

Integrating Marine Cultural Heritage into Marine Spatial Planning for SIDS: an Indian Ocean case focused on Mauritius.

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ABSTRACT

This paper deals with the utility, valorization, and sustainable development of underwater cultural heritage in the Indian Ocean region. We outline how the process of valorizing underwater cultural heritage has been undertaken in this specific context, and how this important resource is being integrated into the Marine Spatial Plan of the island.

The case study under consideration focuses on Mauritius, located in the Southwestern Indian Ocean, with a rich maritime heritage and associated repository of wrecks.

The resources available to conduct the work include human capacity both locally and internationally, built through local partnerships. Financial, logistical, and equipment needs have also been sourced locally and internationally, all of which is outlined in the presentation.

The research presented tackles the question of how to sympathetically integrate a sustainable program to capitalize and protect a nation's maritime legacy, a subject often complicated by the needs for growth and development.

The [expected] results focus on the applicability for other AIMS SIDS, and perhaps SIDS more broadly, illustrating ways to use maritime heritage as a route for building resilience at the local level for communities heavily dependent on coastal lagoon waters.

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INTRODUCTION: THE PATH TO VALORIZING MARITIME HERITAGE IN MAURITIUS

The relative infancy of maritime archaeology as a subject, and more generally, the paucity of archaeology in much of the African continent and her islands (Mitchell 2004), has meant that the impressive maritime legacy of the region remains largely unknown (Sharfman et al. 2012; von Armin & La Hausse, in press). Similarly, writing two decades ago on maritime archaeology in Southeast Asia, Michael Flecker noted that "It is unfortunate that even in these times of increasing cultural awareness, there is little public recognition of the historical role played by ships, their makers, their sailors, and the sea" (Flecker 2002, 12). For Mauritius, situated geographically and culturally between Asia and Africa, these words, unfortunately, still resonate today. The process of acknowledging and developing local maritime archaeology bears testament to this lack of recognition.

In 2008, with the start of the Mauritian Archaeology and Cultural Heritage (MACH) project, there was an explicit and ambitious aim to implement a 'total archaeology' approach to the island (Seetah 2015a). Several sites were quickly integrated into a program of excavation driven by local stakeholders (Seetah 2015b; 2016; see summaries in Seetah et al. 2022). However, there was an evident and massive lacuna matched only by the size and magnitude of the resource itself: maritime heritage. This lacuna was present not only in knowledge of the wrecks, and knowledge of what had been studied, but it was also evident in the way local legislation was enacted to protect maritime sites. Regulations focused almost entirely on the terrestrial context and concentrated on vestiges of colonial elites. From 2008, meetings were held with the Mauritius Oceanographic Institute to integrate maritime heritage into the work of MACH; in 2010, maritime archaeologist Helen Farr, Southampton

University, UK, joined the team to undertake coastal surveys and provide guidance on potential future directions for local maritime heritage research; throughout the period from 2009-2016, meetings were held with a host of stakeholders, including the National Heritage Fund, and University of Mauritius (UoM), all to no avail. What was remarkable about this situation, and unlike many other islands in the region, was that maritime archaeology was well established in Mauritius. Yann von Armin had directed or been involved in the investigation of some 10 wreck excavations (see Table 2 and references, von Armin & la Hausse, in press). This extensive body of work had gone almost entirely unrecognized. Mauritians appeared unreceptive to the value of our heritage.

Two important developments took place in 2016 and 2017 that helped turn the tide. Coming from Stanford University, Rob Dunbar, Neil Tangri, and I were all invited to a two-day workshop on ‘Capacity Building for a Sustainable Development of the Ocean Economy’, and ‘Ocean Acidification’, 29th and 30th June 2016, at the UoM. During this meeting, we collectively sought to integrate and align natural science research on corals, with social science research on cultural heritage, around the broad topic of disease (Seetah 2018). The workshops and small group meetings with students and faculty emphasized the social dimensions of the Blue Economy (see below), and the need for capacity building, points which resonated with local colleagues. In 2017, Carlo Beltrame and Stefania Manfio (Ca’ Foscari University, Venice, Italy) and I were invited to a follow up workshop at the UoM, focused specifically on ‘Sustainability and the Blue Economy’. Beltrame provided a much-needed agenda for local maritime archaeology, employing the *Mercurio* (1812) shipwreck project as a usable case study (Beltrame 2019). Subsequent meetings that year with Rezah Badal and the team of the Department for Continental Shelf, Maritime Zones Administration and Exploration (CSMZAE), Yann von Armin, and a broad assembly of local stakeholders, ultimately catalyzed proper recognition of the existing maritime archaeology, and led to a concerted effort to establish a systematic inventory of local wrecks to promote the scientific study, valorisation, and protection.

CASE STUDIES: BRIDGING THE DIVIDE

Here I outline three case studies aligning maritime and terrestrial contexts.

Case Study 1: Defensive Sea and Landscape

Elements of the fortification landscape unite a group of archaeological sites that draw together different components of the island’s military past. The Dutch built the first fortification on the island, Fort Frederik Hendrik, which was itself constructed on the demolished remnants of what is now Vieux Grand Port, the site of the first Dutch settlement (la Hausse de Lalouvière 1998, 30). This is well testified from historical accounts described by Van der Kerkhoven, a survivor of the *Arnhem*, which wrecked in 1662, close to present day Mahébourg (Moree 1998, 35). This site remains one of the best studied on the island. Initial research was undertaken by van Vliet (1973) but remained preliminary. An extensive program of excavation directed by Pieter Floore started in 1997, with subsequent seasons in 1999, 2000, and 2003-05 (Floore & Jayasena 2010). Results from this site already form the basis for regional comparisons of fortifications (Jayasena & Floore 2010). In addition to this major coastal defensive settlement, sites such as Batterie de la Pointe du Diable monitored access to Mahébourg, Fort George overlooking the northern entrance to the capital of Port Louis, and Batterie de la Pointe aux Canonnières, which surveyed the northern most coast of Mauritius, formed part of a ring of surveillance around the island. To these sites encircling the perimeter, fortifications were established on islets such as *Île de la Passe* to further reinforce strategic defenses. To the fortifications themselves, one can add other elements associated with military landscapes. Principal amongst these is Moulin à Poudre, Pamplemousses. Mauritius was the only colony of France to produce gunpowder, and the site was finally closed when the British took over in 1810. Systematic excavations started in 2015, revealing much about the site, and the people who worked there (Munghur-Medi in press).

Case Study 2: Heritage Tourism

For a small island where one of the main economic pillars is tourism, it is surprising that Mauritius hasn't fully developed the heritage tourism sector. Establishing a viable and sustainable program of wreck dives has been a major effort of work under the MoU between MACH at Stanford, and the CSMZAE working with Yann von Armin in Mauritius. Efforts have concentrated on: 1) identifying, and then rationalizing into a database, all the known historical wrecks; 2) working with community partners to identify and engage all local stakeholders; 3) undertaking preliminary workshops and training sessions to share capacity and build knowledge of maritime archaeological approaches and methods. The regulation, management, and protection of this resource is discussed in Badel et al. (in press), and Manfio (in press), with a state of the art presented by von Armin and la Hausse (in press). Here, suffice to mention that dive tourism is already an important, though underdeveloped, component of existing dive operations. There is impressive potential for growth, given the number of known wrecks and the potential for sustainable development along the lines of 'underwater living museums', for example. To exploit this specific sector more effectively, an immediate and obvious path would be to form tours that enriched the dive experience, and which could also have broader appeal. This could take the form of taking divers (as well as other tourists) around the defensive structures of the island, incorporating some of the key emplacements briefly outlined above. Selecting from the more than 60 coastal sites, clear narratives could be developed that integrate evidence from the historical, archaeological, and architectural records to relate how the ships and coastal sites functioned within the colonial machine, and as part of the process of birthing the nation.

Case Study 3: Grand historical narratives

In addition to developing storytelling accounts around historically significant wrecks that are already in the process of study, such as the Sirius, Mauritius could also develop narratives that centralize its role within key thematic topics that were radically reshaped with the onset of colonialism. These include trade and exchange, migration, and extinction, biodiversity, and conservation, all of which have clear relationships or dependencies on maritime contexts, and which can be fruitfully explored as part of cultural and natural heritage tourism. The island would serve as an ideal location to develop narratives on labor diaspora. Similar initiatives are already in place to describe the story of sugar, a notable example being '*L'Aventure du Sucre*', which incorporates detailed accounts of the history and process of sugar production within a museum setting, a restaurant highlighting local cuisine, and a tour of the former sugar estate itself, allowing for a cultural tourism experience that draws on architecture and landscape, the historical record, as well as local cuisine. For a parallel case study focused on labor, a large number of vessels carrying laboring peoples are well attested and a number have been well studied. These wrecks would provide the first link in a chain exploring how and why the island's population arrived. With the wrecks serving as a cornerstone, which can either be visited by divers or described to non-divers from artefacts within a museum setting, one can integrate disembarkation sites, both formal and informal, into the narrative. Aapravasi Ghat is an ideal example, with a groundbreaking interpretation center that explores many aspects of how laboring peoples were administered and treated as they commenced a new life on the island. Sites like Bassin des Esclave, a location in the Pamplémousse region that was apparently used as a place to wash enslaved peoples, add to our understanding of how laboring peoples were treated. Some debate exists as to the functioning of the site and its relationships to enslavement; however, it is a site of major significance in local memory, particularly for the Creole community. Within the public domain, a relative silence exists to this day regarding the role of enslaved and indentured workers on sugar estates themselves, and on their lifeways more generally. Aapravasi Ghat is indeed a trailblazer in this regard. By using historical, archaeological, architectural, and anthropological research to enrich the story described in the Beekrumsing Ramlallah Interpretation Centre, visitors can better understand the experience of indentured laborers while also gaining a better understanding of how indenture shaped Mauritius, and the role of the island within the larger indentured experiment.

RESOURCES: MARITIME CONTEXTS IN MAURITIUS

Maritime routes around Mauritius served as a nautical thoroughfare for many of the major seafaring nations during the period of colonialism. All settlers, commodities, commensals, and ideas arrived by sea. Thus, while the archaeology of Mauritius has overwhelmingly, and understandably, emphasized terrestrial sites, research towards a unified land and sea framework would more accurately reflect the archaeological past of the island and her inhabitants. The following briefly outlines those lines of evidence and sites that could promote and support the integration of maritime and terrestrial contexts into a cohesive framework.

Historical contextualization

Extensive local collections of historical records are held in the Mauritius Archives in Coromandel, housing over 2 million documents, e.g., *Renseignements commerciaux sur l'île Maurice* (Commercial information on Mauritius), Series: 1803/1863, the Carnegie Library in Curepipe, and the National Library of Mauritius. These are supplemented by other local government archival repositories, held by the Ministry of Health, the Ministry of Lands and Housing, and the Ministry of the Environment. In addition, overseas bodies such as the British Library, London, and National Archives, Kew, in Britain, and Le Centre de Archive d'Outre Mer, Aix-en-Provence, France, all retain archival resources that amount to a rich and accessible repository of historical evidence. Numerous of these have already been extensively mined to develop databases on the wrecks located around the island (See, for example, Toussaint, 1967 for an early case).

Fortification and defense

One of the more obvious and direct connections between maritime and terrestrial contexts are the structural remnants of forts, which form a network across the island linking coastal and inland defense emplacements. The systems of fortification and mechanisms for strategic defense pay testament to the multifaceted historical context that underscores Mauritius's past. They are a specific form of material legacy providing insight into the complex geopolitical landscape of the colonial period. The sites and material vestiges of the forts also serve as a link across oceanic spaces, offering not only a way to record the changing strategies and priorities of fortification interregional, but to compare and contrast how these strategies varied across the Indian Ocean World and beyond, and between imperial groups.

The three colonial powers that settled the island used it in part to survey and protect regional interests. Unsurprisingly, the rivalry between imperial forces made monitoring of the region ever more important. Particularly for Britain, maintaining a free route to India was paramount; moreover, the British were conscious of the costs associated with losing the island and having to recapture it (la Hausse de Lalouvière 1998, 12). Coastal defenses served two ideological functions: not only were they used to strengthen one's own position, but also to weaken the authority and presence of rivals. This was undoubtedly well recognized from early in the colonial history of the island and reflected in the strategy for defense, which changed little from the first permanent settlement in 1638 to 1945 ce at the end of the Second World War (la Hausse de Lalouvière 1998, 12-13). Philippe la Hausse de Lalouvière's extensive work on coastal fortifications offers a comprehensive inventory of some 60 major sites (la Hausse de Lalouvière 1998, 12-35); however, this work – as the author observes – signals the extensive gaps we have in research, and therefore knowledge, of the fortifications of the island (la Hausse de Lalouvière 1998, 32).

Technology of mobility

There are more than 1200 shipwrecks recorded from historical research, representing a huge resource for this field of enquiry. With such an impressive collection of wrecks and a dearth of other underwater heritage such as submerged settlements, it is little wonder that local maritime archaeology has been overwhelmingly focused on this specific form of maritime cultural heritage (von Armin & la Hausse in press). Similarly, von Armin and la Hausse signal to the overemphasis on the island of Mauritius itself,

to the relative exclusion of research on those vessels now lying around the many islets that constitute the Republic of Mauritius, such as Rodrigues, and the Chagos Archipelago. Exhaustive work by the colleagues mentioned above is now harnessing this important archaeology for the local community, both as a cultural legacy worthy of protection and as a sustainable economic resource. Much research is still necessary and given the admonitions regarding an overemphasis on the wrecks themselves, the time is ripe to integrate this valuable and extensive resource into the broader conceptual framework of maritime cultural landscapes. One particular lacuna exists in that we have little if any material evidence on local shipbuilding. We are certain that shipwrights did operate locally, as we know the *Coureur*, for example, was built in Mahébourg based on a French vessel by the same name.

Routes of labor diaspora

Mauritius's role in the region's labor migrations was a prominent one. The definitive work of historians such as Richard Allen (1999; 2008; 2012; 2015), situate the island's position as a major thoroughfare through which laboring peoples were conveyed to locations in the Indian Ocean, and further afield. Mauritius absorbed large numbers of enslaved and indentured peoples to fulfill the needs of the local plantation economy. The island's two WHS commemorate this significant role; they also both represent ideal case studies that fit within the concept of maritime cultural landscapes. While the Aapravasi Ghat is a well-constructed formal depot within a network of mobility moving laborers from India, China, and East Africa, Le Morne represents the fate of enslaved peoples once free, who migrated to the coast and adopted a lifestyle dependent on coastal resources. Behind this oversimplification is a vast and as yet unconnected, largely overlooked, program of research that could knit together formal and informal locations for disembarking enslaved people around the island, during and after enslavement. The transition to a designated formal location, Aapravasi Ghat, for indentured laborers, well managed and controlled on a scale previously unseen on the island, allows for the deep integration of maritime and terrestrial contexts drawing in factors such as legality, trade, technology, and communication, all of which shaped each laboring context.

FRAMEWORK: CONCEPTUALIZING A MARITIME CULTURAL LANDSCAPE FOR MAURITIUS

The concept of a 'maritime cultural landscape' offers an ideal epistemological framework within which the relationships between land and sea, viewed through cultural heritage, can be aligned. Christer Westerdhal championed the concept in a series of publications with the aim of understanding and communicating the utility of maritime heritage (Westerdhal 1992; 1994); the idea has been adopted widely (e.g., see Freire 2014 for Portugal). Within the broader framework, the concept of a maritime cultural landscape draws together the infrastructures that exist in coastal and terrestrial contexts, with the sailing routes that form their own distinct network, as well as the vestiges of human activity from both land and sea (Westherdahl 2008, 212). These distinct but interrelated parameters can be situated within two viewpoints, topographical or cultural (Westerdhal 2006, 334). Other authors developed the concept further; Tuddenham put forward the idea of 'maritimity', noting that a division between land and seas was at times artificial (Tuddenham 2010, 8-14). Thus, these ideas lead us to view maritime heritage resources within their global context, and perhaps implicitly, move away from characterizing the entirety of 'maritime and marine archaeology' (Blue & Breen 2019) based primarily on the evidence from shipwrecks and their associated artefacts (Freire 2014; Tuddenham 2010, 6).

RESULTS

Through dedicated workshops facilitated by the CSMZAE, we are closer to building capacity within a range of stakeholder groups. In the future, we anticipate applicability to other AIMS SIDS, and perhaps SIDS more broadly, illustrating ways to use maritime heritage as a route for building resilience at the local level for communities heavily dependent on coastal lagoon waters.

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