

The Last Voyage of the Dead: The Milky Way and the Boat-Shaped Burial Markers of the Philippines Archipelago

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Abstract

The boat-shaped burial markers of the Philippines archipelago and their original astronomical orientation towards the Milky Way concretely manifest the purpose and concern of monumental architecture and the archipelago's indigenous world view. In the archaeological record of Malayo-Polynesian Philippines, monumental remembrance is not materialised in structures that either defy the earth, like the tower form, or that identify with nature and the cosmos, like the mound. Instead, boat-shaped burial markers laid out low to the ground in stones or coral slabs appear to flow and disappear into the farther landscape. The fickle and frequently powerful and destructive natural environment defines the cosmological, which can only be highlighted or pointed out, not mastered or made a home of. Initial findings seem to show that the boat-shaped burial markers pointed towards the place where the Milky Way appeared to rise up from the horizon in the first hours of the evening, at the start of the short dry season. In the case of the Catanauan burials, this orientation seems to have determined the choice of Tuhian cove itself where the markers are found; the cove opened to a magnificent view of the Milky Way precisely at that time of year. The Annales concept of the longue

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duree and some ethnoastronomical parallels help clarify these peculiarities of the monumental architecture of the various Malayo-Polynesian peoples of the Philippines archipelago, who shared in the region-wide Austronesian ethnic and linguistic heritage, but who more peculiarly shared in their archipelago's distinctively stormy weather.

Introduction

The archaeological record of the pre-Spanish era in the Philippines archipelago presents an enigma. Unlike the records of the wider Austronesian region, where megalithic structures in a variety of distinctive shapes but following basic architectural forms seem to abound according to Victor Paz, an archaeologist at the University of the Philippines-Archaeological Studies Program (personal communication, 2011; see also Figure 5 in this article), no megalithic structures of such forms have been discovered in the Philippines as of this writing. What the record shows instead are the boat-shaped burial markers of two otherwise not immediately related cultures – one in Catanauan and the other in Batanes (Figure 1).



Figure 1: The locations of Catanauan and Batanes in the Philippines archipelago (map obtained from http://en.wikipedia.org/wiki/File:Ph_physical_map.png; accessed 27 January 2014).

The older of these two cultures appears to be the one in Catanauan, dating to 1300–1000 BP (Paz *et al.* 2011). This dating places both sets of burial markers within the same broad time frame as the megalithic practices of the Austronesian cultures that appeared by the time that the Austronesian expansion had reached its broadest extent, stretching from Madagascar to Easter Island. Thus to the degree that the burial markers in the Philippines and the megalithic structures in the wider Austronesian region manifested forms of monumental architecture, we are looking at chronologically parallel monumental practices within different societies in different places that otherwise shared an ancient ethno-linguistic heritage. So the question at hand becomes more acute: Why did monumental practices in the Philippines archipelago take such an oddly different form? Insight towards the answer, I believe, is obtained by examining the geohistorical forces in the archipelago and their long-term effect on its peoples' collective world view, as seen in the linguistic parallels and differences between the Philippines archipelago and the rest of the Austronesian region.

Some words about the preceding methodol are in order. Two considerations came into play in choosing the approach taken here. The first consideration was that the earliest recorded Filipino ethnoastronomical lore—or mythological lore of any kind for that matter—went as far back only to Spanish times. That means records go back no further than 500 BP. Moreover, there is good reason to doubt the antiquity or genuinely indigenous provenance of anything recorded after that. But the Catanauan boat burials are between 1300 and 1000 BP, and their culture appears to have disappeared after 1000 BP. Any ethnoastronomical support for the burial practice postulated here would have to come from parallels in the wider Austronesian region, if any.

The second consideration came out of my first investigations into that very question. As suggested by an anonymous reviewer, a more ethnoastronomical approach is to be expected. I shall take up the wider ethnoastronomical picture, as also suggested by the same reviewer, in the concluding discussion. However, do any particular parallels exist between the cosmology suggested by the orientation of the boats in Batanes and Catanauan to the Milky Way, and the ethnoastronomy in the rest of the Austronesian region? Indeed, already taking the first explained consideration into account, I had initially approached the problem in this manner. As it turned out, the short answer to the question was: No – at least none that I found, beyond the fact of the widespread concepts of the

soul boat and of the sky containing souls. There were intriguing possible parallel cosmological notions scattered here and there, such as the Milky Way as a river in the sky, but nothing that came together decisively. The closest parallel that I came across was from Arnhem Land, northern Australia, just across the water from Papua New Guinea. The anonymous reviewer had in fact offered the same parallel, in view of the wider ethnoastronomical picture. It is a striking parallel and I will bring it up in the closing discussion.

Aboriginal Australia, however, is not routinely associated with research into the Austronesians. Thus I was stumped by the lack of sure comparisons. I set the entire thesis aside for several months. Though it was intriguing, it seemed good only for speculation, something to add as an anthropological side note to world-wide lore about the Milky Way, but without further solid basis for argumentation. My investigation into the ethnolinguistics of the situation had until this time left me with the notion that any ancient indigenous reference to the Milky Way in the Philippines archipelago—if such a reference ever existed—had been forgotten and lost to history. Since skies over the archipelago are clouded over most of the year, I began leaning to the view that perhaps there never was cosmological interest in the Milky Way in the archipelago at all. Then one day, on being urged by Victor Paz to take up the problem again, I was perusing Blust's Austronesian dictionaries *and* his Austronesian linguistic tree *and* a map of Austronesia, and it struck me: The Austronesian way of referencing the Milky Way was very ancient; perhaps it was not the case that the Philippines archipelago had never taken an interest in the Milky Way, but that its way of referencing it had changed. What the Milky Way was called by the boat-shaped burial culture in Catanauan and then by the one in Batanes we shall perhaps never know. But that *a change away from the ancient Austronesian way had occurred* seemed *uniform across the archipelago*. This insight was accompanied by another. Colleagues from the Archaeological Studies Program at the University of the Philippines and I had routinely been making a formal distinction between the boat-shaped burials of the archipelago and the various megaliths found in the rest of Austronesia.

The boat-shaped burials were not megaliths. However, I now realised, from an architectural point of view, *both were monuments*. I had been of the intuition that the "lack of megaliths" in the archipelago had to do with our stormy weather. But I needed something more explanatory than the banal "megaliths get blown over". The preceding two insights

plus this intuition were enough to pick up the investigation again, although now on a different tack.

Monumental Architecture

Five kinds of architecture can be identified in the human structural record: *folk*, *vernacular*, *monumental*, *spiritual*, and *utilitarian* (Allsop 1977). Bruce Allsop describes these types as being “emotionally and originally different” (Allsop 1977: 41). This kind of description indicates the role of architectural form in human culture. Allsop says: “Architecture is not only an expression of what men are: it reflects back upon men and conditions what is possible for them to be and to become” (Allsop 1977: 9). Or as Timothy R. Pauketat and Susan M. Alt put it: “Cultures may seem to reside in the head, but they are made in the physical world” (Pauketat and Alt 2005: 214). The architectural types of interest for this article are the monumental, the spiritual, and the utilitarian. Allsop succinctly defines the monumental type:

Monumental architecture is, by definition, committed to remembrance and so to the appearance of permanence. The simple repose of massive earth-borne structures and of trilithonic openings are preferred to enigmatic balances and controlled thrusts. Symmetry of plan goes with the stable symmetry of structure (Allsop 1977:9).

The mind for architectural monumentality is ancient and has universal spread. Peter M. Barnett is worth quoting at length on this point. Discussing his approach to teaching architecture to beginners, Barnett explains the necessity of understanding that the tower and the mound are basic cross-cultural monumental forms: The tower form, he says, “is the most universal indication of the specialness of a place, and particularly of the axis mundi, or centre of the world. [...] it is the symbol of man himself, walking upright among the beasts of the earth” (Barnett 1977: 12). Of the mound or earth/mountain form, he says:

Equally universal among early civilisations is the earth/mountain form, an expression not only of the natural landscape, but also of the cosmos which it reflects. Examples include the pyramids of Egypt and Mesopotamia, Aztec temples and Indian stupas, and end with the great stupa at Borobudur in Java, with its elaborate cosmic iconography (Barnett 1977: 12).

Here it is pertinent to note that monumental and spiritual architecture are often found merged. Allsop observes: “Death and religion being closely associated in the minds of men, the distinction between monumental and spiritual architecture is often blurred” (Allsop 1977: 7).

What differentiates the two types is their primary cognitive purpose and social function: “Spiritual architecture is related to noncorporeal things, monumental architecture to people [...]” (Allsop 1977: 7). The attempt to distinguish finely between different instances of monumentality and their degree of merger with spirituality will not be made here.

Also to be noted is what Cecil D. Elliott calls “the monumental non-monument” (Elliott 1964: 52). He gives as an example “the building that is not monumental in function but adopts certain characteristics of monuments” (Elliott 1964: 52). Thus: “It may be dignified in manner, permanent in construction, static in form, geometric in shape, and grandiose in scale—but it is an office building, a school or even a family residence” (Elliott 1964: 52). This kind of building is not a monument but fits into the category of utilitarian architecture. Allsop defines utilitarian architecture as being “dedicated to utility” and as expressing “a non-spiritual objective” (Allsop 1977: 9). In what follows, Austronesian structures that exemplify the truly monumental along with varying degrees of spirituality, and the utilitarian non-monument but with monumental qualities, will be encountered.

The Austronesian Expansion

The Austronesian linguistic family comprises nearly 1200 distinct but close-knit languages (Bellwood *et al.* 1995). Originating from a pre-Austronesian homeland in the southern Chinese mainland, the first Proto-Austronesian speakers were in Taiwan (Formosa) before 3500 BCE (Bellwood 1995). After the initial colonisation of the Philippines from Formosa about 3000 BCE (Bellwood 1995), the Austronesian expansion followed migration routes that fanned out southwards from the Philippines archipelago (Figure 2). Expanding west and east, by the millennium after 1 CE the Austronesian linguistic region included Madagascar in the west and the far-flung islands and regions in the east (Bellwood 1995). Thus by roughly 1000 CE Austronesian native speakers extended across a large roughly triangular region of the globe, with Taiwan at the apex, Madagascar at the farthest point to the west, and Easter Island at the farthest point to the east (Bellwood 1995).

The base of this triangle covered the chain of islands running from Sumatra, in the west, to the coastal regions of Papua New Guinea and the islands of Melanesia, north of Australia, through to Polynesia in the eastern Pacific; Hawaii and New Zealand too were part of this

Austronesian region (Bellwood 1995). The Philippines archipelago, thus, lay at the chronological and geographical centre of the expansion. It was the radiating point from which the expansion across the rest of the region took place

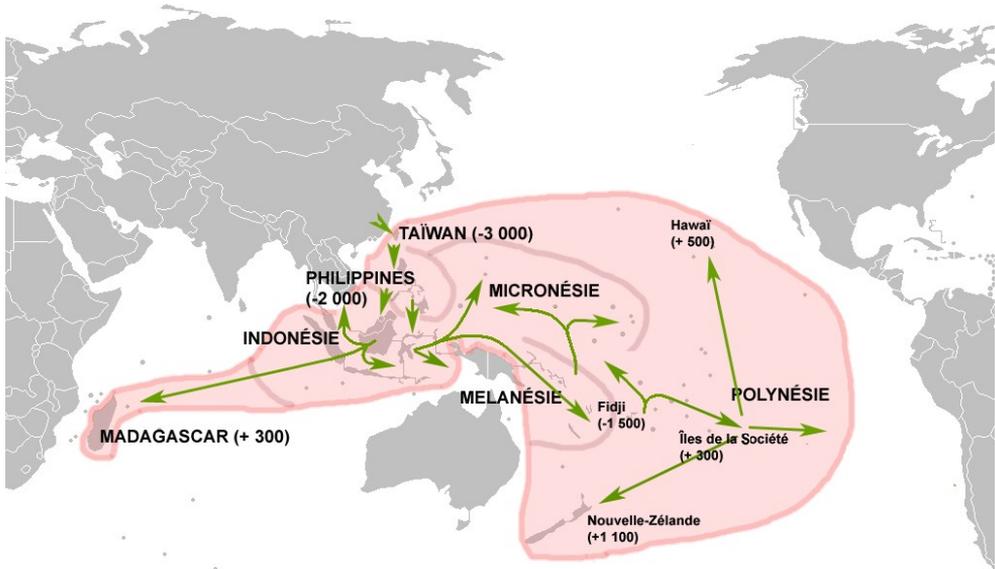


Figure 2: Austronesian Migration Routes (adapted from Cagé 2008).

This expansion resulted in the ramification of Proto-Austronesian into five linguistic subgroups: the various Formosan languages (namely Atayalic, Tsouic, and Paiwanic), Western Malayo-Polynesian (WMP), Central Malayo-Polynesian (CMP), South Halmahera-West New Guinea (SHWNG), and Oceanic (Oc) (Tryon 1995). Robert Blust’s diagram of the Austronesian linguistic tree (Figure 3a) roughly corresponds to the fan-shaped geographical expansion of the linguistic family (Figure 3b). I highlight this graphical correspondence because it helps emphasise some oddities—one linguistic and two archaeological—that I shall point out about the Philippines archipelago as the radiating point in the Austronesian expansion.

The first oddity about the Philippines archipelago as the radiating point in the Austronesian expansion is the disassociation of the word for “path” from also meaning the Milky Way in the languages of the archipelago, but the persistence of the association in the languages that came out of the archipelago. According to Blust’s dictionaries, the association of the word for “path” with the Milky Way is found in WMP languages just south of the Philippines, in northern and southern

Sulawesi, and in various Oc languages from Micronesia eastwards (see Blust and Trussel 2010).

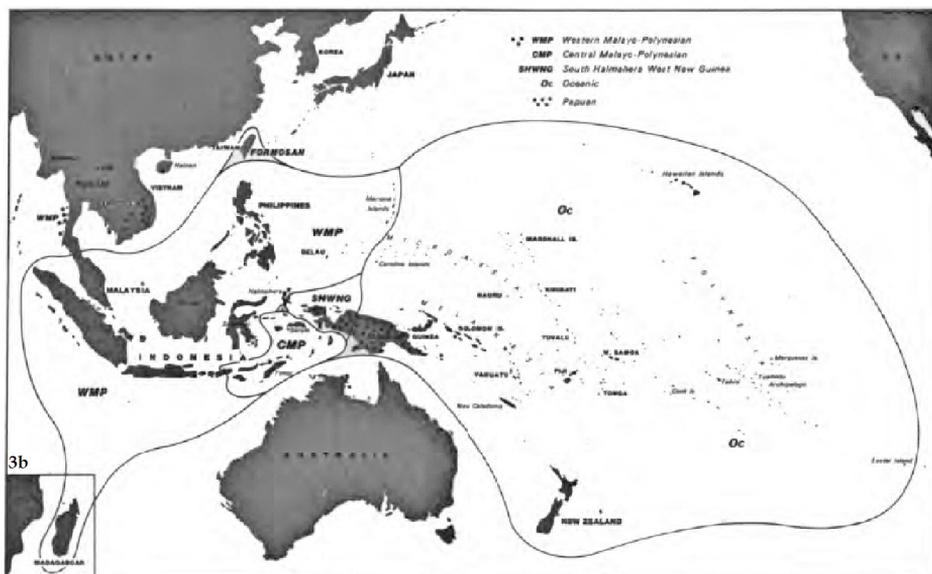
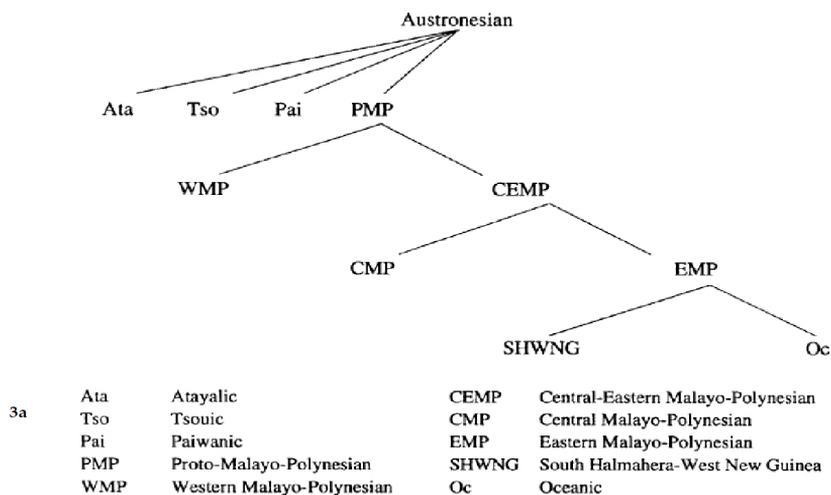


Figure 3: Correspondence between Austronesian subgroups and geographical expansion. a: Blust’s Austronesian linguistic family tree (Tryon 1995: 24). b: Geographical locations of the Austronesian linguistic subgroups (Tryon 1995: 21, Map 1).

This distribution is shown below in Figure 4. These parallel occurrences across different linguistic subgroups were likely not coincidental developments. Rather, the first node in the family tree shared by the subgroups—in this case PMP—must have contained an original word that carried these same meanings. Thus in Blust’s reconstruction,

the PMP word *zalan meant “path” and also meant the Milky Way (Blust and Trussel 2010).

- 1 . WMP Tontemboan (N. Sulawesi): *lalan* (path / Milky Way).
- 2 . WMP Muna (S. Sulawesi): *sala* (path); *sala waghua* (Milky Way).
- 3 . Oc Chuukese (Micronesia): *aan* (path / Milky Way).
- 4 . Oc Lau (Solomon Islands): *tala* (path / Milky Way).
- 5 . Oc Fijian (Fiji): *sala* (path); *sala ni canji* (Milky Way). (See Blust and Trussel 2010)

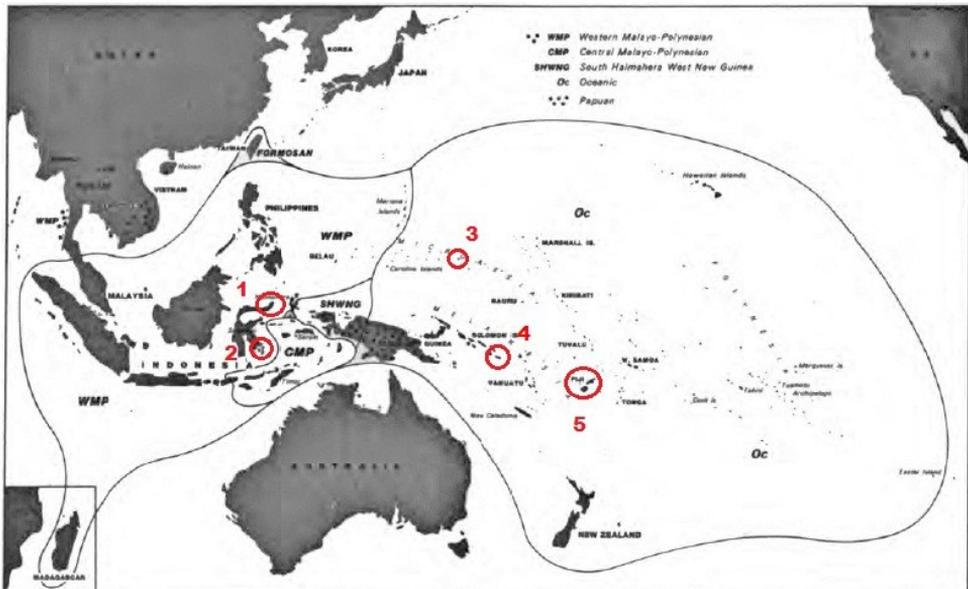


Figure 4: Map of Austronesian languages that associate the word for “path” with the Milky Way (map adapted from Tryon 1995:21, Map 1).

However, as the reconstruction of the migration routes of the Austronesian expansion implies, the association of the word for “path” with the Milky Way must have passed through the Philippines archipelago. Yet Blust’s dictionaries show that the WMP languages of the archipelago no longer carry the association (see Blust and Trussel 2010). In other words, at some point after the expansion of the Austronesians through the archipelago and into the regions south, words for “path” in the Philippines archipelago ceased being associated with the Milky Way. Presumably, if the Austronesians had lingered any longer in the Philippines before further colonising southwards, this disassociation might have become a permanent feature of all subsequent Austronesian

languages outside of Formosa. However, compared to the initial length of time it took between the Austronesian arrival in Formosa and their migration to northern Philippines, their spread through the Philippines and into Micronesia was rather rapid (Gray *et al.* 2009).

The second oddity about the Philippines archipelago as the radiating point in the Austronesian expansion is the absence from the archaeological record of indigenous monumental structures that take either of the two basic forms of the tower or the earth/mountain. As seen in the preceding section, Barnett called these two forms universal to monumentality. Taking after them would be structures such as large burial mounds, whether earthen or stone-filled, stone temples, megalithic blocks and structures, and monoliths.

This absence in the Philippines is not due to any lack of architectural capability, as the rice terraces in the highlands of Luzon testify, and as do the fortress-like *idiangs* that are found situated on prominent overlooks in Batanes. Yet, whatever practices may have accrued around the rice terraces and the *idiangs*, their architecture, though sharing in monumental qualities, is basically utilitarian. They are examples of what Elliott calls the monumental non-monument. What makes this architectural absence all the more curious is the presence of monumental structures that take after either of the two basic forms not only in Austronesian Formosa, from which expansion into the Philippines first took place, but also in Austronesian regions colonised after the migration out of the Philippines (Figure 5).

Much about the original cultural purpose and later cultural use of these monumental structures remains unknown; similarly, much remains on the level of hypothesis (e.g., on the purpose and function of the megalithic structures of Woodlark Island see Damon 1979, and Bickler and Ivuyo 2002; on the Easter Island structures see Belmonte and Edwards 2007).

I note, however, that general socio-political observations about monumentality—for example, the observation that monumental structures effect “a continuing commitment to particular places, and to a social and ecological transformation of the landscape” (Sherratt 1990: 149)—are as true on the whole for the rice terraces of Luzon as they are for the *moai* of Easter Island.

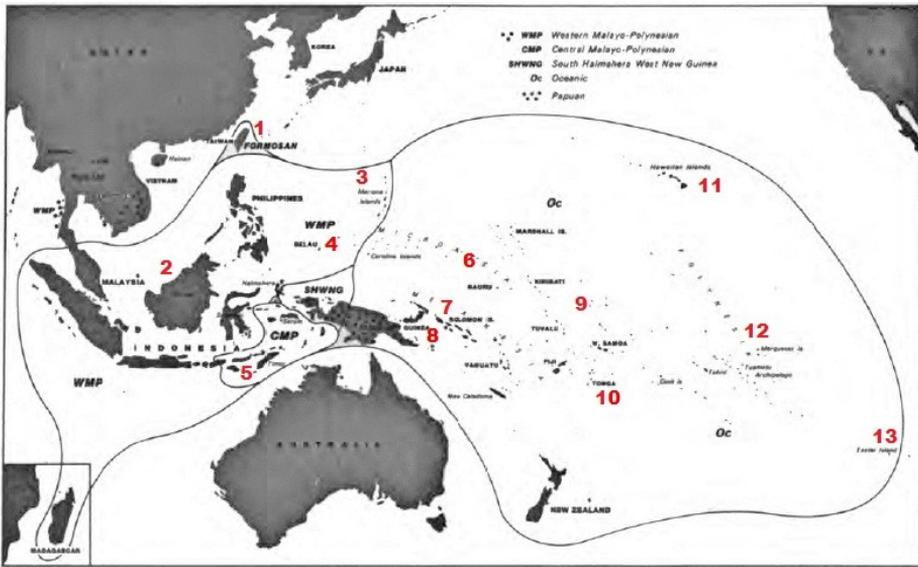


Figure 5: Map of Austronesian monumental structures of basic form (map adapted from Tryon 1995: 21, Map 1).

1. Eastern Formosa: monolithic structures (Chang 1956).
2. Western and central Borneo: various megalithic types (Metcalf 1976).
3. Marianas: latte stones (Russell 1998, cited in Hazell and Fitzpatrick 2006).
4. Palau: stone faces (Osborne 1979, cited in Hazell and Fitzpatrick 2006).
5. West Sumba: monolithic gravestones (Hoskins 1986); Central Flores: monolithic gravestones (Schröter 1998).
6. Pohnpae (Ayres and Scheller 2001, cited in Hazell and Fitzpatrick 2006) and Kosrae (Athens 1990, 1995; Rainbird 1995, cited in Hazell and Fitzpatrick 2006): basalt columns and boulders.
7. Bougainville Island: monoliths and megalithic blocks (Thurnwald 1934).
8. Kula Ring (Trobriand, Kitava, and Woodlark Islands): megalithic structures (Damon 1979).
9. Phoenix Islands: East Polynesian monumental marae (Carson 1998).
10. Tonga: earthen or stone-filled burial mounds (Kirch 1990).
11. Hawaii: stone temples (heiau) (Kirch 1990).
12. East Polynesia: monumental marae tradition (Green 1986, 1993, cited in Carson 1998).
13. Easter Island: ahus (platforms) and moai (statues); (Belmonte and Edwards 2007).

That is, they are as true for monumental non-monuments as they are for genuine monuments. Thus, as valuable as this kind of socio-political framework of analysis is for understanding the archaeological record, more relevant for this article is the exploration of the cognitive dimension of culture. What is needed is an analytical framework that accounts for that dimension. Given that utility is not the primary factor in the original choice for a genuinely monumental form, the point remains

that some form is chosen and not another. The question remains why and with what meaning? Pauketat and Alt point out:

[...] physical constructions make manifest our subjectivities and dispositions and those of other people involved, at least as these exist in specific moments of construction. Indeed, the various moments of construction are also “intersubjective” experiences that shape the ways we think about others, objects, and the spaces of experience (Pauketat and Alt 2005: 214).

In the Philippine archipelago, rather than the kind of monumentality characteristic of the wider Austronesian region, we encounter instead another oddity: boat-shaped burial markers laid out low to the ground in stones or coral slabs. The concept of the soul-boat itself is not peculiar; it was widespread throughout the Austronesian and adjacent regions. However, these kinds of burial markers are peculiar to the archipelago.

Though clearly monumental in purpose, they take after neither of the basic monumental forms of tower or earth/mountain. They are neither “raised against the horizontal of the earth”, like the tower (Barnett 1977: 12), nor are they “an expression not only of the natural landscape, but also of the cosmos”, like the earth/mountain (Barnett 1977: 12). Instead, as shall be seen, they seem to flow and disappear into the farther landscape.

The *Longue Duree* and Cosmology

The *Annales* paradigm analyses history on three levels of space-time: (1) The *longue duree*, or the long term; (2) *Conjonctures*, or the middle term; and (3) *Evenements*, or the short term (Bintliff 1991: 6). Occurring contemporaneously within these levels are, in the words of John Bintliff, “groups of processes moulding the visible development of human societies” (Bintliff 1991: 6). Within the short term are grouped political events and individual actions (Bintliff 1991: 6). Within the middle term are grouped socio-economic and demographic trends, and ideologies (Bintliff 1991: 6). Within the *longue duree* are grouped geohistory, stable technologies, and world views (Bintliff 1991: 6).

Of interest to this study is the influence within the *longue duree* of the natural forces of geohistory (in this case, weather patterns and tectonic activity) on world views. *Annales* thought recognises that such influence occurs. The geohistorical processes within the *longue duree* have been described as “the permanent forces that operate upon the human will and

weigh upon it without its knowledge, guiding it along certain paths" (Febvre 1949: 37, cited in Bintliff 1991: 7).

In this picture, patterns that recur within the collective will or mind over the long term belong to the long-term world view. These world views in turn affect the shape of social institutions in the middle term: "One could not pretend to explain an institution if one did not link it to the great intellectual, emotional, mystical currents of the contemporaneous *mentalities* [viz., "world view"]" (Bloch 1939/40, cited in Burguière 1982: 430, cited in Bintliff 1991: 11). In this case, the social institution of interest is the practice of the boat-shaped burial markers.

The *Longue Duree* in the Philippine Archipelago

The first point of geohistorical interest to note is the location of the Philippines archipelago on what is known as the "Rim of Fire". Bankoff (2004: 93) describes it as "the string of volcanoes extending along a tectonic fault line that runs from Aceh in northern Sumatra to Japan." Geologically coupled to it is what is called the "Belt of Pain." Bankoff (2004: 93) describes it as "an area of extreme seismic activity stretching from just below Hong Kong to north of Malaysia and Singapore". This geological coupling is apparent in Figure 6, which plots on a global scale both tectonic fault lines, in yellow, and epicentres of strong earthquakes (magnitude > 5), in red. Note that the Philippines archipelago lies on yellow and is saturated in red.

What is also notable in Figure 6, however, is that much of the previously described Austronesian triangle similarly lies on tectonic fault lines and thus likewise experiences extreme seismic activity. However, besides from possessing a concentration of active volcanoes and being periodically shaken by earthquakes, what distinguishes the Philippines archipelago geohistorically not only on a global level but from the rest of the Austronesian region is the second point of note: the sheer number of typhoons (hurricanes) that can be relied upon to hit its islands each year. Bankoff (2004: 93) observes that the archipelago lies on "Typhoon Alley," which he describes as "the path usually taken by storms generated in the western North Pacific".

Beginning as low-pressure areas over the ocean, these weather disturbances develop into typhoons, and after passing through or by the Philippines archipelago, may veer northwards towards Japan, or go into

the Chinese mainland, or travel into Southeast Asia (Figure 7). But they all affect the Philippines first. As a result of being in the path of storms, large-scale storm-related disasters, consequent not only upon strong winds but especially upon massive flooding due to torrential rains, occur frequently in the archipelago (see Bankoff 2006). Some 20 storms hit each year (Bankoff 2004). Bankoff notes that three typhoons that caused major disasters hit in 1995 alone (Bankoff 2004).

He has connected over half of floods from 1691 to 1911 as recorded in archives of the Manila Observatory directly to typhoons, and the rest to monsoon rains (Bankoff 2006). In the Philippines, when monsoon rains are at torrential levels, it is usually because they are being exacerbated by offshore typhoons. Moreover, local chronicles from the Spanish era tell of frequent disasters due to flooding (Bankoff 2006). Though Indonesia is also prone to major disasters related to its underlying tectonics, this kind of frequent almost annual and multiple disastrous flooding is not part of the Indonesian picture.

Volcano-related events can also cause ruin on a large scale, as was the case for the eruption of Mt. Pinatubo in 1991 and the subsequent flows of *lahar* (volcanic ash mixed with water) when it rained (Bankoff 2004). Similar large-scale destruction can occur with earthquakes as well, as in the case of the Baguio earthquake of 1990 (Bankoff 2004). Today, strong off-shore earthquakes are always accompanied by tsunami warnings. However, disasters and possible disasters such as these, despite the high seismic activity of the archipelago, do not in fact occur on as regular a basis as those connected to typhoons. Rather, they only punctuate the yearly picture of storm and flood.

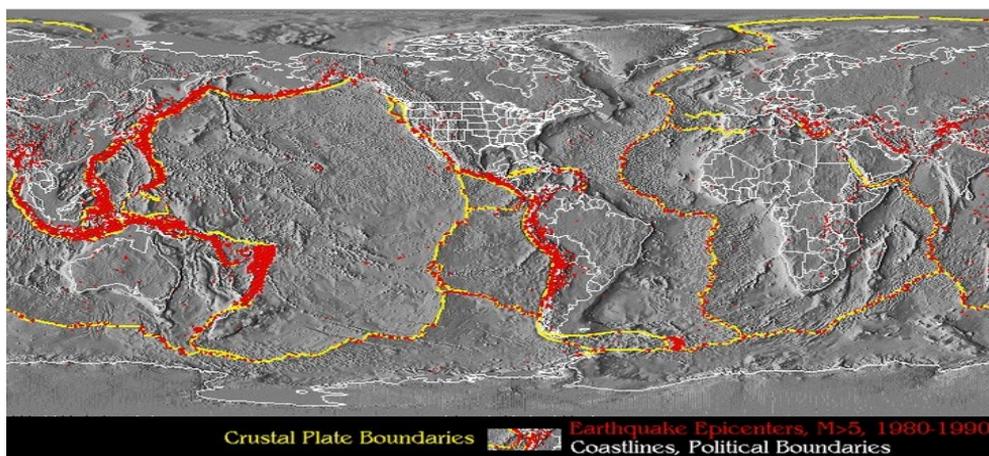


Figure 6: Seismic activity (National Geophysical Data Centre, cited in “Plate Tectonics”).

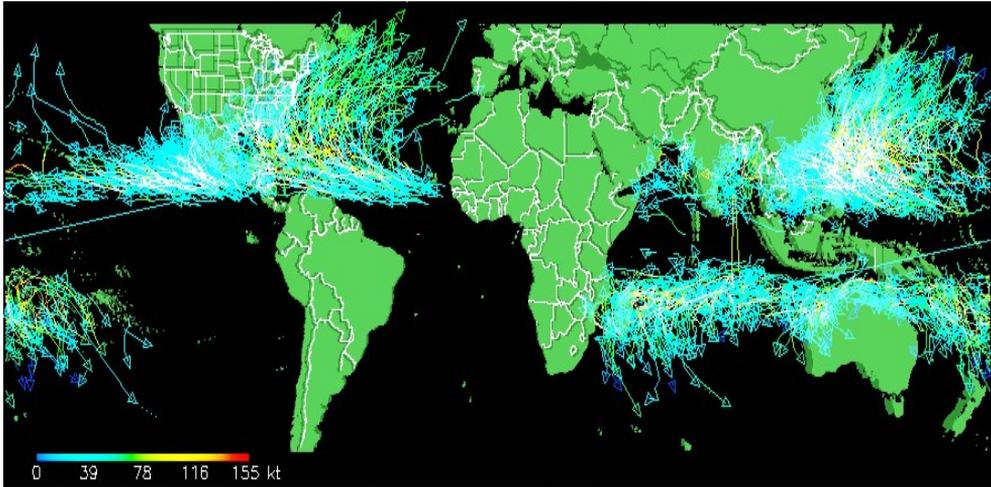


Figure 7: World storm paths and intensities from 1995 to 2011. (The author compiled the image above by overlaying one image on top of the other of the set of images of worldwide tracks for each of the years from 1995 to 2011, available at www.solar.ifa.hawaii.edu/Tropical/summary.html). Note that during this time period no other region on earth experienced the frequency of storms (including strong storms) quite like the Philippines archipelago, which is under the cloud of storm paths at the upper right of the map above. Note also the stark difference with the rest of the Austronesian region, in particular with the region just to the south of the Philippines (i.e. Indonesia), where much is common otherwise in the way of terrain, climate, and seismic activity. Online maps purporting to show the tracks and intensities of all storms beginning from a point in the 19th century show a similar pattern of frequencies e.g. see AccuWeather.com 2010; also see Rohde 2006, for another such map and for a statement of the problem on using storm track data from before the satellite era).

A final point of geohistorical interest about the Philippines archipelago is exacerbation of its weather to meteorological extremes by the ENSO phenomenon. The ENSO phenomenon kicked up to the level of activity with which we know it today at about 4500 BP (see Wanner *et al.* 2008). That is, between 3000 and 2000 BCE. At that period in time, Austronesian colonisation of the Philippines was still ongoing, but the Austronesian expansion southwards and out of the Philippines had not yet begun (see the dates in Bellwood 1995). Before the ENSO upkick, climate was wetter in the general Austral-Asian region (Wanner *et al.* 2008).

With regard to wetness, however, climate in the Philippines archipelago itself apparently was much the same then as it is in the present (see Wanner *et al.* 2008). The difference must have simply been less variability before the upkick (see Wanner *et al.* 2008). For the Philippines, ENSO variability means greatly increased rainfall during the portion of the cycle known as La Niña, but greatly decreased rainfall

during the portion known as El Niño (“The ENSO Cycle”). El Niño is the likely culprit behind the second half of the local comment about Philippines climate reported by Bankoff (*Asia Magazine* 1990: 10, cited in Bankoff 2004: 93) “when it rains, it floods; when it doesn’t, there are droughts”.

Monumental Architecture in the Philippines Archipelago Collective World View

The preceding geohistorical processes that involve the Philippines archipelago have occasioned the rise among the indigenous peoples of the archipelago of what Bankoff (2004: 111) calls a “culture of disaster”. Bankoff (2004: 111) observes that “In some societies, natural hazards occur with such historical frequency that the constant threat of them has been integrated into the schema of both daily life and attitude”. Citing F. Landa Jocano (1999), Bankoff identifies the core cultural attitude of *bahala na* and the core cultural value of *pakikipagkapwa* as the primary coping practices in the Philippines culture of disaster (Bankoff 2004). Bankoff sees the overall configuration of these practices, rather than the elements of the practices themselves, as being distinctive about the Philippines setting (Bankoff 2004). The attitude of *bahala na* involves both the notion that life is a series of calculated risks, and the notion that fate ultimately lies outside of human hands (Bankoff 2004). The value of *pakikipagkapwa* involves a cluster of traits that operationally express group empathy, unity, and support, especially during times of disaster (Bankoff 2004). This cultural picture is essentially one of human solidarity and cooperation in the face of hazardous and unpredictable, but not unexpected, natural forces of cosmic magnitude.

Behind this picture, Bankoff sees an indigenous cosmology: divine forces are ultimately fickle, and they express themselves routinely in the great disasters of nature (Bankoff 2004). If his analysis is correct, then one can begin to see reason for the previously mentioned linguistic oddity of the Philippines archipelago, concerning words for “path” and the Milky Way. Though the Milky Way changes in shape, orientation, and brightness in the course of a single night, it is visible any time of year that the night sky is visible. Thus it shares in the permanency of the sky. Not surprisingly then, it has a place in folk cosmologies in cultures around the world. It even plays a role in the cosmology of the Manus of the Admiralty Islands archipelago, where on two of the islands of the

archipelago, the word for the Milky Way, *pwanchal*, also still means “the way” (Hoeppe 2000: 29–30).

However, Blust’s reconstructed PMP word *zalan not only means “path,” but more specifically, “path, made by a human as opposed to an animal” (Blust 2010). Anyone who lives in the Philippines for any substantial length of time comes to know that because of the heavy rains and recurrent floods and landslides, permanency is not a feature one associates with human-made paths, ways, or even modern roads. Indeed, Bankoff observes that because of the frequency of natural disasters in the Philippines, “most engineering accomplishments are viewed as futile and of inconsequential purpose” (Bankoff 2004: 92). One can begin to see why in Malayo-Polynesian Philippines, words for “path” ultimately became disassociated from meaning the Milky Way.

In a similar manner, within cultures of the cosmological view that Bankoff describes for the Philippines archipelago, there is no meaningful place for anthropological structures that are “committed [...] to the appearance of permanence” as exemplified in form by “[t]he simple repose of massive earth-borne structures” and by “stable symmetry of structure” – which is what normally describes monumental architecture (Allsop 1977: 9). Within cultures with a cosmology such as Bankoff describes, structures with such forms neither exemplify the view of the cosmos, as supposedly the permanency of the earth/mountain does, nor exemplify the human person in relation to the earth, as supposedly the ascendancy of the tower does (see Barnett 1977). Perhaps the best example of this negation of presumptive cosmic symbolism is the half-buried Spanish-era church that lies seemingly a safe distance beyond the foot of Mayon volcano. One can begin to see why among pre-Spanish peoples of the Philippines, human-made monuments in the basic forms of the earth/mountain and of the tower never took cultural hold.

Thus, in the Philippine archipelago, human-made fixed points were routinely subject to swift natural burial or destruction, which as a well-known phenomenon negated any symbolic claims that might have been made for them vis-à-vis cosmic ascendancy or permanency. The only fixed points to which such claims could sensibly be imputed were natural ones in the ancient landscape, such as the sacred mountain, and the mountain’s natural grotto. Moreover, no path or way made out by humans was guaranteed as permanent or safe, not even a sea journey; yet these paths and ways had to be travelled in the simple business of

everyday life (see the examples in Bankoff 2004). Cosmologically, one's deepest concern was not with one's ultimate destination, but with one's journey (see Bankoff 2004 discussing Alfredo Lagmay; see also the discussion on anxiety on pp. 98–100).

Yet in purpose, monumental architecture is “committed to remembrance” and “is concerned primarily with the dead” (Allsop 1977: 9). In what permanent way were the dead to be remembered by the living, if one's deepest concern was not the destination but the journey? I believe that the indigenous cosmology of the Philippines archipelago and the purpose and concern of monumental architecture came together in the boat-shaped burial markers of Batanes and Catanauan.

Archaeological field work is still an ongoing affair at Catanauan. Much more work has to be done before enough hard data has been accumulated to enable even the principal investigators to begin constructing a specific picture of the culture that produced the boat-shaped burial markers there. Similarly, more work is still needed on the Batanes boat-shaped markers. In the minds of the principal investigators, the Batanes markers especially still have some vexing fundamental questions attached to them, including whether or not they were all originally meant as burial markers, as skeletal remains cannot be found in some (Dizon *et al.* 2007–2008); although in the view of Armand Mijares (personal communication, 2012), an archaeologist who excavated in Batanes, they were all indeed meant as burial markers.

Here I shall deal only with basic facts and what is incontrovertible: the shape and composition of the markers in Catanauan and Batanes, their layout and orientation in the landscape, the number of burials per marker, and the fact that at least two Batanes markers contained burials. The dating of the Batanes markers is another vexing question, but in the view of the principal investigators, they are not as old as the Catanauan markers, and the latter can reliably be dated to about 1300–1000 BP according to Victor Paz, (personal communication, 2012) the Catanauan Site Director. The picture that I shall construct from these points, therefore, will be equally broad and basic.

The Batanes and Catanauan Boat-Shaped Markers

Two major sites for the boat-shaped markers in the Batanes group of islands are Chuhangin on Ivuhos Island, and Nakamaya on Batan

Island. Eusebio Dizon, an archaeologist from the National Museum of the Philippines, explored the Chuhangin site in 1994 and described it as follows: "...down on the rolling plain, there were boat shaped stone grave markers in regular patterns. The stones were arranged [to present the] current traditional boat or *tataya*, where the bow or prow and stern appear prominently" (Dizon and Santiago 1995, cited in Dizon and Mijares 1999: 5). With that picture in mind, an inspection of the principal investigators' maps of the Chuhangin and Nakamaya sites reveals boat markers similarly sprawled across the landscape; these maps also reveal that the markers are generally oriented along Northwest-Southeast axes, as are the flotilla of markers as a whole at each site (for Chuhangin see Dizon *et al.* 1995–1997: 44, Figure 6; for Nakamaya see Dizon and Cayron 1997: 21, Figure 1).

Principal investigators originally noted that the boats apparently pointed prow-forwards towards the sea (Armand Mijares, personal communication, 2012), although there is no way to actually tell prow from stern (Armand Mijares, personal communication, 2014). However, this orientation also generally aligns with the appearance of the Milky Way at the area where its band touches the far horizon, in January when the annual battery of storms ceases.

The northerly latitude of the Batanes Island group ensures that rains still occur in the months before the storms begin again in June. What is important to note is that the stormy portion of the year brings with it a nearly constant cloud cover over the entire archipelago, rendering the night sky unobservable most of the time, whether or not rain is actually falling. Excavation of a burial marker at the Chuhangin site was conducted in 1995 and of another marker at the same site in 1996 (Dizon and Mijares 1999).

The stones of the first marker were of an andesite and limestone composition (Dizon and Mijares 1999), while the stones of the second marker were coralline limestone (Dizon and Mijares 1999: 7, Figure 4). The markers contained a single burial each (Dizon and Mijares 1999). The second boat-shaped marker is about 4.5 metres in length and 2.0 metres wide (Dizon and Mijares 1999: 7, Figure 4). In comparison, the dimensions of two boats excavated at the Pamayugan 2 site in 2006 were 3.5 metres long by 2.0 metres wide, and 2.4 metres long by 1.3 metres wide (Dizon *et al.* 2007-2008). Thus the dimensions of the boat marker at the Chuhangin

site may be seen as falling within the variance of dimensions of boat markers found elsewhere on Batanes.

Over 1500 kilometres from Batanes, in Catanauan on the Quezon Peninsula, some 80 metres from the shoreline of Tuhian beach, scarcely above sea level, are the boat-shaped markers of archaeological Localities 1 and 4. They likewise (as the principal investigators view it) point pro-wards towards the sea (Victor Paz personal communication, 2012; see also the discussion on the boat shaped burial markers as intentional forms in Paz *et al.* 2011). As with the Batanes markers, they also are oriented along Northwest-Southeast axes (the principal investigator confirmed that this orientation was the case even for the perturbed markers; Victor Paz, personal communication, 2012).

This detail of orientation can be seen in the map in Figure 8. The dimensions of the largest marker, seen in the upper left of the map, at nearly 4 metres long and 2 metres wide, falls within the variance of the Batanes boat marker dimensions, seen earlier. The Catanauan markers differ from the Batanes markers in composition, being composed of coral slabs. Moreover, each contains not a single burial, but multiple burials. This last detail is also seen in Figure 8.

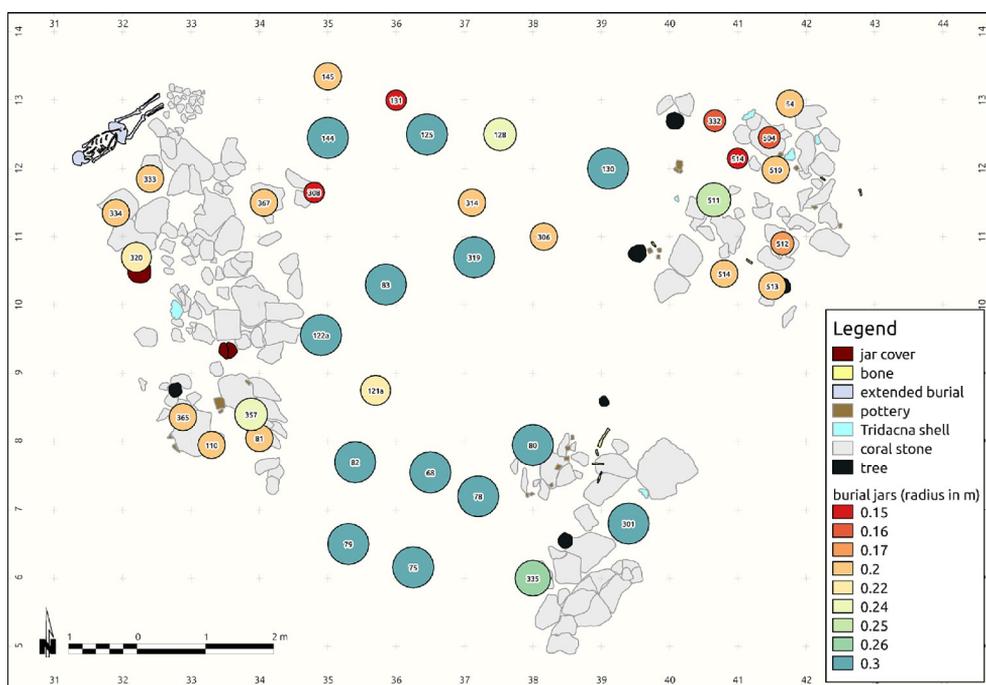


Figure 8: Map of archaeological site at Locality 1, Catanauan (image courtesy of Victor Paz).

The markers date, as previously noted, from 1300–1000 BP. The extended burial seen in the upper left of the map belongs to a later culture that likewise used the site as a burial ground (Victor Paz, personal communication, 2012; see also Paz *et al.* 2011). Relatively recent use of heavy farming equipment had perturbed the site, as is highly evident in the markers at the right and bottom of the map (Victor Paz, personal communication, 2012; see also Paz *et al.* 2010, 2011).

The Last Voyage of the Dead

From Tuhian beach itself one obtains a spectacular perspective on the night sky. One stands on the rim of a smoothly arcing cove whose symmetric mouth opens almost directly South-East (Figure 9). Thus the cove perfectly frames one's first view of the Milky Way at the beginning of the dry season, when in the hours after nightfall it is seen as a pale white band that arcs upward from the far horizon, at the centre of one's field of view.

Within the Milky Way and on its border one sees Sirius and Canopus, the two brightest stars in the night sky seen from this region at this time of year (Figure 11). In the centuries 1300–1000 BP, the Milky Way rose up almost vertically, compared to the angle at which it appears today (e.g., compare the image in Figure 11 to that in Figure 10). At that time period, at the beginning of the dry season (say about 15 January), at 8:00 p.m., the largest boat-shaped marker at Locality 1 (i.e. L1SM1) was oriented to a point on the horizon near directly below Canopus, while the orientations of markers L4-1 and L4-2 at Locality 4 almost perfectly bracketed a point on the horizon directly below Sirius (Figure 11). This near alignment occurred each night, moving about 30 minutes earlier each week. By mid-February the sky was already too bright with light from the just-set sun for the Milky Way and the stars of the alignment to be visible. This brief two-week yearly window of visible alignment suggests that an annual ritual may have occurred at this time at Tuhian, at the beginning of the dry season, *vis-à-vis* the dead at the burial markers.

It also suggests that, beyond reasons of proximity, ethnoastronomical considerations went into the choice of Tuhian cove itself for the opportune location of the boat-shaped burial markers. At present, no remains of associated habitations have been found near the boat-shaped markers, and the author would not be surprised if these are in fact found at some distance away, near the shores of another larger

cove to the south, which does not face the Milky Way, and on which present-day Catanauan town now stands.

Indeed, even after the passing of the boat-shaped marker culture at Catanauan, the sense that the landscape at Tuhian beach was in some way uniquely special for the burial of the dead may have persisted among inhabitants of the area for some time. It may help explain why a subsequent and apparently quite different burial culture continued to use at least one of the localities for its own burials, as was indicated by the extended burial in the preceding Figure 8. These hypotheses can only help enhance the larger interpreted picture that eventually emerges from further work on the archaeological remains. It is in this enhancement where the validity and usefulness of these hypotheses ultimately lie.



Figure 9: The cove of Tuhian beach opens South-East, perfectly framing the first view of the Milky Way at the start of the dry season. Shown in the figure are the azimuth orientations of the boat-shaped burial markers L1SM1 (az =160°) at Locality 1, and L4-1 (az = 131°) and L4-2 (az = 136°) at Locality 4. Investigator Emil Robles (personal communication, 2013) believes that the other markers at these localities are too perturbed to yield specific azimuth orientations. (From an original image courtesy of Emil Robles; this image was obtained from the original by enhancing colour and luminosity levels.)



Figure 10: The Milky Way, Sirius, and Canopus; about 8:47 p.m., looking southeast from Tuhian beach, Catanauan, on 18 January 2012. Today the band of the Milky Way is slightly more angled to the horizon than it was at 1100 BP, when it was more vertical. In the photo, Sirius shines brightly near the top; Canopus shines brightly at the middle right. The visual difference in brightness between these two stars and the other stars within the field of view is more apparent in this image than in the computer-generated sky chart contained in Figure 11. On the horizon glow the electrical lights of fishing boats. Reflections of stars streak the bay. (This pseudo-HDR image was obtained by the author from his original photo. The original photo was added to itself once then once again using *PaintStar*. The resulting three images were then processed for an HDR-like image using *Picturenaut*. The result brings out the colours and contrasts in the underexposed areas of the original image, without overexposing the rest of the image. The human eye and brain appear to perform an essentially similar task. This technique helps compensate for limitations in photographic equipment and for modern-day light pollution, to create an image closer to what the human eye might have seen on a clear and dark night.)

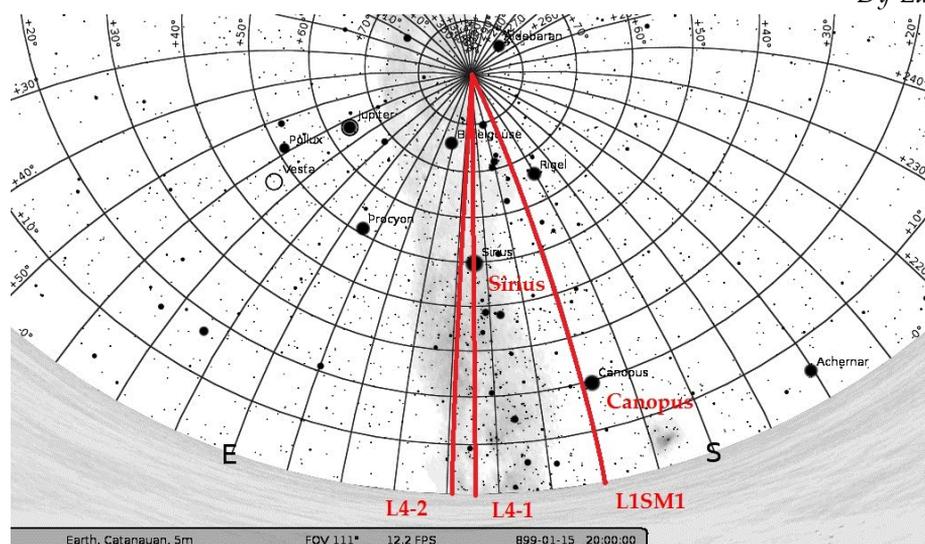


Figure 11: Chart of the night sky at 8:00 p.m., looking directly South-East (viz. straight out to sea) from Tuhian beach on 15 January 899 CE (image created by the author using *Stellarium*). The Milky Way arcs upward at the center of one’s view. Red lines running from the celestial zenith to the horizon indicate the points on the horizon to which the Catanauan boat-shaped burial markers L4-2, L4-1, and L1SM1 were aligned. The points are near directly below the stars Sirius (α Canis Major) and Canopus (α Carina), the two brightest stars seen in the sky at that time of year.

Discussion

The Milky Way as a celestial path travelled by souls of the dead is a worldwide mythic motif. Variants of it occurred across the native peoples of America (Gibbon 1972) and among Indic groups of the Old World (Gibbon 1972). In China it was a great celestial river (Schafer 1974). This river connected on both sides of the celestial dome to the oceans of the earth, allowing voyage between sea and sky (Schafer 1974). The celestial river is also a Polynesian myth (e.g. see Driessen 1982). The motif of the celestial river is also found among the aboriginal peoples of northern Australia (Ridley 1873). For the Yolngu in Arnhem Land, across the water from New Guinea, stars in Orion also form a celestial canoe, named “Julpan” (Norris 2007). Besides from Julpan, the Yolngu also have the lore of a boat of the dead, or spirit boat, called “Larrpan” (Norris 2007), that takes its passenger souls to the Milky Way:

When Yolngu people die, they are taken by a mystical canoe, Larrpan, to the spirit-land (Baralku) in the sky, where you can see their camp-fires burning along the edge of the great river of the Milky Way. The canoe is sent back to earth as a shooting star, letting their family on Earth know that they have arrived safely in the spirit-land (Norris 2007).

This Yolngu lore suggests an explanation of the cosmology behind the boat-shaped burial markers of Catanauan and Batanes. However, even if the Yolngu myth does fit the archaeological picture at these sites, Gibbon would argue that there is no reason to assume anything but independent origin for seeming parallels such as these unless further evidence of common origins is available (see Gibbon 1972). What can be concluded from Gibbon (1972) is that such independent parallels are not uncommon and occurred worldwide.

We have no oral or written records otherwise of the cosmologies attendant at Catanauan and Batanes. Principal investigators of the Batanes burials are not even certain that the boat-shaped markers belonged to the native Ivatan culture (Dizon and Mijares 1999). We do know, however, from a Spanish missionary report in 1787, that the Ivatans of Batanes believed that in death the souls of their elite went to the sky to become stars (Hornedo 1994). Within this broad context, the conclusions reached in this article make anthropological sense. In terms of ancient cosmology, beliefs that held in some form or other rather commonly among different peoples around the world are being proposed as holding here as well. Moreover, given the not infrequent occurrence of the various components of this picture in other parts of the world—the Milky Way as a path or river for the souls of the dead, the soul boat, the boat-shaped burial marker (i.e. also in northern Europe)—it is not surprising that at one point in the human story that these components should come together as they did in Catanauan and Batanes.

I do believe that in line with the ideas presented here, a useful investigation may be made of the practice of boat-shaped burial markers in northern Europe and their attendant cultural world view. The *longue duree* of northern Europe may help explain both cultural parallels and cultural differences.

I do not expect that outright astronomical parallels are to be found, since the year-round observational picture is quite different between northern Europe and cloud-covered, storm-racked Philippines near the equator. Filipinos, indeed, are a people of the storm, and as the preceding Figure 7 indicates, there really is no place on earth with weather quite like that in the Philippines archipelago. Moreover, the skies of northern Europe and the behaviour of day and night, near the polar extremes of the globe, are not quite like the skies and the behaviour of day and night in more equatorial latitudes. Elsewhere around the world,

looking at how memorialisation occurs in other cultures of disaster may be another fruitful avenue for investigation.

Laid out in the landscape and composed, in the case of Batanes, of stones, or in the case of Catanauan, of coral slabs, the boat-shaped burial markers of the Philippines archipelago were given the quality of persistence. Yet, laid out low to the ground, they did not emphasise human mastery and defiance of the earth. Moreover, laid out in boat shapes, they did not emphasise a micro cosmos tamed and made home by human beings. Rather, pointed prow-forwards towards the sea, and in either being gathered together like a flotilla of boats on a common journey, as in Batanes, or in having the dead gathered together within one boat, as in Catanauan, they functioned as mute reminders of the people's shared journey into the world of cosmic forces, of which death was the final journey.

Yet, even until now, perhaps the glimmer of a permanent destination for these ancient peoples breaks through. Aimed along Northwest-Southeast axes, as apparently are all the markers uncovered in Catanauan, and as are most of the markers discovered in Batanes, when the storms cease by mid-January, after eight months of consistently cloud-covered skies, in the first clear nights, the boats point not only towards the sea, but in the darkness after sunset towards the region on the far horizon where the broad band of the Milky Way—which is now no longer an impermanent path made by human hands, but is an eternal path in the heavens in which shine the brightest stars of the night—rises from the edge of the world into the sky.

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