REVIEW ESSAY:

Straw Boats and the Proverbial Sea: A Response to 'Island Archaeology: In Search of a New Horizon'

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Abstract

In a recent *ISJ* paper, "Island Archaeology: In Search of a New Horizon", Boomert and Bright (2007) argue that the field of "island archaeology" should be replaced by an "archaeology of maritime identity". We disagree and counter that although islands share many physical, biological, and cultural similarities with continental coasts, coastal zones also grade uninterruptedly into riverine, lacustrine, and terrestrial landscapes, raising questions about the validity of their concept of the archaeology of maritime identity. In our view, island archaeology (the application of archaeology to island settings), regardless of past biogeographical underpinnings, has made major contributions to understanding the historical ecology, human impacts, and cultural developments of islands around the world. A focus on islands by archaeologists has encouraged scholars to study the history of island and maritime societies within a comparative framework that is useful for breaking out of the often provincial focus on a single island or archipelago.

Keywords: islands, archaeology, biogeography, maritime identity, historical ecology

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Introduction

In a recent paper published in ISJ, Boomert & Bright (2007) provide a useful history of thought regarding the archaeology of islands and its historical and theoretical underpinnings. While their overview breaks little new ground (see Yesner, 1980; Kirch, 1986a; 1986b; Broodbank, 1999; Irwin, 1999; Keegan, 1999; Rainbird, 1999; 2004; Terrell, 1999; Erlandson, 2001; Anderson, 2004; 2005; 2006; 2007; Fitzpatrick, 2004), it explores a variety of issues with examples from numerous island groups around the world. We found much to agree with in their discussion, but disagree with some of their fundamental conclusions, especially the idea that a sub-discipline of island archaeology intellectually isolates archaeologists working in island settings and should be replaced with their concept of an "archaeology of maritime identity". We note immediately that there is a long-established umbrella field of maritime archaeology, encompassing the specialties of nautical archaeology, island archaeology, coastal archaeology and other interests, so there is neither any apparent advantage in proposing a similarly over-arching structure, nor in tying it to identity. This merely privileges identity over many other legitimate approaches to maritime archaeology and that is much too slender a basis for a field which is already broadly constituted.

Boomert & Bright suggest that few archaeologists "make explicit the assumptions underlying their belief that island archaeology is a viable domain of study and not merely an application of archaeology to islands," singling out the editors of the *Journal of Island and Coastal Archaeology* for ignoring "the difference between both viewpoints entirely" (p.3). Fitzpatrick and Erlandson (2006; *also* Erlandson & Fitzpatrick, 2006) did not address such distinctions explicitly because they did not consider them particularly significant or interesting. Clearly "island archaeology" is both the application of archaeology to islands *and* the study of the culturally distinctive developments and ecological changes that characterize the history of human settlement of islands around the world. The fact that there are similarities between many coastal and island societies does not negate the validity of the comparative study of island societies.

After reviewing the history of archaeology in island settings, Boomert & Bright (2007:17) suggest that the "primary postulate of island archaeology, namely that the manifestations of human behaviour on islands show persuasive structural similarities and are essentially divergent from those on mainlands, can be taken to be incorrect." They argue that a subfield of island archaeology is unwarranted, primarily because its foundations lie in biogeography which (in their opinion) treats islands as idealized units of analysis and is not an effective means for understanding past human behaviour in island environments. Instead of the study of island archaeology, Boomert & Bright propose that an "archaeology of maritime identity" be established to release us from the shackles of academic isolation and allow us to "encourage the study of human perspectives on and interaction, communication, and cultural development in archipelagic and coastal mainland, thus maritime, environments" (p.16). In our opinion, very few of many archaeologists who work on islands around the world would consider themselves to be intellectually isolated. In fact, archaeology is a highly interdisciplinary field, and island archaeology has thrived in recent decades through collaboration with both social and natural scientists – including a

debate about the meanings of insularity (*e.g.* Rainbird, 1999 and ensuing discussion) and an emphasis on historical ecology in island settings (*e.g.* Kirch & Hunt, 1997; Fitzpatrick & Keegan, 2007; Rick & Erlandson, 2007).

Biogeography and Archaeology: Building a Straw Boat

One of Boomert & Bright's major objections to island archaeology is the role that principles of biogeography played in the early development of the field, especially the idea that islands represent "simplified systems in which key factors vary so that their effects can be isolated" (p.6). There is no question that biogeography has been an important consideration in archaeology and a natural outgrowth from the biological sciences (Evans, 1973; 1977; Keegan & Diamond, 1987; Patton, 1996; Terrell, 1997; 2006). However, the concept of "islands as laboratories" was explored even earlier by anthropologists, including Ward Goodenough (1957), Margaret Mead (1957), Vayda & Rappaport (1963), and does not owe its history exclusively to biologists. Boomert & Bright also note that biogeography emphasizes that islands "should be understood as bounded, isolated, fragile and variable habitats characterized by a high degree of floral and faunal endemism" (p.6). Yet, however influential MacArthur & Wilson's (1967) theory has been, this is not and never has been entirely true, and island archaeologists have been wary in accepting it at face value. Many biogeographers have shown over the past 40 years (see Brown & Lomolino [2000] for a good discussion on the history of biogeographical applications), that the equilibrium theory of island biogeography takes too little account of both the permeability of barriers (e.g. currents, winds, ice flows), and the biological changes induced by human settlement. In fact, it has been archaeologists, often working together with natural scientists, who have been instrumental in showing how biotic extinction and other processes subvert the classical model, as described most recently by Steadman (2006).

Boomert & Bright have constructed a straw boat, in fact, by suggesting that many island archaeologists still view islands as ideal units of analysis because of their "emphasis on boundedness and on physical and social/mental isolation of (small) island societies" (p.17). Archaeologists explored this idea (e.g. Evans, 1973; 1977; Held, 1993) some time ago, but few would support the notion today that islands are simple and "ideal" units of analysis. Islands can offer just as many complexities as comparable areas in continental settings. It is widely recognized that human seafaring capabilities, although highly variable through space and time, are fundamentally different than the dispersal capabilities of other organisms; that climatic or environmental phenomena mediate the frequency and intensity of movement; and that, culturally, few islands were completely isolated. It is important to remember that isolation is a real phenomenon for many island peoples, however, and cultural behaviours can be influenced by a diminishing, or an absence, of external contacts. That said, however, islands at times do have the potential of offering what Vitousek (2002) calls "model systems." The Hawaiian Islands, for example, have recently been examined as a model system for the nonlinear dynamics between dryland farming systems, natural biogeochemical gradients, and human population dynamics (Kirch, 2007; Vitousek et al., 2004). The key point here is not that islands are fundamentally different, but rather that the same processes which can be readily identified and studied on islands are also applicable to non-insular situations.

Paddling a Circular Tributary

Despite their efforts to deconstruct a field of study that has been growing for decades, Boomert & Bright fail to demonstrate that island archaeology is based on false premises or that an "archaeology of maritime identity" would improve the practice of archaeology in island settings. They are correct in asserting that islands are extremely diverse: varying in size, configuration, climate, and distance from continental mainlands, and in the ecological diversity and productivity of their terrestrial and aquatic habitats. Because of this variability, and their obvious juxtaposition to marine or aquatic ecosystems, islands do share many attributes with coastal land and seascapes in continental mainland areas. On the other hand, large islands such as New Guinea, New Britain, or Viti Levu had extensive inland populations who never saw the coasts or the sea, and who would be completely excluded by an archaeology oriented around "maritime identity."

Boomert & Bright's statement that islands grade uninterruptedly into mainlands, presumably because they are "linked" together by the sea, is a central theme throughout their paper. This is evident when they refer to Oceania and the Mediterranean as "archipelagoes" along with the Caribbean (p.3). While Caribbean archaeologists typically treat all islands in the West Indies as a single and interconnected archipelago - rightly or not - the islands of Oceania do not fit this definition. The sheer size of the Pacific, covering nearly half of the world's surface and containing over 25,000 islands, defies an archipelagic characterization. Most of the land area in Polynesia, for example, exists in the very widely dispersed islands of New Zealand, Hawaii and Easter Island, between which there was no known contact. Although an archipelagic perspective of cultural history may be more appropriate in the Caribbean (despite the very different settlement histories between many of the islands), this is rarely the case for the Pacific given what we know of prehistoric migrations and the development of seafaring over time.

Their statement that "islands grade into mainlands" ignores the fact that seafaring is generally required to cross from continental coastlines to true islands, incorrectly implying that islands/oceans/mainlands are essentially the same regardless of oceanographical, climatic, and topographical factors, and as such, be accessed whenever humans feel it convenient. To support their argument, they provide the simplistic assertion that "mountains divide, while the sea connects," a reversion to generic land and seascapes that ignores the variability inherent in both and does little to further our understanding of the diversity of island, coastal, and terrestrial geography on the dispersal and development of humans around the globe.

Clearly, island, coastal, and interior societies can all be isolated by a variety of physical, social, or technological barriers, the permeability of which can vary through space and time. For island societies, however, numerous environmental factors (such as sea level rise, climate change, hurricanes and tsunamis), loss of boat-building resources or knowledge, increased risk, and other factors can limit or completely sever contact between island groups. In many cases, island societies were isolated to degrees rarely, if ever, seen in mainland and interior settings. The long history of isolation of *Homo erectus* and the

possible new species found there, *Homo floresiensis*, are two dramatic examples (Morwood *et al.*, 1998; 1999; 2004; Brown *et al.*, 2004; *see also* Falk *et al.*, 2005; Weber *et al.*, 2005; Argue *et al.*, 2006; Martin *et al.*, 2006), but Australia, Tasmania, Rapa Nui, and the isolation of the Norse community in Greenland provide additional ones that should also be considered. Archaeological and historical evidence demonstrates that external contacts waxed and waned and were severed permanently in some cases. At European contact, long distance seafaring technology clearly needed to settle islands such as Rapa Nui, Palau, and the Chathams was no longer present.

Islands can be isolated some or all the time, in both a real and relative sense, when seafaring technologies are not sophisticated enough to permit travel over certain distances or are lost over time, and if oceanographic or climatic conditions prevent sea crossings. Boomert & Bright, along with others (*e.g.* Rainbird, 1999; 2004; 2007) have argued that isolation is primarily a social construct, suggesting that the decision to colonize or travel between islands was a conscious decision largely unaffected by outside influence. This is partly true, but there are numerous cases where environmental conditions have significantly influenced human seafaring.

The Proverbial Sea and the Lack of Sails

Boomert & Bright end their renunciation of "island archaeology" by suggesting that we "strive towards establishing an archaeology of maritime identity" (p.18). Their argument that "islands and archipelagoes are highly variable and grade uninterruptedly into mainlands," however, can just as easily be applied to their concept of "maritime landscapes and identity." If island "scapes" grade imperceptibly into coastal ones, then coastal land and seascapes grade equally imperceptibly into estuarine, riverine, lacustrine, and terrestrial environments. Larger rivers provide essentially "maritime" travel corridors deep into continental interiors, creating interaction between highly diverse human groups dependent on the sea or aquatic habitats to different degrees (see Yesner, 1980). Where and how do we draw the lines between maritime, riverine, or terrestrial identities through space and time? Wherever they go, humans are inexorably linked to water and aquatic habitats (large or small) for their survival: should we therefore retreat to an archaeology of aquatic identity, and how would this be different from an application of archaeology to aquatic landscapes? The authors also fail to discuss the fact that not all peoples living on islands or coastlines are "maritime" or coastally focused. After initial colonization and the subsequent movement of settlements inland, maritime connections can be lost, rendering the application of a maritime identity-based archaeology irrelevant.

Finally, a focus on island archaeology has encouraged scholars to study maritime cultural developments, historical ecology, and human impacts in comparative frameworks that are very useful for breaking out of the often provincial focus on a single island or archipelago. Boomert & Bright themselves note that "the physical isolation and extreme ecological vulnerability of particularly insular flora and fauna to human predation cannot be denied" (pp.17-18). The investigation of how humans impacted pristine island ecosystems is not simply an application of archaeology to islands, but an investigation as to how humans adapted to newly encountered island environments. Peoples in the past brought with them

to islands many different plant and animal species, exploited (and often over-harvested) native species, and burned or cultivated landscapes that led to increased erosion, sedimentation of coastal lowlands, the destruction of native habitats, and evolved to become culturally managed landscapes. Such changes are not unique to island landscapes – and they differ in scope and scale on islands around the world – but the biogeography of many islands makes them especially susceptible to human degradation. As a result, the study of human impacts on island ecosystems has provided invaluable lessons about the range of environmental problems encountered or caused by island societies, as well as the solutions they developed (*e.g.* Kirch, 1997a; 1997b; 2007). Again, in this manner, island cases often provide valuable "model systems."

Although they support their arguments with data from various islands, Boomert & Bright's position on island archaeology is easier to understand when one considers that their research efforts are concentrated in the Caribbean, a relatively small island region where most islands are intervisible. Some Caribbean islands such as Cuba were first settled around 4000 BC, but most were colonized after 500/400 BC by people who lacked (and did not require) sailing technology to traverse the sea. This is in stark contrast to Oceania, as well as the Mediterranean, where islands or island groups are separated by greater distances, where islanders developed sailing techniques, and in some cases became completely or relatively isolated - not socially, as Boomert & Bright propose - by the seascape itself. A Caribbean perspective may have limited their view on the full range of island colonization processes and what happened to peoples and landscapes thereafter.

Ultimately, one of the major things that separate the study of islands from continental areas, and why a field of island archaeology is a fruitful line of inquiry, is that some type of seafaring was required to reach islands. It was time and space variation in seafaring that shaped the ability of island, or indeed all maritime people, to develop or maintain external relationships. The boat was much more than an ideological or metaphorical vehicle. Island colonization sometimes required only simple boat technologies but in other situations, a degree of sophistication in vessels and skills, and often the use of sails. For remote islands, complex and well-established navigational skills were necessary if long-range roundtrip voyages were to be successful. Despite such technological achievements, there was no assurance that peoples would or could travel between islands. Human decisions influenced the movement of peoples but seafaring was often limited by insuperable environmental difficulties and sometimes by the restricted distribution of specialized knowledge (*e.g.* Anderson *et al.*, 2006; Thomas, 2001)

Conclusions

Ultimately, although Boomert & Bright provide a useful review of the history of island archaeology and some of the problems island archaeologists have addressed at various times, they provide no compelling reason to replace island archaeology with an "archaeology of maritime identity." They create a straw "boat" argument based on the original tenets of island biogeography and treat island archaeology as a relatively static entity that has not advanced along with changes in biogeographical or archaeological theory. Many of the criticisms they level at the concept of island archaeology have been identified and discussed by others, and who have concluded that a subfield of archaeology applied specifically to island societies continues to be useful. Archaeologists have made major contributions to understanding historical ecology, human impacts, and cultural developments in island settings and maritime regions generally around the world. In addition, a comparative focus on islands has proven useful in breaking out of the often provincial focus on a single island or archipelago.

Of course, there are clear similarities between coastal and island settings and societies; but there are also essential differences. Boomert & Bright's assertion that island and coastal settings grade imperceptibly into one another is equally applicable to the gradual transition between the geography of coastal, riverine, lacustrine, and terrestrial ecosystems, as well as the highly varied human societies that occupy them. Today, archaeologists study a full range of human adaptations across many evolutionary, geographic, intellectual, technological, social, and organisational transitions. Archaeology today is a diverse and highly interdisciplinary field that encompasses a variety of theoretical and methodological approaches. Yet, none of this diversity suggests that island archaeologists should abandon ship for a lifeboat called "archaeology of maritime identity"; or, perhaps to put it more accurately, discard a small but sound vessel for a larger ship of dubious seaworthiness.

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