# At Sea in the Twenty-First Century

## Tanya J. King and Gary Robinson

Contrary to the idiom, people "at sea" have always been "at home." Since the Mesolithic and before, human communities have lived closely with the ocean, not simply as a domain to visit temporarily in order to extract resources, food, specimens, experiences, or literary analogies. Figurative depictions of seascapes as vast, unpeopled, and temporally constrained are at odds with the evidence depicted in this volume. Rather, oceans persistently constitute the principal organizing spaces through which many communities dwell in the world.

In this volume, we present rich ethnographic data, both archaeological and anthropological, demonstrating the centrality of marine environments to the lives of peoples around the globe. While the majority of people experience the ocean as an alternative to a largely terrestrial existence, the voices we present in this volume tell a story with a very different emphasis. For these people, the sea "grounds" them in a way both figurative and literal.

The book is decidedly Ingoldian. This is unsurprising, given that the volume sprung from a conference panel organized by a number of Ingold's students and where Ingold acted as the panel discussant. In particular, Ingold's notion of "meshwork" emerges as a binding feature of most chapters, albeit implicitly. The concept itself draws on the phenomenological characteristics of much of Ingold's anthropology, harnessing the metaphor of the "network" as a point of contrast with which to depict the fluid and perpetual coming-into-being of creatures and materials:

> I return to the importance of distinguishing the network as a set of interconnected points from the meshwork as an interweaving of lines. Every such line describes a flow of material substance in a space that is topologically fluid. I conclude that the organism (animal or human) should be understood not as a bounded entity surrounded by an environment but as an unbounded entanglement of lines in fluid space. (Ingold 2011, 64)

It is Ingold's refusal to imprison materials and organisms in the categories fabricated by humans—animate and inanimate, static and dynamic, animal and material, terrestrial and marine—that enables him to conceive of a world that is mutually constituting. For Ingold, ontological genesis is a continuous state, brought about by the movement of people and things and ideas as they go about their daily business. "In this animic ontology, beings do not propel themselves across a ready-made world but rather issue forth through a world-in-formation, along the lines of their relationships" (Ingold 2011, 63).

This volume compiles a number of ethnographic stories in which humans "issue forth through a world-in-formation," encompassing both terrestrial and marine locations. Indeed, the chapters encourage us to look at the world in a way that problematizes the distinction between land and sea, and to recognize the continuity with which people live and enliven their surroundings.

## Human Engagement with the Sea: A Shifting Discourse

For some forty years of Western thought, the nature of the relationship between people and the ocean has been under increasing scrutiny. Key reasons for this scrutiny include the intense industrialization of commercial fisheries since the 1970s, the expansion of oil and gas exploration, the development of the *United Nations Convention on the Law of the Sea* (1982) (which seeks to protect the marine resources of sovereign nations from outsiders), and the "awakening" of those in the West to "environmental" concerns. Under discussion has been the rightful place of humans in the marine environment: How should people engage with the sea? What, if anything, should be extracted? What limits and allowances should be imposed in order to ensure people engage with the ocean properly? The answers have been varied and often contentious, reflecting the myriad ways in which people engage with, and attribute meaning to, the ocean. As such, nation-state restrictions and affordances have been applied to individuals, corporations, firms, categories of people, and even to the personification of "the environment" itself, each group seeking to establish that its way of valuing the ocean is best. As Castree (2010, 1731) explains, "Struggles over nature are always already struggles over meanings."

Examples of such "struggles" include those between commercial and recreational fishers (Kearney 2002; Cooke and Cowx 2006), where competition for a shared resource, as well as the perception of incongruous ideological motivations, can prompt antagonisms on the water as well as in the political realm (Voyer et al. 2017). Likewise, there are heterogeneous

views on how the resource should be used and by whom within the angling sector itself (e.g., Arlinghaus et al. 2007), as well as among those focused on commercial fishing communities (Smith, Sainsbury, and Stevens 1999; Beddington, Agnew, and Clark 2007; Hilborn 2007). The dynamics between commercial fishers and indigenous resource users (whether commercial or subsistence) can also be characterized by disagreements over who has the right to engage the environment in a particular way (Barber 2010; McCormack 2012; Breslow 2014). Neither commercial, recreational, or traditional fishers have been particularly successful in asserting their rights to the ocean over those claimed by powerful multinational corporations such as BP (formerly British Petroleum), who supply the world with oil and gas (Cicin-Sain and Tiddens 1989; McCrea-Strub et al. 2011; Pinkerton and Davis 2015; Pomeroy, Hall-Arber, and Conway 2015). Of course, those who advocate for "the environment" may argue that extractive resource use of any kind—by fishers, oil and gas companies, wind and tidal energy developers, bioprospectors, or beachcombers—is incommensurate with the preservation ethic of nonextraction (Drengson and Devall 2010; King 2005, 356).

Underlying these attempts to control human engagement with the sea has been an assumption that it is possible for humans to remove themselves from the ocean, a perspective reinforced by the almost exclusively terrestrial or coastal experiences of humans. As King explains (2005, 353): "Most people experience the ocean in absentia. Unchallenged by conflicting experiences, the public is potentially able to imagine an ocean ecosystem without humans." This "imagined" environment informs the expectations that people and their governments have of the human–marine relationship; conflicts can arise when incongruous meanings converge to challenge the lived experiences of diverse user-groups (King 2005).

It is in the context of such struggles, and public discourses that seek to limit—or even halt—human interactions with the ocean, that we present this volume. In these pages, we challenge the notion that the sea is not the proper domain of people. Acheson has stated: "The sea is a dangerous and alien environment, and one in which man is poorly equipped to survive. It is a realm that man enters only with the support of artificial devices . . . and then only when weather and sea conditions allow" (Acheson 1981, 276). However, people *do* live at sea, and with far more domesticity and less drama than Acheson's oft-quoted passage suggests. The case studies we present range from industrialized commercial fisheries in Iceland, Australia, and the US to combined commercial and subsistence focused ocean-goers in Greenland to car-carrier employees from the Philippines. Evidence of past, intimate associations with the ocean is provided

by archaeological accounts from the UK, South America, and Australia. Proposing a marine environment without human interaction ignores the evidence that humans have a long-spanning and rich relationship with the ocean.

## Uniting Landscape and Maritime Archaeology

The significance of the sea to sites on the land has a long but sporadic history within archaeological research. Davies argued that the location of megaliths along the shores of the Irish Sea could be linked to navigation markers within the Irish Sea (1946). Bowen (1972) considered the geographical distribution of megaliths in the light of later sea traffic, the voyaging of Celtic saints, and pilgrims using skin boats. He concluded that as far back as the Mesolithic and Early Neolithic, an established pattern of movement and trading, from peninsula to peninsula and coast to coast, had been established and that the origin of this movement was the pursuit of migratory fish. In response to Bowen, Clark (1977) suggested that the apparent cultural continuity seen in the occurrence of passage graves along the Atlantic fringes of northwest Europe could be best explained as being the result of sea-born fisher-peoples. The distribution of megaliths throughout this region was thus accounted for though the movements of people following the migratory movements of fish along the Atlantic seaboard. These views were developed when modified diffusion was deemed the social mechanism behind the appearance of similar monuments in various sea-separated places (Renfrew 1973, 20–47). From the 1970s onward, reaction against the idea of diffusion within British prehistory, in conjunction with the failure of finding a common origin for megaliths, has served to exclude movement as a variable in the lives of prehistoric people.

In the past twenty years, landscape archaeology in Britain has developed in many directions, providing increasingly sophisticated understandings of past peoples' sense of place. In part, this change of perspective has come about through a growing awareness of indigenous peoples' perceptions of landscape and the realization that landscapes are deeply ingrained with meaning for the people who inhabit them (Basso 1984; Hirsch and O'Hanlon 1995; Ucko and Layton 1999). A central theme within studies of prehistoric landscapes has been a focus on the settings of sites and monuments and how they emphasize and signify certain aspects of the lived landscape (Thomas 1993; Tilley 1994; Richards 1996; Cummings and Whittle 2003). While this work has certainly energized debate and research within archaeology, it has equally received criticism for both

its interpretation of the archaeological record and its lack of a coherent fieldwork strategy (Fleming 1999, 2005; Brück 2005; Barrett and Ko 2009).

In contrast to the growing body of work that considers the social construction of landscape, little attention has been given to the sea. Some archaeologists have noted the significance of the sea to the settings of monuments, where the sea is interpreted as a symbolic or metaphorical backdrop to life, and death, on the land (Scarre 2002; Cummings and Whittle 2003). But prehistoric coastal and island communities did not simply gaze across the sea—they physically engaged with it through the daily practices of seafaring and fishing. In this respect, the sea was not a neutral backdrop for human action but an active medium through which prehistoric communities lived, experienced, and ordered their world. A consideration of social practices associated with the sea is thus central to any interpretation of the archaeological record of island and coastal communities.

The research agenda of maritime archaeology has traditionally focused on technical aspects of boat construction and seaworthiness, the identification of landing places, and the role of both activities in exploring movement and trade (Muckelroy 1980; Wright 1986; McGrail 1987, 1988, 1989; Johnstone 1988; Robinson, Shimwel, and Cribbin 1999). While there is clear overlap in research between landscape and maritime archaeology, little communication has historically been made between these two sub-disciplines, each having distinct research agendas and avenues of publication. The separation between maritime and terrestrial archaeology creates an imbalance within the discipline, especially as most coastal and island communities in the past would have been based upon aspects of both environments (Crumlin-Pedersen 2010, 14; Westerdahl 2011, 311).

The agenda of maritime archaeology has recently been questioned, and vital new approaches that emphasize the social dimensions of the sea have arisen (Chapman and Gearey 2004; Van de Noort 2004, 2006; Farr 2006; Crumlin-Pedersen 2010). Much of this research has been developed by successfully bringing together maritime and landscape-based approaches in order to develop a critically aware social maritime archaeology. Key to this change has been Westerdahl's influential paper, which called for a refocus of maritime archaeology toward the "maritime cultural landscape" (1992). Westerdahl's concept of the maritime cultural landscape aims to incorporate all aspects of the human utilization of maritime space, including boats, landing places, settlement, fishing, hunting, and all of the attendant features and material culture of maritime communities (1992, 5; 2011, 337). Westerdahl's work had the effect of creating a more unified discipline where maritime and land-based archaeology share common themes and research questions (Flatman 2011, 311).

Recent developments within island archaeology have also highlighted the ways in which seascapes share many similarities with landscapes (Broodbank 2000; Robb 2001). The publication of a dedicated "seascapes" edition of *World Archaeology* marked an important recognition of the importance of the maritime social landscape within land-based archaeology (Cooney 2003). Another landmark in the move toward the widening appreciation of maritime issues within mainstream archaeology was the discovery in 1992 of the Dover Boat (Clark 2004a). The multidisciplinary approach adopted by this project and the emphasis placed upon the social significance and context of the boat (Clark 2004b, 3; 2010, 187) has contributed to a widening appreciation of maritime perspectives in mainstream reports and papers (Adams 2007, 219; Strachen 2010). Equally, the discovery and publication of the Dover Boat has brought about a renaissance of research into the entangled histories of prehistoric communities of the English Channel/Manche-Mer du Nord region (Marcigny and Talon 2009; Needham 2009; Philippe 2009; Lehoërff 2012).

If we are to attempt to discuss the use of the sea by coastal and island communities, it is essential that the approaches and themes explored within the complementary fields of landscape archaeology, maritime archaeology, and maritime anthropology are considered alongside one another in accounts of the past, as well as being brought to bear on studies of the present. Only by bringing together these fields of research can we provide a rich and meaningful understanding of engagements with the sea. In order to accomplish this task, we must consider a variety of available archaeological resources, including the configuration of the prehistoric coastline, the archaeological evidence for boats, the identification of landing places, the evidence for fishing and hunting, and systems of wayfaring. Only by exploring such themes can we begin to understand potential relationships between archaeological sites on land and the prehistoric use of the sea. Likewise, it is only through recognition of the ongoing nature of the relationship of humans with the ocean that we can appropriately understand the ways in which people continue to be at home on the waves.

## Chapter Summaries

Cobb and Ransley open the volume with a chapter that combines the observations of both an archaeologist and an anthropologist. While drawing on the authors' individual field studies—in the archipelagos of Mesolithic western Scotland and modern-day Kerala, India, respectively—the chapter explores the key premise of the volume: that people have always

been just as much at home at sea as on land. Indeed, their discussion problematizes the notion of any fundamental distinction between the two "scapes"—land and sea—and proposes a more integrated, Ingoldian view of the world that captures the meshwork of living in a world simultaneously earthy and watery.

Howard explores the processes through which Scottish fishermen come to know particular marine places or, rather, how these places simultaneously come into being through the purposeful labor, social encounters, and historically situated movements of fishermen. Places like Wullie's Peak emerge via the shared experiences, conversations, stories, and interactions among fishermen, both in and around these locations on the ocean as well as in the pubs and homes of the men for whom the places are salient. Drawing on Gibson's (1979) notion of "affordances"—a concept later employed by Ingold to establish the mutually constituting nature of people and places—Howard evocatively describes the day-to-day activities of Scottish fishermen as a process that "makes" the grounds that concurrently shape their activities, social encounters, and experiences of place.

Klokler and Gaspar's chapter explores the archaeological evidence from shell mounds along the Brazilian coast, particularly in the southern region of Santa Catarina, where populations built mounds up to eight thousand years ago. Rather than inferring a dumping ground for the remnants of feasts or the waste from temporary settlements, Klokler and Gaspar use the archaeological evidence to paint a picture of populations who were relatively sedentary, wide-ranging in their resource exploitation (partly through the use of maritime technologies) and who exhibited complex sociopolitical organization within, and among, groups. The evidence points to the importance of large bodies of water (such as lagoons and bays) in the establishment of stable territorial settlements and denser, more complex population structures than previously depicted.

Wickham-Jones's chapter, like so many in the volume, challenges us to see human encounters with land and sea as part of the same experience. Meandering over the Scottish mainland, around the islands of Skye and Orkney, and the ocean in between, Wickham-Jones stresses the dynamism of these spaces over the past ten thousand years and the fuzzy nature of the boundary as changing ocean levels have altered topography: coasts have emerged and retreated, mountains have sunk into the sea; for the peoples of the past, nothing was fixed. Following from this, she explores how the experience of being on land is informed by historical, social, and material experiences originating at sea, and vice versa, blurring the distinction between the two. For the archaeologist, this viewpoint is significant as it challenges the dominance of present paradigms, which were founded on dry-land research. If we are to understand the lives of our

ancestors, we must broaden our understanding of their world by apprehending the changing and fluid nature of their experience.

Elixhauser explores orientation and wayfaring within the partly frozen waters of East Greenland. The chapter examines strategies adopted by the Iivit in finding safe passage through ice and the communication of this information by crew members. Issues of orientation and wayfinding are recurrent themes of communication, not only among boat drivers and passengers but also with other East Greenlanders encountered along the way. The chapter examines the importance of gestures, silences, and other modalities of nonverbal communication. For Elixhauser, just as for numerous authors in this anthology, communication goes beyond information transmittance between sender and receiver; it is a creative process that engages all of the senses.

Simonetti's chapter takes us beneath the surface of the water on the Chilean coast, where a group of Chilean and Argentinean underwater archaeologists explore a Pleistocene site discovered during the process of building a gas station. Simonetti explains that due to the physical challenges posed by diving, individuals dive in groups of two or three at a time. The chapter focuses on how these people communicate what they observe. The role of gestures is key to Simonetti's description, but he is careful not to suggest that divers have an image in their heads that they convert to an external picture using hand-signals. Rather, gestures both represent and transfer embodied knowledge among people in a way that does not reach the level of verbal language (speech) or even image (picture); the gestures themselves are the ideas being conveyed. Though not explicit in the link, Simonetti's description of gestures as a process of both knowing and becoming fits well with the Ingoldian notion of meshwork, where the focus is on the generating force of perpetual movement rather than on the information gleaned through a knowledge of static points. In this way, Simonetti's chapter problematizes the distinction between the underwater environment and the shore, encouraging us to see "how we inhabit together, through movement, a fluid world."

Robinson explores a prehistoric seascape that has been buried beneath alluvium as result of changes in sea level, long-term sediment transportation, and storm events. The chapter examines the exceptional prehistoric archaeology of Tremadoc Bay in northwest Wales, demonstrating that the significance of this impressive range of monuments and material culture can only be understood in reference to models of the configuration of the ancient coastline. Using Westerdahl's concept of the "maritime cultural landscape" (1992, 2011) the archaeological record of Tremadoc Bay is used to rethink the significance of this evidence for the study of its prehistoric maritime and coastal communities.

James evokes the worldview of the Yan-nhaŋu of Northern Australia, whose intimate knowledge of winds and other ecological features and events informs movement among the Crocodile Islands in the harvest of resources. As James says, "The synchronous relationship of the ancestors with their environment present in myths continues to shape the patterns of Yan-nhaŋu people's behavior as they harmonize their travels with the time and tides of their maritime homelands and the edicts of ancestral laws." James draws on the pioneering anthropological work of Donald Thomson, who described the use of fish traps and explored the complex intersection of marine technology, ecological knowledge—terrestrial, marine, and celestial—harvesting strategies, language, ritual, kinship, and cosmology. For example, for Yan-nhaŋu, the moon represents an ancestral figure that is perpetually sacrificed to atone for his drowning of two sons in a fish trap. Modern day fish traps are deployed according to the cycles of the moon, and various other harvesting practices coincide with the movement of celestial bodies; the cycles of plant, animal, and marine life; and the coming together of people within and among social groups. The generative nature of the movement of people and seasons and winds and creatures—again—evokes the "meshwork" that appears and reappears in the chapters of this volume.

Guilfoyle, Anderson, Reynolds, and Kimber present the results of a community-led research program documenting and interpreting the cultural seascapes of the Recherche Archipelago. Like that of Robinson (in this volume), this chapter draws on Westerdahl's concept of the maritime cultural landscape in an attempt to reconstruct the past maritime landscape of the archipelago. The chapter adopts a multidisciplinary approach to the archaeological record, modeling the process of postglacial sea level changes and documenting the human responses to these events over the last ten thousand years. This reconstruction of the ancient coastline of the archipelago allows the authors to place newly discovered sites, identified via fieldwork, back into an ancient maritime context. The scope of this chapter is chronologically wide, covering traces of human activities from prehistory to post-British colonial settlement. The strength of this research lies in its inclusive approach, allowing different perspectives to be voiced while sharing a single goal—to learn how to best understand, manage, and protect a shared natural and cultural landscape.

The role of women at sea is addressed in the richly ethnographic chapter provided by Willson and Tryggvadóttir. Challenging the popular Icelandic notion that women working in the fishing industry are anomalies or curiosities, Willson and Tryggvadóttir explore the experiences of contemporary large-vessel Icelandic seawomen, who must elude stereotypes of their own inadequacy before their male peers consider them equal sea-

farers. These women challenge stereotypes, not by styling themselves as "men," nor by explicitly driving a "feminist" agenda through asserting that "women," as a category, belong at sea. Rather, through hard work, persistence, strategy, and cleverness, successful seawomen establish themselves as known and trusted individuals.

Tejsner's chapter positions the life worlds of Greenlander Qeqertarsuarmiut in relation to broader Western narratives about climate change. He takes as a point of contrast the paternalistic depiction of all Greenland Inuit—like many indigenous or subaltern populations—as being particularly vulnerable to an inaccurately broad definition of climate change, the metaphor for which is melting sea ice. Tejsner describes the intimate association of the Qeqertarsuarmiut with their local environment, in which ice changes, tides flow and ebb, animals and sea creatures emerge, vanish, and reappear in their habitats, on their plates, and through their stories, in a continuous flow of life which the people influence as informed and strategic agents. Tejsner provides an alternative discourse to that of "risk," a challenge to the notion that climate change is unproblematically linked to melting sea ice, with Greenlanders posited as helpless subjects in a global narrative.

Swift's contribution problematizes the characterization of the onboard environment of professional Filipino seafarers as being the "shop-floor" rather than "domestic" sphere of the village where men's families reside. Drawing on fieldwork in both locations, Swift describes an all Filipino-crewed car carrier as displaying features that might be associated with the nurturing, safe, and feminine space of "home," while in the union-run Seamen's Village in the Philippines, the business of the shipping companies plays out in the day-to-day work and social activity of the seafarers' families. Challenging the characterization of Filipino workers as passive colonial subjects who have taken to seafaring as a stepping-stone to land-based work, Swift depicts them as upwardly mobile agents who have deliberately carved out professional positions in a global labor network that operates—at least in part—at sea. Rather than leaving their homes to enter a hypermasculine workplace, the Filipino seafarers are at home at sea.

Boucquey and Campbell take us to Carteret County in North Carolina, US, where conflict between commercial and recreational fishers is underpinned by similarities and differences in the experiences, practices, and motivations of the people of each sector. Both value the process of engaging with the natural world and meeting the challenges of overcoming an evasive prey. Professionals catch and sell fish in order to support their families, thus forming a core part of their identity and their links to heritage and place. Conversely, recreational fishers tend to make links between their experiences of fishing and quality childhood time spent with

male family members, being necessarily engaged in a leisure pursuit. By richly illustrating the overlaps and distinctions between the experiences of the two sectors, Boucquey and Campbell stress that successfully mitigating conflict between recreational and professional fishers will require not just careful resource allocation, but attention to the key ideological differences that inform the ongoing conflict.

Stacey and Allison explore the maritime-orientated livelihoods of the Sama-Bajau of Southeast Asia. Taking a wide chronological view of this group, the authors delve into the Sama-Bajau's history, dispersal, and settlement from the eleventh century to the present. Specifically, they examine the dependence of these specialist communities upon the highly biodiverse island, coral reef, and oceanic environments of the region and how they have responded to the social, economic, and environmental changes of the contemporary world. The chapter explores the concept of maritime nomadism through a detailed consideration of the livelihood strategies of the Sama-Bajau. It considers the negative connotations that have been associated with this group, connotations that largely result from a misunderstanding of the social complexities of their migratory maritime-orientated livelihoods. The authors argue for a more culturally informed approach to conservation initiatives in the region and for a reconsideration of the role of the Sama-Bajau within such initiatives.

King explores the territoriality of commercial shark fishermen in Australia and the genesis of particular boundaries among and between men and places at sea. While informal territoriality has generally been depicted in contrast to the formal regulations and classifications of fisheries managers and scientists, King argues that distinguishing too rigidly between formal and informal management arrangements ignores the mutuality of the two systems. Rather, she argues, perceptions of the ocean are invested with the encounters and salient categories found both at sea (with other fishermen) and on land (with fishermen, managers, and others). Indeed, in the course of their duties, and particularly their efforts at comanagement, fisheries managers encounter the social dynamics and territorial disputes of fishermen, which are subsequently incorporated into formal management structures.

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# References

Acheson, J. M. 1981. "Anthropology of Fishing." *Annual Review of Anthropology* 10, no. 1: 275–316.

Adams, J. 2007. "Joined-up Boats: Maturing Maritime Archaeology." *Antiquity* 81, no. 311: 217–20.

Arlinghaus, R., S. J. Cooke, J. Lyman, D. Policansky, A. Schwab, C. Suski, S. G. Sutton, and E. B. Thorstad. 2007. "Understanding the Complexity of Catch-and-release in Recreational Fishing: An Integrative Synthesis of Global Knowledge from Historical, Ethical, Social, and Biological Perspectives." *Reviews in Fisheries Science* 15, no. 1–2: 75–167.

Barber, M. 2010. "Coastal Conflicts and Reciprocal Relations: Encounters between Yolngu People and Commercial Fishermen in Blue Mud Bay, Northeast Arnhem Land." *The Australian Journal of Anthropology* 21, no. 3: 298–314.

Barrett, J. C., and I. Ko. 2009. "A Phenomenology of Landscape: A Crisis in British Landscape Archaeology?" *Journal of Social Archaeology* 9, no. 3: 275–94.

Basso, P. 1984. "Stalking with Stories: Names, Places and Moral Narratives Among the Western Apache." In *Text, Play and Story: The Construction and Reconstruction of Self and Society.* Edited by E. Bruner, 19–55. Washington: Proceedings of the American Ethnological Society.

Beddington, J. R., D. J. Agnew, and C. W. Clark. 2007. "Current Problems in the Management of Marine Fisheries." *Science* 316, no. 5832: 1713–16.

Bowen, E. 1972. *Britain and the Western Seaways.* London: Thames and Hudson.

Breslow, S. J. 2014. "Tribal Science and Farmers' Resistance: A Political Ecology of Salmon Habitat Restoration in the American Northwest." *Anthropological Quarterly* 87, no. 3: 727–58.

Broodbank, C. 2000. *An Island Archaeology of the Early Cyclades.* Cambridge, UK: Cambridge University Press.

Brück, J. 2005. "Experiencing the Past? The Development of a Phenomenological Archaeology in British Prehistory." *Archaeological Dialogues* 12, no. 1: 45–72.

Castree, N. 2010. "Neoliberalism and the Biophysical Environment 1: What 'Neoliberalism' is, and what Difference Nature Makes to it." *Geography Compass* 4, no. 12: 1725–33.

Chapman, H., and B. Gearey. 2004. "The Social Context of Seafaring in the Bronze Age Revisited." *World Archaeology* 36, no. 4: 452–58.

Cicin-Sain, B., and A. Tiddens. 1989. "Private and Public Approaches to Solving Oil/Fishing Conflicts Offshore California." *Ocean and Shoreline Management* 12, no. 3: 233–51.

Clark, J. G. D. 1977. "The Economic Context of Dolmens and Passage Graves in Sweden." In *Ancient Europe and the Mediterranean: Studies Presented in Honour of H.O'Neil Hencken.* Edited by V. Markotic, 35–49. Warminster: Aris and Phillips.

Clark, P., ed. 2004a. *The Dover Bronze Age Boat.* London: English Heritage.

———. 2004b. "Introduction." In *The Dover Bronze Age Boat.* Edited by P. Clark, 1–3. London: English Heritage.

———. 2010. "Afterword: The Wet, the Dry and the In-between." In *Carpow in Context: A Late Bronze Age Logboat from the Tay.* Edited by D. Strachan, 179–90. Edinburgh: Society of Antiquaries of Scotland.

Cooke, S. J., and I. G. Cowx. 2006. "Contrasting Recreational and Commercial Fishing: Searching for Common Issues to Promote Unified Conservation of Fisheries Resources and Aquatic Environments." *Biological Conservation* 128, no. 1: 93–108.

Cooney, G. 2003. "Introduction: Seeing Land from the Sea." *World Archaeology* 35, no. 3: 323–28.

Crumlin-Pederson, O. 2010. "'Archaeology and the Sea in Scandinavia and Britain: A Personal Account' by Ian Friel." *International Journal of Maritime History* 22, no. 2: 350–51.

Cummings, V., and A. Whittle. 2003. *Places of Special Virtue: Megaliths in the Neolithic Landscapes of Wales.* Oxford: Oxbow Books.

Davies, M. 1946. "The Diffusion and Distribution Pattern of the Megalithic Monuments of the Irish Sea and North Channel Coastlands." *The Antiquaries Journal* 26, no. 1–2: 38–60.

Drengson, A. R., and B. Devall. 2010. "The Deep Ecology Movement." *Trumpeter* 26, no. 2: 57–78.

Farr, H. 2006. "Seafaring as Social Action." *Journal Maritime Archaeology* 1, no. 1: 85–99.

Flatman, J. 2011. "Places of Special Meaning: Westerdahl's Comet, 'Agency' and the Concept of the 'Maritime Cultural Landscape.'" In *The Archaeology of Maritime Landscapes.* Edited by B. Ford, 311–30. New York: Springer.

Fleming, A. 1999. "Phenomenology and the Megaliths of Wales: A Dreaming Too Far?" *Oxford Journal of Archaeology* 18, no. 2: 119–25.

———. 2005. "Megaliths and Post-modernism: The Case of Wales." *Antiquity* 79, no. 306: 921–32.

Gibson, J. J. 1979. *The Ecological Approach to Visual Perception.* London: Houghton Mifflin.

Hilborn, R. 2007. "Defining Success in Fisheries and Conflicts in Objectives." *Marine Policy* 31, no. 2: 153–58.

Hirsch, E., and M. O'Hanlon. 1995. *The Anthropology of Landscape, Perspectives on Place and Space.* Oxford: Clarendon Press.

Ingold, T. 2011. *Being Alive: Essays on Movement, Knowledge and Description.* New York: Taylor & Francis.

Johnstone, P. 1988. *The Seacraft of Prehistory.* London: Routledge.

Kearney, R. E. 2002. "Recreational Fishing: Value Is in the Eye of the Beholder." In *Recreational Fisheries: Ecological, Economic and Social Evaluation.* Edited by Tony J. Pitcher and Charles E. Hollingworth, vol. 2, 17–33. Oxford: Blackwell Publishing Ltd.

King, T. J. 2005. "Crisis of Meanings: Divergent Experiences and Perceptions of the Marine Environment in Victoria, Australia." *The Australian Journal of Anthropology* 16, no. 3: 350–65.

Lehoërff, A., ed. 2012. *Par-delà l'Horizon, Sociétés en Manche et Mer du Nord, il y a 3 500 ans.* Paris: Somogy éditions d'art.

Marcigny, C., and M. Talon. 2009. "Sur les Rives de la Manche: Qu'en est-il du Passage de l'Âge du Bronze à l'Âge du Fer à Partir des Découvertes Récentes?" In *De l'Âge du Bronze à l'Âge du Fer en France et en Europe Occidentale (X$^e$–VII$^e$ siècle avant J-C); la Moyenne Vallée du Rhône aux âges du Fer.* Edited by M.-J. Roulière-Lambert, A. Daubigney, P.-Y. Milcent, M. Talon, and J. Vital, 385–404. Dijon: Revue Archéologique de l'Est, Supplément.

McCormack, F. 2012. "Indigeneity as Process: Māori Claims and Neoliberalism." *Social Identities* 18, no. 4: 417–34.

McCrea-Strub, A., K. Kleisner, U. R. Sumaila, W. Swartz, R. Watson, D. Zeller, and D. Pauly. 2011. "Potential Impact of the Deepwater Horizon Oil Spill on Commercial Fisheries in the Gulf of Mexico." *Fisheries* 36, no. 7: 332–36.

McGrail, S. 1987. *Ancient Boats in North-West Europe: The Archaeology of Water Transport to AD 1500.* London: Longman.

———. 1988. "Assessing the Performance of an Ancient Boat: The Halsholme Logboat." *Oxford Journal of Archaeology* 7, no. 1: 35–46.

———. 1989. "The Shipment of Traded Goods and of Ballast in Antiquity." *Oxford Journal of Archaeology* 8, no. 3: 353–58.

Muckelroy, K. 1980. "Two Bronze Age Cargoes in British Waters." *Antiquity* 54, no. 211: 100–9.

Needham, S. 2009. "Encompassing the Sea: Maritories and Bronze Age Maritime Interactions." In *Bronze Age Connections: Cultural Contact in Prehistoric Europe.* Edited by P. Clarke, 12–37. Oxford: Oxbow.

Philippe, M. 2009. "The Canche Estuary (Pas-de-Calais, France) from the early Bronze Age to the Emporium of Quentovic: A Traditional Landing Place Between South-east England and the Continent." In *Bronze Age Connections: Cultural Contact in Prehistoric Europe.* Edited by P. Clarke, 68–79. Oxford: Oxbow.

Pinkerton, E., and R. Davis. 2015. "Neoliberalism and the Politics of Enclosure in North American Small-scale Fisheries." *Marine Policy* 61: 303–12.

Pomeroy, C., M. Hall-Arber, and F. Conway. 2015. "Power and Perspective: Fisheries and the Ocean Commons Beset by Demands of Development." *Marine Policy* 61: 339–46.

Renfrew, C. 1973. *Before Civilization: The Radiocarbon Revolution and Prehistoric Europe.* Harmondsworth: Penguin Books Ltd.

Richards, C. 1996. "Monuments as Landscape: Creating the Centre of the World in Late Neolithic Orkney." *World Archaeology* 28, no. 2: 190–208.

Robb, J. 2001. "Island Identities: Ritual, Travel and the Creation of Difference in Neolithic Malta." *European Journal of Archaeology* 4, no. 2: 175–202.

Robinson. M. E., W. Shimwel, and L. G. Cribbin. 1999. "Re-assessing the Logboat from Lurgan Townland, Co. Galway, Ireland." *Antiquity* 7, no. 3: 903–8.

Scarre, C. 2002. "Coast and Cosmos: The Neolithic Monuments of Northern Brittany." In *Monuments and Landscape in Atlantic Europe.* Edited by C. Scarre, 84–102. London: Routledge.

Smith, A. D. M., K. J. Sainsbury, and R. A. Stevens. 1999. "Implementing Effective Fisheries-Management Systems-management Strategy Evaluation and the Australian Partnership Approach." *ICES Journal of Marine Science* 56, no. 6: 967–79.

Strachan, D. 2010. *Carpow in Context: A Late Bronze Age Logboat from the Tay.* Edinburgh: Society of Antiquaries of Scotland.

Thomas, J. 1993. "The Politics of Vision and the Archaeologies of Landscape." In *Landscape, politics and perspectives.* Edited by B. Bender, 49–84. Oxford: Berg.

Tilley, C. 1994. *A Phenomenology of Landscape.* Oxford: Berg.

Ucko, P., and R. Layton, eds. 1999. *Archaeology and Anthropology of Landscape.* London: Routledge.

Van de Noort, R. 2004. "The Humber, its Sewn Plank Boats, their Contexts and the Significance of it All." In *The Dover Bronze Age Boat in Context: Society and Water Transport in Prehistoric Europe.* Edited by P. Clark, 90–8. Oxford: Oxbow Books.

———. 2006. "Argonauts of the North Sea: A Social Maritime Archaeology for the 2nd Millennium BC." *Proceedings of the Prehistoric Society,* vol. 72, 267–87.

Voyer, M., K. Barclay, A. McIlgorm, and N. Mazur. 2017. "Connections or Conflict? A Social and Economic Analysis of the Interconnections Between the Professional Fishing Industry, Recreational Fishing and Marine Tourism in Coastal Communities in NSW, Australia." *Marine Policy* 76: 114–21.

Westerdahl, C. 1992. "The Maritime Cultural Landscape." *The International Journal of Nautical Archaeology* 21, no. 1: 5–14.

———. 2011. "Conclusion: The Maritime Cultural Landscape Revisited." In *The Archaeology of Maritime Landscapes.* Edited by B. Ford, 331–44. New York: Springer.

Wright, E. V. 1986. "A Bronze Age Beach Capstan?" *Oxford Journal of Archaeology* 5, no. 3: 309–21.

**Figure 1.1.** Ashtamudi Estuary. Photo by the authors.