

A Phenomenology of Oceanscapes: Aquatic Lifeworlds and Sustainability

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ABSTRACT

This paper is included in ‘Session 3 Decade of Action, the call for Oceans’ Past to Bridge our Communities’ to address the encounter with experience and understanding of humans and their aquatic surroundings, i.e. the phenomenology of oceanscape. Defined as the human perception and experience of the ocean, this concept includes both tangible and intangible events and encounters. The notion of the sea as a blank, formless and featureless space has often been evoked in scholarly writings. Recently, however, researchers have made compelling arguments against this point of view by recognizing the materiality and temporality of the sea itself. Even though the ocean as a fluid space lacks the firm surface of the land, it is not without recognizable structures in various forms. After introducing and examining a theoretical framework for the phenomenology of oceanscape, and exploring the experience of encountering a vast body of water, this paper uses the analysis of (contemporary) human interactions with the ocean that are firmly rooted in the past to address sustainable concepts of human-ocean interaction in the present. The Haenyeo in South Korea and the Ama in Japan, both representatives of invaluable and intangible East Asian maritime heritage, exist in the space between past and present and between land and water. Based on centuries-old tradition and knowledge, their present understanding of their maritime environment can contribute to a better understanding of social and mutual human-ocean entanglements and thus contribute to ocean literacy as defined by UNESCO.

Keywords: phenomenology, marine cultural heritage, sustainability, East Asia

List of abbreviations

IOC Intergovernmental Oceanographic Commission
OL Ocean Literary
TEK Traditional Ecological Knowledge

INTRODUCTION

In this paper, it is argued that ocean literacy and sustainability efforts require an objective comprehension of traditional ecological knowledge (TEK), which is derived from past human experiences within aquatic lifeworlds and oceanscapes. Such knowledge serves as a basic building block and should be considered for a successful sustainable future. By examining how individuals and cultures perceive and interact with the ocean as a vital component of their lifeworld, and recognizing it as an integral part of their past, present and future, one gains insight into the ocean’s role in socio-cultural, political, and economic transformations. This in turn prompts the development of crucial strategies for conserving it. Several studies have explored the role of fisheries in the socio-cultural fabric of coastal towns, highlighting their significance for communities facing new policies, environmental shifts, and other challenges (see, for example Lim, Ito, and Matsuda 2012; Khakzad and Griffith 2016; Axon 2019; Chisholm Hatfield and Song 2019; Henderson et al. 2019). I contend that these individuals or groups should be included in discussions alongside national governments, local coastal communities, and business and private sector stakeholders, rather than being limited to sustainable tourism and educational initiatives.

The world’s oceans influence the climate, the weather, food consumption and the circulation of goods. Yet, this important part of human lives is under dire threat. Coastal zones especially are rapidly deteriorating as a result of changing environmental conditions, human development and climate change (IOC/UNESCO 2011). Recognizing this, UNESCO has proclaimed a Decade of Ocean Science for sustainable development (2021–2030) aiming to reverse the decline in ocean health and promote sustainability. UNESCO’s Intergovernmental Oceanographic Commission (IOC) developed a roadmap, outlining preliminary objectives and identifying stakeholders. Initially, maritime/marine archaeology and underwater cultural heritage did not feature in the implementation plan. Thanks to a concentrated effort led by the National

Museum of Denmark, cultural heritage and marine archaeology were recognized as essential to Ocean Decade's goals. Understanding an ocean's past and the past and present lifeworlds of coastal communities contributes invaluable knowledge to sustainability efforts and resilience building (UNESCO 2019; Trakadas et al. 2019). However, all efforts to implement long-lasting changes in coastal areas concerning sustainability must take a bottom-up approach and take human geographies and specific local conditions into consideration as top-down approaches risk marginalizing local communities and are more prone to failure (Axon 2019; Henderson et al. 2021).

To help promote sustainability efforts and to include local stakeholders, UNESCO makes use of the promotion of ocean literacy (OL). OL was developed over the past two decades, gaining significant traction among marine biologists and environmental educators before becoming a prominent factor in the Ocean Decade (Worm et al. 2021). The term is defined as 'the understanding of human influence on the ocean and the ocean's influence on people' (IOC/UNESCO 2020, 23). OL is meant to enable and scale up actions in all sectors of society regarding ocean sustainability and identifies four priority areas: policy formulation, formal education, corporate action, and community engagement. The IOC/UNESCO implementation plan mentions specifically aquariums, zoo and museum operators, the education of children and the general public as groups and areas of interest but makes no mention of ocean literacy in paragraphs addressing national governments, local coastal communities, and business and private sector stakeholders, even though holders of local and indigenous knowledge are later mentioned as essential partners (IOC/UNESCO 2020). This seems at odds with Goals 12, 13 and 14 of SDG 14: sustainable consumption and production patterns, the pressing requirement to combat climate change and conservation and sustainable use of the oceans (Santoro et al. 2017), neither of which can be implemented successfully without involving coastal communities, businesses and governments. It is equally concerning that it is seldom mentioned that the term 'literacy' denotes as much scientific knowledge and educationally acquired knowledge as TEK. OL needs to include diverse perspectives of human interaction with the ocean and must be tailored to regional cultural contexts (Worm et al. 2021).

A Phenomenology of Oceanscape

The concept of phenomenology, employed as a tool to describe the character of human experience and the encounter between humans and their surroundings, was originally introduced as part of landscape studies (Johnson 2012) featuring an immersive bodily approach (Tilley 1994; Thomas 2006; Johnson 2012; Tilley 2012) and understands 'landscape' as a social construct or context for social actions rather than as solely physical or geographical (Gosden and Head 1994; Darville 1999; Knapp and Ashmore 1999; Ingold 2000; Ashmore 2004; Ingold and Vergunst 2018). Phenomenology means in its basic definition the human encounter with and the experience and understanding of one's surroundings. The experience relies on context: one needs to be able to transform something that happened or something one's senses tell one into something that becomes recognizable or memorable. Therefore, the maritime experience is rooted within the ocean itself and needs to be analysed and interpreted within that context.

Marine exploitation conducted using ships, boats, nets and fishing lines is likely to yield different experiences than harvesting by diving where the body serves as the means of production. Experience includes both tangible and intangible encounters and events. Some can be traced through the materials employed, whereas others cannot be directly traced, like tacit knowledge regarding good fishing grounds, safe diving techniques, oral traditions, myths and beliefs. Thus, to be able to understand experiences with the oceans, one has to make use of an array of sources. The two case studies discussed in this article primarily utilise information obtained through ethnographic surveys using participation-observation and interviews, that address local traditions, both past and present experiences, maritime heritage and concerns for the future (Hong and Rahn 1967; Kato 2007, 2009, 2019; Lim, Ito, and Matsuda 2012; Chisholm Hatfield and Song 2019; Song 2020).

Phenomenological studies in archaeology have been met with critiques of subjectivity (Thomas 2006), similar arguments can be made for anthropology or ethnography. The same landscape can be seen in multiple ways through the lens of a variety of people. However, by embedding interpretations into a framework of external references and by establishing a firm context in which interpretations happen, subjectivity can be kept at a manageable level. Phenomenology as a method of examining past and present experiences with the ocean can be enhanced by combining it with other theoretical approaches. The origins of phenomenological studies in landscape studies have resulted in a primarily terrestrial perspective, which has marginalised the ocean, viewing it only as a backdrop or boundary to land, rather than recognizing it as a space in its own right (Farr 2006).

A common theoretical approach to study aquatic lifeworlds is the seascape, although the definition of what that term means can vary. Westerdahl and Cooney put emphasis on the relationship between land and sea while Ford sees the sea in its own right (Cooney 2003; Ford 2011; Westerdahl 2011). The author defines a seascape as a middle ground between land and water, viewable as connected and existing independently. As the two case studies presented here are located in the Pacific and in line with the focus on oceans promoted in the Ocean Decade, ‘seascape’ will be replaced by ‘oceanscape’ henceforth.

However, although phenomenology proves useful for analysing human experiences with their aquatic lifeworlds, adjustments need to be made. Unlike landscapes, the sea neither yields material remains on its surface nor is it easily explored through a researcher’s body (Berg 2007). Oftentimes, the ocean has been called a blank, formless or featureless space in scholarly writings and the research of seascapes has been marginalised in academic discourses (Wigen 2007). Recently, however, compelling arguments have been made to recognise the materiality and temporality of the sea. Individuals and cultures understand and experience the ocean as a space that has character and agency and even a personality by itself (Anderson and Peters 2014; Steinberg and Peters 2015; Peters and Steinberg 2019; Campbell 2020). To an experienced sailor, the surface of the ocean becomes readable through wave patterns, for example, and changes in colour can indicate reefs, shallows or sudden depths (Lewis 1971; Riesenberger 1972). This indicates a much-needed shift towards the ocean as the centre of human geography instead of placing it at the margin and a strong recognition that the ocean is its own world with embodied human experience. The longstanding binary between land and sea needs to be overcome. Instead, one should focus on fluidity, both in terms of the materiality of the ocean and its definition as a space (Anderson and Peters 2014; Peters and Steinberg 2019) while being cautious of going too far and trying to label everything as ocean or ocean-adjacent (Anderson 2019).

CASE STUDIES: AQUATIC LIFEWORLDS AND SUSTAINABILITY

Diving women have a long tradition on the shores of the Korean Peninsula and the Japanese Archipelago. Archaeological remains indicate that the practice began in the 4th Century. These women practise freediving. Two different approaches are used, unassisted (*cachido*) and assisted (*funado*) dives, the former usually dives to a depth between 4 to 6 metres and the latter to a depth between 7 and 15 metres.

The Ama of Japan

The term ‘Ama’ was first used in the 12th Century to describe a fisherperson. Initially, the term was used for both men and women, but over the years the term became primarily associated with female divers. According to a survey in 1989, the largest number of Ama or found in Chiba, Mie, Nagasaki and Iwate prefectures. They dive for seaweeds, shellfish, urchin, lobster, oyster, octopus and abalone, the latter being the preferred catch. Over the past decades, several surveys have been conducted amidst groups of Ama (see, for example, Maraini 1962; Hong and Rahn 1967; Martinez 2004; Kato 2007, 2009, 2019; Lim, Ito, and

Matsuda 2012). Lim, Ito and Matsuda, for example, conducted a study among the Ama of Yahataura village of Ashibe Town, Iki City, Nagasaki prefecture, using participant observation, focus group discussion and interviews. During their study, with data collection in 2008, the authors found that most Amas were in the age bracket between 50 and 60, and numbers were projected to decline over the coming years. This is a steady trend that began decades ago. In 2004, there were 54 Ama in Yahataura (Lim, Ito, and Matsuda 2012) compared to 120 in 1972 with ages ranging from 17 to 65 (Sato 1973). They identify three main factors that contribute to the issues Ama has to face in the present: dwindling resources, risks and health hazards due to increased pollution, and the marginalisation of women in the fishing industries. The Ama in Yahataura made the conscious decision not to wear wetsuits, the reduced diving time is meant to counter the dangers of over-harvesting resources and the fishing season for abalone, turban shells and sea urchin has been shortened (Sato 1973; Lim, Ito, and Matsuda 2012). The adoption of scuba gear could drastically increase their harvest but would threaten the environment in the long-term. Some villages in Japan have outlawed the use of wetsuits to prevent overharvesting for that reason (Hong and Rahn 1967). The Ama possesses an acute sense of ethics: what they fear most is uncontrolled harvest, not any dangers from the ocean, which explains the initial resistance to new diving equipment (Kato 2007, 2009). More pressing, however, is the fact that the Ama are not involved in the structural organisation of the Fisheries Cooperative Association (FCA) which regulates access and control to fishery resources, and therefore have no say in the administrative and managerial decision-making process (Lim, Ito, and Matsuda 2012).

The effort to have Ama divers included in UNESCO's intangible cultural heritage list is ongoing, a first step towards reaching this goal was the registration as an Important Intangible Folk Cultural Property within Japan. Their coexistence with the ocean through sustainable fishing makes them an important part of ocean heritage as a whole. Their deep awareness of the marine ecosystems they rely on, leads them to responsible and sustainable harvesting and they are important members of the coastal communities they live in. The hope is that by recognising their importance to the nation or even worldwide, the profession becomes revived and their knowledge will continue to ensure sustainable harvesting of marine resources (Ishihara 2017). Traditional practice of women divers has become a popular tourist attraction in recent years. However, the real power of the Ama lies in their knowledge, most of it tacit. Ethnographic fieldwork between 2015 and 2017 in Toba, Mie Prefecture; Minami-cho (Abu, Izari), Tokushima Prefecture; Iki Island in Nagasaki, Kuji in Iwate, and Chikura in Chiba Prefecture to elicit oral histories of Ama, showed that among the study participants, many were involved in tourism activities, where they would offer Ama cuisine and cultural experiences combined with storytelling, centred around the Ama hut, or offer an Ama experience including diving and harvesting shells. However, stereotypical images prevail and Ama sometimes gets idealised or is placed in a 'fixed tourist scape of romanticised heritage' (Kato 2019, 949).

The Haenyeo of South Korea

The Haenyeo of South Korea has been part of UNESCO's List of Intangible Cultural Heritage since 2016. Haenyeo fisheries on Jeju are dispersed over 102 fishing villages and geographically cover fishing grounds within a distance of 1.5 kilometres (km) from the coastline and a depth of seven meters (m) at low tide. As of 2017 they produced 90 per cent of all shellfish exported from the island, thus being a driving force of the local economy (Song 2020).

The Haenyeo face comparable challenges to the Ama. Their numbers have decreased from 14,000 in the 1970s to 4,500 in 2015. Women are hesitant to pursue the line of work of their foremothers due to its great physical strain. In the 1970s, the government initiated funding for wetsuits in order to alleviate the cold and enhance the diving time to boost harvests. Despite this, according to one Haenyeo's assessment, their culture could disappear within approximately thirty years (Mundy 2015). The TEK of the Haenyeo is connected to changes regarding climate change and island culture. It is based on a lengthy oral history transmitted over generations. Haenyeo can be seen as stewards of seascapes and landscapes. A field study by Chisholm Hatfield and Song conducted on Cheongsando, Yeosodo, Jeju, Saengildo, and Udo showed the importance

of Haenyeo in regard to sustainability efforts. The Haenyeo are a source of information about environmental issues, having developed an acute sense for change. The resources they harvest, shellfish, seaweed and abalone, for example, are steadily declining. The Haenyeo react by implementing countermeasures such as planning sustainable harvest collections, reseeding ocean resources or moving to other islands. Their diving techniques are non-intrusive and, similar to the Ama, they adhere to strict guidelines to ensure this remains the case, even with the use of wetsuits. They understand precisely what is at stake, therefore upholding their tradition and history in the present and future. However, their environmental knowledge is not as highly appreciated as their economic impact or role in tourism. (Chisholm Hatfield and Hong 2019). Their knowledge of the harvesting season was developed through observation with the goal of keeping marine biodiversity alive. The system they developed over time is made sustainable by adhering to specific harvest seasons and size restrictions for shellfish, designation of fishing grounds and ensuring ecological and social stability but these factors need to be maintained continuously to ensure smooth running in the future. Local policies on conserving and managing the ocean cannot succeed without taking their expertise into consideration (Song 2020).

DISCUSSION AND CONCLUSION

Both Ama and Haenyeo are endangered groups of people due to various factors. Despite recognising them as bearers of intangible maritime cultural heritage and indispensable parts of oceanscape, much work still needs to be done. Other than trying to bolster the numbers through social measures, they need support to grapple with external factors that they have no means of controlling. The consequences of pollution and climate change, erosion due to coastal development, and marginalisation are all factors that can and need to be amended if Ocean Decade's sustainability goals want to be reached. The relationship between human and nature becomes sustainable when it is reciprocal, whether that means a practical, symbolic or conceptual relationship. Connectivity with the natural world is sensory, and grounded in everyday experiences (Kato 2007, 2009). These women have a trove of experience in dealing with the oceanscape in a sustainable way and they prove it every day. They feel the waters with their bodies, they subject their livelihood, their beliefs, their past, present and future to the ocean and have proven throughout their long history that they are ocean literate in the literal sense.

The oceanscape allows people to help recognise their place in relation to the surrounding environment, caring for it and being cared for in return. The Ama and Haenyeo, despite being recognised as living intangible heritage, live in a present that is under threat due to dwindling numbers, pollution, and social and economic issues. These issues are not limited to their local coastscape nor caused by their communities. They are embedded within the larger context of the global oceanic environment. Their vital role should not be seen only or mostly as a heritage preserved through museums or as part of tourism and education efforts, but they need to be actively involved in all discussions together with stakeholders from policy and business and private sectors. They immerse their body in the ocean every day multiple times, their lives tied to it in many ways and adhering to a strictly sustainable harvesting cycle of their own volition. Their long history grants them the necessary authority for successful long-term sustainability ventures. Moreover, their focus on maintaining the ocean instead of exploiting it has been demonstrated time and time again.

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