaute. In conjunction with this new asset, the DRASSM also created an active underwater robotics branch to develop new research and development (R&D) and innovative capabilities with the goal of reaching even deeper sites (ones well beyond the limits of human diving) with remotely operated vehicles (ROV) (Figure 19.1). Combined with appropriate geophysical tools, the André Malraux and the ROVs have provided DRASSM archaeologists with extended abilities in support of diverse endeavours, including preventive archaeology. My colleague Denis Dégez provides up-to-date details of these advances in a chapter in this volume.
- 2012–2014: The initial launch and development of the Offshore Wind Farms (OWF) programme in France led to necessary changes within the Heritage Codex. Wind farms, as large-scale industrial projects, were recognised as having the potential to threaten the financial equilibrium of the maritime archaeology preventive system. Accordingly, in 2014, the DRASSM created and tested a new operational option, a more adaptable and flexible type of investigation called 'evaluations'.
- 2014–2019: A steady but constant increase in the volume of development projects being assessed archaeologically was observed as part of the maritime preventive archaeology framework. In 2019, INRAP, as an operator of diagnostics, initiated internal structural changes in the organisation of its subaquatic section, giving it renewed human resources and capabilities in order to respond to both the increased volume of activity and projected future challenges.
- **2021:** Following the *André Malraux* in 2012 and the 15 m *Triton* in 2015, the fleet welcomed a new 46 m vessel named the *Alfred Merlin*. The *Alfred Merlin* has the capability to travel to French overseas territories, as well as deploy ROVs to depths of more than 2000 m.

The operational procedures

To fulfil the obligations specified by the Heritage Codex, the French maritime preventive archaeology system offers three different types of procedures, which respond to various preventive archaeological scenarios. In general, these procedures allow either conservation by study or ensure that remains preserved in situ are avoided during development:

• **Diagnostics:** Established in 2001, diagnostics are generally put into place as part of the permit approval process as each new development project is authorised. When implemented, diagnostic procedures have the goal of detecting, identifying and characterising the presence of potential archaeological remains before any

development take place. In the maritime environment, diagnostics are exclusively entrusted to INRAP, the national preventive archaeology operator, but they fall under the administrative and scientific control of DRASSM, the organisation responsible for prescribing diagnostic operations for the detection of archaeological heritage within the planned and expected footprint of a development project. Their implementation, which is similar to diagnostics applied in a terrestrial context, must follow predefined stages, including investigation, intervention proposal, operation and report. In a maritime context, these projects can concern port developments (as for example, the extension of Portla-Nouvelle along the coast of the Mediterranean Sea), energy production and transport, telecommunications (such as the 'Amitié cable' which lands on the coast near the Bordeaux region) and marine aggregate extraction.

- Excavation ('Fouille'): Also established in 2001, preventive excavation can be prescribed immediately or following the results of a diagnostic. To date (as of 2022), preventive excavations in the maritime environment have been prescribed but not implemented. However, they have been actively pursued since 2017, first in conjunction with a port development project in Corsica, followed by another port development project in Gironde near Bordeaux in 2021, and more recently with another port development project in Martinique (a French overseas territory in the Caribbean). Identical in structure to the terrestrial version, an excavation has the objective of collecting and analysing data about the site under investigation. Excavations are open to competition between public and private operators, and they may be conducted by INRAP, a commercial company or even a local public service as approved by the Ministry of Culture. They involve a strict step-bystep procedure including investigation, call for tender, operation and report.
- Assessment ('Evaluation'): Established in 2014, assessment is a procedure exclusive to the maritime environment. It is equivalent to a diagnostic as defined in the Heritage Codex, allowing the developer, when possible, to anticipate the formal procedure. Conducting an assessment is also equivalent to an 'impact study' on cultural heritage according to the Environment Codex. Assessments concern only projects which cover an area beyond or crossing the first nautical mile zone (wind farm, energy cable, extraction, etc.) and which have, by their size, the potential to jeopardise the financial equilibrium of the system. This procedure is negotiated on a case-by-case basis by the DRASSM, and approved projects fall under its responsibility. Assessments combine the collection, study and analysis of geophysical survey data with insitu expertise conducted either by ROV and/or divers. Assessments highlight and characterise the elements of the archaeological heritage potentially impacted by development, as well as define avoidance zones around the archaeological remains to preserve them from the

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Figure 19.1. ROV being launched from the DRASSM ship *André Malraux* off the coast of Brittany in 2021. Image by N. Bigourdan, copyright DRASSM.

impact of development. For example, for the right-ofway of cables and wind turbines, the offshore project known as Île d'Yeu and Noirmoutier, off Saint-Nazaire (Figure 19.2), combined detection and verification of identified anomalies. Similar projects included the Courseulles wind farm in Normandy and a power cable in Corsica. Results are presented in a public report.

Projects and evolutions

Ports / wind farms / cables / aggregates

Given the many development projects along the country's coastline and maritime zone which are potentially subject to the implementation of the French maritime preventive archaeology system, the DRASSM has faced a diversity of challenges based on the different nature of each industrial infrastructure, which can be listed as follow:

• **Ports and coastal developments:** These projects tend to encompass a large diversity of infrastructure and activity types, including jetties, dredging, pontoons, moorings, *etc.* They also happen to have been the first type of maritime development taken into account within the context of the maritime preventive archaeology system, and as such, they have been subject to much attention over the last two decades. One of the earliest examples is the project of Le Havre Port 2000 in Normandy. Another, more recent example

is the extension work of Port la Nouvelle near the city of Narbonne along the Mediterranean coast. Due to their location close to the coast, this type of project always and only falls under the diagnostic procedure, with the possibility of expanding efforts to a preventive excavation when the results of the diagnostic indicate the need for further investigation.

- Offshore wind farms: By their nature, location and size, these large-scale projects have precipitated the need to create a viable process which initiated the procedure of evaluations. Since 2022, new and similar projects have entered a new era, one characterised by higher volume. While the last decade saw tenders for only five projects, another five were recently announced, and there are more to come with a national scheme which aims to achieve energy independence within the next couple of decades. Among the first examples of OWF to have been launched are the ones near Saint-Brieuc (Brittany) and Noirmoutier (Vendée). As previously mentioned, because of their location and size, these projects are assessed archaeologically within a preventive context only through investigations undertaken as part of an evaluation.
- Energy and telecom cables: This new breed of maritime industrial project appeared on the scene of French maritime preventive archaeology in late 2019 as part of a new initiative to renew submarine telecom cables. Even if energy cables are slightly different (because of some legal exemptions), the challenge for



Figure 19.2. Map made in 2015 showing the location of geophysical anomalies over the area of a future offshore wind farm near the city of Saint-Nazaire. Image by D. Dégez, copyright DRASSM.

Ilves, Kristin, Veronica Walker Vadillo, and Katerina Velentza. *Delivering the Deep: Additime Archaeology for the 21st Century: Selected Papers From IKUWA 7.* E-book, Oxford, UK: BAR Publishing, 2024, https://doi.org/10.30861/9781407361475. Downloaded on behalf of 18.118.1.173 these projects emerges from the political weight and financial oversight of these international ventures, a circumstance which necessitates various levels of negotiation, as well as raising the awareness of the need for heritage protection among developers. The first example brought to DRASSM's attention was the 'Amitié' cable landing near Bordeaux. A more recent telecom example is the 2Africa cable system project in Marseille. Here again, because of the nature of this type of development project, the evaluation procedure is often the best option, even if circumstances and schedules sometimes allow only a diagnostic to be considered as an option.

Marine aggregates: Marine aggregate projects are occurring where sand and gravel deposits are found on the inner continental shelf. Projects falling under this definition are appearing more often along the Atlantic and Channel coastlines. From its inception, this type of development has strongly resisted the idea of collaborating with scientific stakeholders of the maritime preventive archaeology system in France. The financial constraints claimed to be applied towards these ventures have often been brought forwards in order to gain wide political support for completing these projects, while at the same time avoiding interactions at all levels with the organisations which protect maritime heritage. Because of the lobbies, few archaeological investigations have been conducted. So far, no preventive archaeological responses have been implemented or even accepted by developers. There is a significant and pressing need to develop new ways of communicating and raising awareness of the value of MCH among marine aggregate developers. These mechanisms could help renew the dialogue and mutual understanding between stakeholders.

Geophysics / robotics / vessels

In order for DRASSM to fulfil its mission objectives, some of the operational challenges generated by the maritime preventive archaeology system have required the widening of an already diverse set of field implementations, including:

• Geophysical capabilities (Figure 19.3) were initiated over 20 years ago. However, they were firmly established for use as a part of preventive archaeology only in 2012, and they were later included as part of the evaluation process. The available technological resources (*e. g.* Side-scan Sonar, magnetometers,



Figure 19.3. DRASSM's Side-scan Sonar and magnetometer on the rear deck of the *André Malraux* in 2022. Image by N. Bigourdan, copyright DRASSM.

Ilves, Kristin, Veronica Walker Vadillo, and Katerina Velentza. *Delivering the Deep: क्रिक्सिime Archaeology for the 21st Century: Selected Papers From IKUWA 7.* E-book, Oxford, UK: BAR Publishing, 2024, https://doi.org/10.30861/9781407361475. Downloaded on behalf of 18.118.1.173 Multibeam Echo Sounder) have been growing gradually but steadily, and the initially limited human resources were recently doubled. In term of remote sensing, developments include the recent addition of drones for survey, detection and photogrammetry along shallow waters.

- **Robotic capabilities** are a central component of a larger strategy initiated in 2006 which had the objective of increasing human abilities beyond their physiological limits. Through the collaborative efforts of several robotics university laboratories from France (*e. g.* LIRMM of Montpellier) and abroad (*e. g.* Stanford University), ROV and robots (including humanoid robots which provide their human pilots with haptic feedback, like OceanOne) have been created or are being developed. These assets are also being used regularly for the purposes of preventive archaeology. Recent technological advances have included an ROV with the ability to operate at greater depth.
- The fleet of ships are the heart of operations. The current fleet is the result of multiple, sustained efforts to secure the financial support necessary for building and operating three floating platforms. The launch of these three vessels has multiplied the capabilities of

interventions throughout France, and they will soon support deployments to French overseas territories. Over the past 10 years or so, these vessels have met the challenges and strengthened the operational capacities of research conducted under the purview of the Ministry of Culture. Two deep-sea vessels, the *André Malraux* and *Alfred Merlin* (Figure 19.4), together with the small unit *Triton*, have been designed to support the prerogatives and goals of the State in terms of cultural heritage, particularly in the case of infrastructure installations and the exploitation of natural resources.

Results and perspectives

Avoidance and discoveries

Because the mitigation strategy aims to protect MCH while supporting industrial development, the easiest and often preferred option is implementing an avoidance zone around a site of archaeological interest discovered as part of a preventive investigation. But this is less true for the diagnostics process, where in-depth analyses tend to occur more often, than the evaluations process, where a sense of urgency may lead investigations towards simple characterisations.



Figure 19.4. The DRASSM ship *Alfred Merlin* entering the port of Marseille in 2021. Image by N. Bigourdan, copyright DRASSM.

Ilves, Kristin, Veronica Walker Vadillo, and Katerina Velentza. *Delivering the Deep: Additime Archaeology for the 21st Century: Selected Papers From IKUWA 7.* E-book, Oxford, UK: BAR Publishing, 2024, https://doi.org/10.30861/9781407361475. Downloaded on behalf of 18.118.1.173 However, during approximately 15 years of diagnostics and eight years of evaluations, almost 100 preventive archaeology operations have been implemented within a maritime context, of which more than 60% occurred in the last five years (Bigourdan and Leroy 2022: 250). This recent linear intensification of the volume of activity is accompanied by an increase in the number of finds and discoveries (Figure 19.5), including both sites and isolated objects, despite a slowly improving ratio between the areas investigated and discoveries. This point is explained by the intrinsic nature of this type of investigation, which does not target areas of archaeological interest but is rather orientated by the locations of the industrial projects.

Future developments, horizons of improvements and cooperation

This branch of preventive archaeology is dedicated to evaluating and mitigating the impact of development on heritage in the maritime environment. It is gaining momentum, mainly through structuring and the relations



Figure 19.5. Stone anchor found during an evaluation operation off the island of Noirmoutier, photographed in 2019. Image by C. Lima, copyright DRASSM.

between actors in the sector (*e. g.* instructors, prescribers, operators, developers). However, it remains in a state of significant flux in striving to be able to respond effectively to all the identified challenges.

The forecast for future maritime developments in France shows a continuous increase in the number of planned OWF and submarine cable projects, as well as an increase in the diversity of project types with new technologies such as wave, tidal and current energy-collecting turbines. This trend will continue to increase the need for preventive archaeology to be implemented and maritime heritage to be protected over the next few years or even decades.

With an increase in the number and diversity of preventive archaeology projects, several complex cases have tested the limits of the system, and have also pushed DRASSM to find new solutions and analyse and learn from its past performance. One new horizon of improvement among others, already underway, is focussed on further developing the identification of paleo-environments as part of preventive archaeology investigations, through an increased inclusion of geotechnical and sub-bottom profiler data, and better collaboration with the marine aggregate industry.

Beyond the evolving field of French maritime preventive archaeology, the DRASSM's mission is and also remains to protect the maritime cultural heritage and to support the scientific aspects of these investigations. In this context, DRASSM also aims to promote and support archaeological research in a multidisciplinary way and with continuity between land and sea, as well as all the actors involved in the marine environment.

Conclusion

To conclude, it is important to remind the reader that the regulations relating to preventive maritime archaeology are binding on all developers, even if there are specific exemptions for fishing operations and the laying of communication cables. Funding for assessments, like excavations, is provided by the developers. Shipwrecks and coastal sites have been identified, and preventive excavations are looming. For the time being, project modifications or the avoidance of characterised anomalies have made it possible to preserve cultural heritage as it currently exists, without harming it, and thus preserve archaeological resources for the future.

Detecting, studying, documenting, preserving and promoting cultural heritage remains an ongoing challenge which takes on its fullest meaning in the context of regional planning and major consumers of non-renewable heritage (Garcia 2021). It is therefore no longer a question of a scientifically thematic choice, but of the application of a public research policy in the general interest. By small touches which are almost pointillism, cultural heritage is revealed in context. History thus resurfaces from the soil, between sea and land.

Acknowledgements

I would like to thank Hanna Hagmark, executive director of the Åland Islands Maritime Museum, whose words (posted at the entrance of the museum's main exhibition) inspired me to remember why I do what I do. I would like to quote what she said:

'We are the people of the sea; The sea is our way; We live with, off and on the sea; We know that the sea gives and takes, isolates and connect; The sea is in our past and in our future; The sea is here and now.'

References

- Bigourdan, N. and Leroy, F. 2022. L'archéologie préventive en milieu maritime [Preventive archaeology in the maritime environment]. In: S. Marlier, M. L'Hour, A. Charron and D. Djaoui (eds.), *Trésors du* fonds des mers: Un patrimoine archéologique en danger [Treasures from the seabed: An archaeological heritage in danger], 248–252. Arles, France: Musée départemental Arles Antique.
- Delestre, X. 2021. Les services régionaux de l'archéologie (1991–2021): Trente and d'histoire en mouvement [The regional archaeological services (1991–2021): Thirty years of history in motion]. Paris: Éditions du patrimoine.
- Ehler, C. and Douvere, F. 2007. Visions for a change: Report of the first international workshop on marine spatial planning. Intergovernmental Oceanographic Commission and Man and the Biosphere Programme. IOC Manual and Guides 46: ICAM Dossier 3. Paris: UNESCO.
- Eikeset, A. M., Mazzarella, A., Davidsdottir, B., Klinger, D. H., Levin, S. A., Rovenskaya, E. and Stenseth, N. C. 2018. What is blue growth? The semantics of 'Sustainable Development' of marine environments. *Marine Policy* 87: 177–179.
- Firth, A. 2015. The social and economic benefits of marine and maritime cultural heritage: Towards greater accessibility and effective management. London: Fjordr Limited for Honor Frost Foundation.
- Garcia, D. 2021. La fabrique de la France: 20 ans d'archéologie préventive [The making of France: 20 years of preventive archeology]. Paris: Inrap/ Flammarion.
- Legat, A., French, V. and McDonough, N. 2016. An economic perspective on oceans and human health. *Journal of the Marine Biological Association of the United Kingdom* 96(1): 13–17.

Ilves, Kristin, Veronica Walker Vadillo, and Katerina Velentza. *Delivering the Deep: More and Content and Content Papers From IKUWA 7.* E-book, Oxford, UK: BAR Publishing, 2024, https://doi.org/10.30861/9781407361475. Downloaded on behalf of 18.118.1.173

In the beginning was muteness: approaching an anonymous shipwreck via poetry

Katariina Vuori

Abstract: In this chapter, I present a poetic approach to examining meanings and verbalising affections in maritime cultural heritage. As an example, I explain the conduct of 'From wreck to poetry' workshops organised at the IKUWA7 Congress and how the poems and poetry can be analysed through a three-stage metaphor analysis and free association. My motivation was to explore how a structured-poetry exercise works when the subject of the poem is an old wreck. What would be the response to a mix of archaeology and poetry, and would a creative approach stimulate, inspire or change the descriptive vocabulary regarding a wreck? Can we use poetry to add meaningfulness to the extended biography of an archaeological object?

Workshop participants included experts of maritime and underwater cultural heritage management, maritime historians and underwater archaeologists. They found the method to be easy, useful and fun, and a great tool for bringing new insights on how the material culture can be approached and interpreted beyond the objective, academic tradition. A word analysis of the poems demonstrated that creativity increases the diversity of descriptive vocabulary and that metaphors allow the viewer to venture beyond the obvious materiality. This study suggests the structured-poetry method could facilitate a multilevel cultural heritage discourse among different stakeholders.

Introduction

My research object is a seventeenth-century shipwreck, the Hahtiperä wreck, discovered in Oulu, Northern Finland in August 2019. It is the oldest surviving wreck discovered in Northern Finland so far. Traditionally, the biography and storification of wrecks from a historical period are based on archaeological and multidisciplinary research and written sources. These processes sum up as a narrative, which can be told to other researchers and to the general public in a storytelling format. Such narratives traditionally justify the value, or lack thereof, of a relic.

The usual sources in wreck research for identifying and building up the biography of a vessel from a historical era include the physical remains and their context, typology, written documents such as customs declarations and interdisciplinary research such as dendrochronology for dating, as well as provenance and ethnography. Sometimes the wreck site includes artefacts or human and/or animal remains, which open up a whole range of interdisciplinary research methods (Muckelroy 1978; Rönnby 2014). A well-detailed, vivid and in some cases exciting background of a wreck profits the scientific field, adds to the object's value and helps in capturing the curiosity of the audience.

The Hahtiperä wreck is a mute, 'paperless' and anonymous passenger from the past. No cargo or written documents are related to it. In my research, I study whether creative methods can add substance to the extended object biography of the wreck, transfer knowledge and engage different stakeholders to express their subjective views on cultural heritage through personal encounters with the relic. In this chapter, my focus is on structured poetry generated through the image of this particular wreck, and on the literal or metaphorical meanings the workshop participants used to describe the wreck.

The combination of arts and creativity is an emerging transdisciplinary practice of experimental heritage work and museum pedagogy (*e.g.* Renfrew 2003; Van Dyke and Bernbeck 2015; Bailey 2017; Kavanagh 2019; Bailey *et al.* 2020; Petersson and Burke 2020). When I took on my dissertation work on the wreck of Hahtiperä in 2022, I wished to contribute to the 'afterlife'—the post-excavation period of the wreck's object biography—by engaging the general public in the creation of the wreck's narrative, its life story. I also hoped I could give the general public a chance to see authentic pieces of the wreck, interact with them through slow, sensory archaeology and add to the multivocality when assessing the values and meanings attached to the wreck.

'Slow archaeology' is a method for archaeological object observation (*e.g.* Caraher 2016; Mol 2021). The origin of the term is unknown, but the concept has emerged alongside a broader 'slow movement'—a cultural shift towards slowing down life's pace—and 'slow science', which is a counterreaction to the increasing requirement to produce scientific information faster (Caraher 2016: 422). Caraher calls for slowing down in archaeology, stating that modern digital appliances have changed how archaeologists document and explore excavation sites (Caraher 2016: 421).

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