Revisiting Michael Pearson's Indian Ocean Littoral

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Abstract

This essay rethinks Pearson's formulation of littoral society in two essays he wrote in 1985 and 2006. While the first made a case for coastal history, the second continued the theme into the littoral, the strip between land and sea. Pearson foregrounded the universality of a clearly discernible littoral culture on coastlines along and across the Indian Ocean. This translated consequently into a shared history and a common heritage across the ocean's diverse shores. At a time when maritime historians were writing what were essentially land-based histories on ocean spaces, Pearson's social history of the littoral over a longue duree was a significant intervention.

Key words

littoral, ocean, culture, time, space, identity

In 2006 Michael Naylor Pearson, elaborating a model of littoral society he formulated in 1985, published 'Littoral Society: The Concept and the Problems'. While the 1985 publication made a case for coastal history, the 2006 essay pursued the theme into the littoral.¹ In it Pearson foregrounded a littoral of identical material culture across the Indian Ocean, translating into a shared history and common heritage across its otherwise diverse shores. Eschewing traditional maritime history, he moved closer to archaeology which designates coastal sites on major estuaries, at the mouths of tidal creeks and in delta locations as 'poly-focal contact zones'.²

Ten years since, this essay rethinks the 2006 model, applying the following periodizations: the pre-Anthropocene; the Anthropocene from the 1700s; and globalisation from the 1990s. It consists of: an examination of Pearson's ideas; their critique; and an assessment of the littoral. I do not go into social constructions of the sea—since littoral culture, rather than the physical setting of the sea is focal to Pearson's vision—looking instead at Pearson's formulations from his most representative writings on the littoral, and highlighting those left unaddressed: importance of rivers to the littoral; permeability to upstream-downstream flows; susceptibility to interior forces; and the importance of political boundaries in analysing the littoral. I argue that islands, which also have their littorals, are not isolated but function in connective chains. I find, through an examination of universality, limits and connectivities in Pearson's model, an inconsistent notion of place and a ahistorical function of time and memory. I hope 'Mike' will appreciate my arguments.

II. The Model

1 M. N. Pearson, 'Littoral Society: The Case for the Coast', *The Great Circle*, 7, No. 1 (APRIL 1985): 1-8; M. N. Pearson, 'Littoral Society: The Concept and the Problems', *Journal of World History*, 17, no. 4, 2006: 353-73. Henceforth 'Case for the Coast' and 'Littoral Society' respectively.

2 Chris Loveluck, Dries Tys, 'Coastal societies, exchange and identity along the Channel and southern North Sea shores of Europe, AD 600–1000', *J Mari Arch* (2006) 1: 140–69.

The Littoral

The littoral is where the river meets the sea—where sweet and salt water mingle to produce a third kind of water: the brackish water of the estuary. Littoral worship reflects the difference between potable and non-potable—feminine river deities predominate as opposed to male oceanic gods. Cultures reveal the harmony between river and sea: the Nile of Egypt; the Greek Okeanos, the Indic Ganga Sagar, the Brazilian rio-mar, ancient and medieval European notions of the world as archipelagic—if not aquapelagic.³ The notion of the littoral is universally present.

The centrality of the littoral foregrounds an inclusive ocean history as world history.⁴ Distant port-cities are more connected to each other than to their political centres inland:

‘there is such a thing as littoral society...we can go around the shores of an ocean, or a sea, or indeed the whole world, and identify societies that have more in common with other littoral societies than they do with their inland neighbors ... Surat and Mombasa have more in common with each other than they do with inland cities such as Nairobi or Ahmadabad. Yet this is not yet widely accepted.’⁵

Littoral society consists of fisherfolk, boatmen, rope and sail makers, shipbuilders and sailors, rather than admirals, financiers, map makers, captains, merchants and monarchs. Centuries-old livelihoods are focal, occupations secondary, expansive practices significant. Drivers of change until the appearance of the Anthropocene in the eighteenth century, its people sail unbounded spaces such as the Sea of Melayu and Nusantara, a single continuous ‘sea’ linking the Indian Ocean, Sumatra, the Straits, the Malay Peninsula, the Gulf of

3 John R. Gillis, ‘Not continents in miniature: islands as ecotones’, *Island Studies Journal*, 9/1, 2014: 155-66, 156.

4 Pearson, ‘Case for the Coast’: 1.

5 Pearson, ‘Littoral Society’: 353-4.

Siam/South China Sea, and the Mekong Delta.⁶ The change occurs when multiple activities are threatened by industrial fishing. Littoral people earlier moved effortlessly between fishing, agriculture and small business, a way of life Pearson terms amphibious, seeing them as very distinct from their land-based counterparts: 'The concerns of coastal people were usually quite different from those of peasants and pastoralists inland' and 'Where once people of the shore could be both farmers and fishers, they now are one or the other, not both... the sea has been territorialised, or perhaps continentalised... thus ending centuries where the sea was *mare nullius*, part of the commons'.⁷ As interface between sea and land, the littoral demonstrated the equilibrium or disequilibrium as the case may have been, between different sectors of the local economy; the disjunction appears with the shift from a time and space determined by religious tradition to one determined by capitalism and the nation-state—systems and entities precisely located in time.⁸

The 2006 essay makes a clear distinction between the coast and the littoral: the coast fringes the sea, while the latter is the *marge*, the place where land actually cedes to sea. Harbours dot the littoral, ports are situated upstream, the maritime city is located further inland. This three-fold classification suggests a tension—an 'innate disagreement'—between aquatic forces on the *marge*.⁹ Describing this unique landscape, Pearson challenges national history-making:

6 Leonard Y. Andaya. 'A History of Trade in the Sea of Melayu', *Itinerario*, 24, 2000: 87-110: 88.

7 Pearson, 'Littoral Society': 366; Michael Pearson, 'Territoriality and the Decline of the Ecotone'. Forthcoming in Rila Mukherjee ed. *Territoriality in Coastal Societies* (provisional title); Gerard Le Bouedec, 'La Pluriactivite dans les Societies Littorales: XVIIe-XIXe siècle', *Annales de Bretagne et Pays des l'Ouest*, 109-1, 2002: 61-90.

8 A. Kellermann, *Time, Space, and Society: Geographical Societal Perspectives*, (Springer Science & Business Media, 2012), 102.

9 Lucyna Kostuch, 'Between Rivers and the Sea: The Hellenic Aquatic Divisions', *The International Journal of Maritime History*, 27/2, 2015: 177-91, 177.

'What other things show that indeed coastal zone people, at least all those around the shores of warm seas and oceans, have more in common with each other than with their inland neighbors? We could look at food...Houses...Certain languages achieved wide currency...providing commonality around the shores of the Indian Ocean... Languages know no boundaries...For most of history (people) knew little of political borders. Smuggling was an occupation (and) piracy (too)...(There was) a "water world," where boundaries were indistinct...(where) coastal religion is also distinctive...Folk religion on the littoral, beneath an Islamic veneer, reflects the needs of its practitioners...On the coast, religion had to do with customs to ensure safe voyages, or a large catch, or a favorable monsoon so that fishing could recommence.'¹⁰

Universality-Limits

More than any other type of vegetation, mangroves in the Indian Ocean littoral signal its universality. This aquatic vegetation with the rich aqua fauna it supports—various types of crabs, particular species such as lung fish, mud fish and cat fish that survive out of water and numerous marsh birds—introduces the element of amphibiousness; products of a sea in flux, waves continually battle the littoral.¹¹ This distinctive landscape—described as a green sea— attracted attention: 'Everywhere it is green, not because of the nature of the waters, but because of the sea-weed and the other vegetation that is visible through the water'. In high tide the vegetation was submerged in water.¹²

¹⁰ Pearson, 'Littoral Society', 364-6.

¹¹ Pierre Schneider, 'La connaissance des mangroves tropicales dans l'Antiquité', *Topoi*, 14/1, 2006: 207-44.

¹² In Pierre Schneider, 'La connaissance des mangroves tropicales dans l'Antiquité (compléments)', *Topoi*, 17/2, 2011: 353-402, 360-1.

Greco-Roman notices foreground islands, lakes, lagoons, marshes, navigational channels and canals marked by such dense vegetation on the Red Sea littoral. After Berenike:

‘le littoral et le golfe changent considérablement: on ne navigue plus le long d’un littoral rempli d’écueils; on se rapproche plus ou moins de l’Arabie; la mer est peu profonde, à peu près deux orgyes; sa surface est couverte d’herbe, car des algues et des plantes marines sont visibles; elles abondent en effet le long du chenal, particulièrement là où, chez ces peuplades (ou: «dans cet endroit»), les arbres poussent dans l’eau’.¹³

Pearson can be accused of environmental determinism. His enquiry is focal on the western Indian Ocean, although examples from the Indonesian archipelago, Malaysia and Thailand enter his 2006 essay. Once we draw the eastern Indian Ocean into the discussion the picture changes, its littoral is more fragmented, differing from the western Indian Ocean physically and environmentally. It is almost archipelagic in parts, accommodating varied social experiences. The total surface area of the Indian Ocean is about 70,560,000 square kilometres, of which the eastern Indian Ocean comprises 29.88 million square km. The western Indian Ocean comprises a little over 40 million square km. Its environment has been classed as arid and mobile, while that of the former is seen as monsoonal and static. One seems ruled largely by the desert, the other by rivers. Climates differ, the high desert temperatures of Arid Asia encircling the northern part of the western Indian Ocean find little resonance in the humidity of Monsoon Asia. The eastern Indian Ocean is marked by the monsoon winds zone, while the western segment has, in addition, a trade winds zone. Monsoon Asia has been seen as embodying largish agrarian empires, Arid Asia has had more spatially restricted polities.¹⁴

13 Strabo cited in Schneider, ‘(compléments)’: 358.

14 This scheme is adapted from Jos Gommans ‘Burma at the Frontier of South, East and Southeast Asia: A Geographic Perspective’, in Jos Gommans and Jacques P. Leider eds. *The Maritime Frontier of Burma: Exploring Political, Cultural and Commercial Interaction in the Indian Ocean World, 1200-1800* (Leiden, KITLV Press, 2002), 1-7.

Given such geomorphic-hydrographic dissimilarities, there may be substantial variations in littoral practices. However, this stereotyping of the western Indian Ocean extends only to the northern part of the western Indian Ocean. Moving down the Swahili coast, where many regions lie in tropical and sub-tropical zones, Arid Asia disappears.

The notions of *ressac* and ecotone preclude determinism, suggesting multiple unelaborated factors conditioning the littoral:

'A complementary way to conceptualize land-sea relations and connections is...(the) notion of *ressac*, the threefold violent movement of the waves, turning back on themselves as they crash against the shore... the way in which the to-and-fro movements of the Indian Ocean mirror coastal and inland influences that keep coming back at each other just as do waves'.¹⁵

Eschewing universalism a year later, Pearson became sceptical of the increasingly popular concept of an 'Indian Ocean world', raising:

'one final general point, namely the whole matter of the unity of "the Indian Ocean". Is the area too vast and diverse for the term to have any heuristic value? About one third of the world's population are conventionally included in the rubric "the Indian Ocean world". Certainly today most people living in one of the 37 states which border the ocean identify in political terms with their own country, not with some nebulous notion of Indian Ocean commonality.'¹⁶

Limits play a dual role in his model—as frontier and border. The littoral is finite, the notion of territorial waters emerging much later. The instability and impermanence of the littoral makes it a frontier, where two or more systems clash.

¹⁵ Pearson, 'Littoral Society': 359.

¹⁶ Michael Pearson, 'Consolidating the Faith: Muslim Travellers in the Indian Ocean World' in Devleena Ghosh and Stephen Muecke eds., *Cultures of Trade: Indian Ocean Exchanges*, (Newcastle: Cambridge Scholars Publishing, 2007), 18.

Quoting Heesterman: “The littoral forms a frontier zone that is not there to separate or enclose, but which rather finds its meaning in its permeability”, Pearson looks at the coastal ecotone as border between maritime and terrestrial histories:¹⁷

‘I have previously written extensively about littoral society. What is new now is that I have found the concept of an ecotone to be extremely fruitful, not only to describe the coast before the anthropocene era, but also to illuminate what has subsequently happened.’¹⁸

III. Critiquing Pearson’s Model: Place-Space-Memory-Time

Place is a particular locale, here it is the shoreline with its own character: subject to waves, currents, tides, tsunamis, floods and earthquakes—yet incessant peril is not factored into Pearson’s model.¹⁹ Place can be understood in many ways: as definite, bounded, open space; as location or position within a certain spatial order; as particular locale with its own character; as abode and as a generalised sense of space, dimensionality or extension.²⁰ For Pearson, place equals location:

‘Location on or near the shore is an obvious matter... It is this mixture of maritime and terrestrial influences that makes a study of littoral society a paradigm for maritime history in general.’²¹

The littoral is unique, different from Braudel’s coastal society which is more linked to land. It is ruled by its own synergies, comprising the beach, although not all coastal areas

17 Pearson, ‘Littoral Society’: 356.

18 Pearson, ‘Territoriality’.

19 Kerry Sieh, Patrick Daly, E. Edwards McKinnon *et al*, ‘Penultimate predecessors of the 2004 Indian Ocean tsunami in Aceh, Sumatra: Stratigraphic, archeological, and historical evidence’, *J. Geophys. Res. Solid Earth*, 120, 2015: 1-18.

20 J.E. Malpas, *Place and Experience: A Philosophical Topography* (Cambridge: Cambridge University Press, 1999), 21-2.

21 Pearson, ‘Littoral Society’: 354.

have beaches, deltas and islands: 'Islands are perhaps where we are most likely to find littoral societies....Similarly, islands in the rivers can be seen as making up little littoral societies all their own, even far "inland.".'²²

Ecosystems clash in islands. Gillis whom Pearson quotes, says:

'Islands must be understood as ecotones...a place where two ecosystems connect and create a unique environment different from both. It therefore illuminates aspects of island life that are obscured when we treat islands as bounded territorial units constituting a singular ecosystem. Continents may contain one or more ecotones; but islands, especially smaller ones, are dominated by the ecotone where land meets sea. The littoral ecotone helps explain many of the distinctive qualities of island economies and the adaptability, dynamism, and resilience of island societies...Ecotones are made, not given. Two or more ecosystems may intersect, but an ecotone does not exist unless someone exploits this condition...Human evolution has been ecotonal....'²³

Space is simpler than place. Closely linked to time, it designates the realm of temporal physical extension—the realm within which we make sense of volume, size, shape, length, breadth, height, distance and position; it is both physical or non-physical extension, tied to notions of dimensionality and not just restricted to mere physical extension or location.²⁴ Pearson's littoral, following the Western philosophical tradition where the history of space is increasingly understood in the narrow terms of physical extension or void similar to the Greek *kenon*—a undifferentiated realm of pure extension—rather than in the more expansive Greek notion of *chora*, just as place or

²² Ibid., 358.

²³ Gillis, 'Not continents,' 155, 161.

²⁴ Malpas, *Place and Experience*, 23.

topos is now subverted to refer increasingly to mere location within a larger spatial structure, purveys a homogeneous notion of space as physical extension with a corresponding autarchic notion of time. This is a Newtonian space of a single, homogenous and isotropic container in which all things are located.²⁵

If we accept space as pure extension, place—and the emotions associated with it—ultimately becomes irrelevant, losing autonomy and functioning only as an adjunct of space.²⁶ Yet, Pearson imbues his littoral with a sense of place, as locale, and not just as location within space. This results in tension because local spatial conceptions are different—approximating more the elusive *chora*—a place with no certain topology or form. Here locations are relational, not exact: ‘by the river’, ‘along the shore’, ‘at the foot of the hill’, ‘through the next bend in the dunes’, a distinct local geography structuring awareness. Pearson marginalises memory but a society’s notion of space is mediated through memory—a relational temporal concept left unaddressed.

Very few models take into account the significance of time in spatial structure as well as the changing significance of space in time. Encroachments from interior and exterior imbue the littoral with multiple notions of time, not just pre- and post-global. The introduction of modernity and globalisation into the littoral—hitherto marked by a notion of universal time—from the late twentieth century shows:

‘The complex symbiosis between land and sea that we found to characterize littoral society for most of history is fast being transformed. Land influences, often from far away, are profoundly modifying what used to be an important, albeit elusive, segment of human society. People still live on the coast, but a

25 Malpas, *Ibid*, 26-8; Jeff Malpas, ‘Putting Space in Place: Philosophical Topography and Relational Geography,’ *Environment and Planning D: Society and Space* April 2012, 30, 2: 226-42.

26 Malpas, *Place and Experience*, 27-8.

littoral society that moves easily between land and sea, an amphibious society governed by *ressac*, back and forth, has now been overwhelmed by forces from far inland and far away.²⁷

Braudel's conception of a new kind of time: the world's time or historical time—both universal time and narrative time rolled into one—what he calls 'imperious time', is useful when the global and the local intersect.²⁸ Pundravarddhana-pura in ancient Bengal—later Mahasthan—was deemed twice-blessed because of its Karatoya river. The *Karatoya Mahatmyan*, composed sometime prior to the second half of the twelfth century, states its men were wise and pure; the land was filled with gold, made for dancing and enjoyment; it was elevated, fertile and snake-free and filled with tanks and wells.²⁹ Here the river defines the land but local perception determines the landscape—Mahasthan is described as an island within the sea, although actually situated far upland on an ancient trade route to Bhutan and Tibet.³⁰ This particular notion of place is also found in *bhati* (lowlands) in the southeastern Bengal delta: a classification of medieval littoral people because of its unique environment—a low country while Bengal was higher, the frontier between *Bhati* and *Bangala* approximating the present border between Bangladesh and India.³¹

How does Pearson manage time, change and history on the littoral? Time cannot be separated from space, just as we

27 Pearson, 'Littoral Society': 372-3.

28 Braudel, *On History*, 48.

29 Prabhas Chandra Sen, *Mahasthan and Its Environs* (Varendra Research Society, Monograph 2, Rajshahi, Bengal, 1929), 20-1, 25-8.

30 Jean-Francois Salles, 'Les fouilles de Mahasthangarh (Bangladesh)', *Academies des Inscriptions et Belles Lettres*, 139th year, no. 2, 1995: 531-56, 542-3.

31 Jadunath Sarkar tr., Shihab al-Din Talish, *Fathiya-I Ibriya*, *Journal of the Asiatic Society of Bengal*, n.s., 2, no. 6, 1906: 257-67 and no. 3, 1907: 405-17; M. I. Borah tr., Mirza Nathan, *Baharistan-i-Ghaybi*, 2 vols. (Government of Assam, 1936); Richard M. Eaton, *The Rise of Islam, and the Bengal Frontier, 1204-1760* (University of California Press, 1993, paperback 1996), 146; Henry Beveridge ed. Abu'l-fazl 'Allami, *Akabar-nama*, vol. 3, 432, 645-7, (3 vols., 1902-39 rpt, New Delhi: Low Price Publications, 2010).

saw that the notion of space cannot be separated from that of place.³² The littoral's spatial model becomes a chart on which Pearson projects social reality, a template for the different movements of time—the three-way movement of *ressac*—and for all categories of social life.³³ This cultural space-time is focal when we investigate the ways time functions in Pearson's model:

'Crucially, chronology is central and must be taken into account... Identification of an ecotone depends on the time over which the interactions of two habitats are observed. A transition zone between land and water varies at the scale of days, seasons, years, and decades. A riverine ecotone may appear narrow during the summer, broader if an annual cycle is considered, and very large if a flood of a century and its effects are included. Many other, including spatial, characteristics will change accordingly ...'³⁴

Pearson's model seems to theorise reproduction but neglect transformation; the question remains, how useful is a social theory which is concerned not primarily with change but predominantly with stasis and social reproduction, becoming deterministic in the process.³⁵

Pearson enjoyed his visit to the Sundarban, a strip of land on the India-Bangladesh border yielding to the sea in 2013; villages clustered on its many islands mirrored his conception of littoral society. One third of this archipelago belongs to India, the rest to Bangladesh. A hardy mangrove, the *sundari* from

32 Malpas, *Place and Experience*, 42; Kellermann, *Time, Space, and Society*, 1, 102.

33 Sarah Matthews (tr.), Fernand Braudel, *On History*, (University of Chicago Press, 1982), 52.

34 Pearson, 'Territoriality.'

35 Lisa Adkins, 'Practice as Temporalization: Bourdieu and Economic Crisis,' in Simon Susen and Bryan S. Turner eds., *The Legacy of Pierre Bourdieu: Critical Essays*, (London: Anthem Press, 2011), 348; Georgina Born, 'Making Time: Temporality, History, and the Cultural Object', *New Literary History*, 46, Number 3, Summer 2015: 361-386, 361.

which it derives its name, grows out of the water everywhere; Pearson photographed it endlessly. The main activity is fishing, exemplified in the medieval Bengali text *Manasa Mangala* by Visnu Pala which equates castes and classes in Bengal with various species of fish—*catfish*, *kalbaunsh*, *rahu*.³⁶ Mud, more than pebbles or gravel or indeed any other kind of soil, is the primary component of this unique but treacherous landscape. I like to think Pearson saw littoral histories as part of water histories after this visit:

'Let me suggest that a history that takes full account of water as well as land is one that focuses on the beach, the littoral. Here is where we may find a society which by including both land and sea is distinctive from further inland or further out to sea... This points to the way forward. Rather than worry about extreme cases, binaries, with the land and sea being totally separate, we need to be amphibious, moving easily between land and sea... Only on the coast do we find a unique combination of fixed and yet fluid... I am convinced that is the marge, the coast, where we can write the most distinctive maritime, water-based, history' and '...studies of the littoral can contribute importantly as we try to write not only maritime, but also world, history.'³⁷

IV. Challenging Pearson's Model: Fungibility-Permeability-Connectivity

Although Pearson's model is marked by fungibility: 'In delta areas we find ambiguity, lack of definition and boundaries, a zone where land and sea intertwine and merge, really the fungibility, the interchangeability, of land and sea', his littoral

36 Sukumar Sen, ed., *Visnu Pala's Manasa Mangala*, (Calcutta: Asiatic Society, Bibliotheca Indica, 1968, rpt, 2002), 52-3, 68-9.

37 M.N. Pearson, 'Water and History: Some Sceptical Notes' in Rila Mukherjee ed. *Living with Water: Peoples, Lives and Livelihoods in Asia and Beyond* (forthcoming January 2017); Pearson, 'Littoral Society': 373.

remains largely untouched.³⁸ But upstream-downstream connections created permeability. Plutarch, referencing Alexander, highlighted the interchangeability of land and sea on the littoral: '(Alexander) sailed over a battling sea; and as he traversed the parching strands of Gedrosia and Arachosia, it was in the sea, not on the land, that first he saw a living plant'.³⁹

The littoral was the point of entry for silver, copper and gold needed by inland societies and states. Imported goods were present at most littoral sites: coinage, ceramics, votive icons and metal artefacts are examples.⁴⁰ The 1985 essay implied networked connectivities; in 2006 Pearson saw port-cities—sites of networked interactions—as funnels for international trade. Debating 'how far inland' we should go, he cautioned hinterlands differ in size, scope and scale, making it difficult to apply the scheme of an expanded hinterland indiscriminately: 'The extent of the hinterland varies—as Fernand Braudel had it, a thousand frontiers—depending on the question or problem being posed'.⁴¹

Islands too functioned as connective nodes in exchange chains. The Nicobar Islands—situated on a historic route across the Bay of Bengal—participated in an exchange economy that was a combination of barter trade through island-hopping enmeshed within long-distance commodity trade. While travelling to India from Palembang, c. 671, Yijing noted that iron (*loha*) was much in demand in the Nicobars (Lo-jen-

38 Pearson, 'Littoral Society': 355.

39 Frank Cole Babbitt (tr.), Plutarch, *De Alexandri magni fortuna aut virtute*, 2/9, Cambridge, MA. Harvard University Press. London. William Heinemann Ltd. 1936. <http://www.perseus.tufts.edu/hopper/text?doc=Perseus%3Atext%3A2008.01.0231%3Achapter%3D2%3Asection%3D9>. Accessed 1 March 2016; also in Schneider, '(compléments)': 'il (Alexander) navigua sur la mer qui le combattait, et, parcourant les régions désertiques des Gédrosiens et des Arachosiens, il vit la végétation dans la mer avant de la voir sur terre': 382.

40 Loveluck, Tys, 'Coastal societies..', p. 152; J.C. Heesterman, 'Littoral et intérieur de l'Inde', *Itinerario*, 4, Issue 01, March 1980: 87-92, 89.

41 Michael Pearson, 'Indian Ocean Port-Cities: Themes and Problems', in Rila Mukherjee ed. *Vanguards of Globalization: Port-Cities from the Classical to the Modern*, (Delhi: Primus Books, 2014), 63-77, 63, 66-8; Pearson, 'Littoral Society': 354.

kuo, Lanjabalus), ships going to and from Palembang stopping to exchange iron against ambergris, bananas, coconuts, round chests of rattan and bamboo, and probably coir ropes to bind planks together.⁴²

Rivers, less important in Pearson's model, are actually more important than the sea. Srivijaya, an early Southeast Asian polity, was not just a maritime power, but also a riverine polity:

'Whether situated on the Musi (Palembang) or the Batang Hari (Jambi), it was a polity knit together by the tide, which affected the heartland and periphery alike...'⁴³

Malay states were often:

'merely collections of thinly-populated centres at river mouths, held together through trade, kinship; shared ceremonial or religious practices; various forms of clientship and dependency; violence and intimidation; and possibly language.... Rivers and straits tended to be the core of states and were rarely the edges. These were, in the words of Pierre-Yves Manguin, "ship-shape societies", built around boats and water-borne communications.'⁴⁴

Their sultans were called 'Lords of the Sea.' People were amphibious and others truly aquatic, such as sailors who spent most of their lives on sea in long voyages:

'The 'classic characteristics of a littoral society—that is, a symbiosis between land and sea' ... are palpable in every story the people of Nusa Utara tell about their

42 I Tsing/J. Takakusu tr., *Buddhist Practices in India*, (Clarendon: Oxford University Press, 1896), 30-1.

43 O. W. Wolters, 'Restudying some Chinese writings on Sriwijaya', *Indonesia*, 42 (October 1986): 1-41, 31.

44 Carl A. Trocki, 'Borders and the Mapping of the Malay World', Paper presented at the Association of Asian Studies Annual Meeting, 9-12 March 2000, San Diego, California, 2006, 4, 6.

lives. On the outer islands, village chiefs are officially referred to as *kapitalaud* (sea captains).⁴⁵

Imperial communication and transportation networks modified littoral life from the nineteenth century. Penal settlements appeared in a landscape where paths between villages only existed where there were no direct river routes. A close examination of the actual paths used by traders in nineteenth-century Sumatra reveals the complexity of the river and portage system linking the interior and the coast.⁴⁶ Captain Lingard (later to be famous in Joseph Conrad's novels) bartered opium, salt, and guns into the interior of East Borneo, mostly via his travels up several local rivers, setting off a 'seepage effect' of movement and trade from the North Borneo Company's expanding dominions, as indigenous merchants headed south into Batavia's sphere connecting outstretched networks of alliance, competition, and commerce. In British Sarawak boundary-crossing interior Chinese traders fled outstanding debts to more prominent Chinese merchants downriver, and disappeared silently across the Dutch frontier.⁴⁷

V. The Littoral Now

Ten years hence, how do we regard Pearson's littoral? His scheme underlines the irrelevance of political borders to littoral folk such as fishermen, who frequently stray into international waters while undertaking daily activities. Such people function in a 'lawless' space; often falling through cracks of the systems in which they find themselves. For centuries, littoral people

45 DJORINA VELASCO, 'Navigating the Indonesian-Philippine Border: The Challenges of Life in the Borderzone', *Kasarinlan: Philippine Journal of Third World Studies* 2010, 25 (1-2): 95-118, 106.

46 Andaya. 'Sea of Melayu': 93.

47 In Eric Tagliacozzo, 'Hydrography, Technology, Coercion : Mapping the Sea in Southeast Asian Imperialism, 1850-1900', *Archipel*, 65, 2003: 89-107, 93-4.

have taken advantage of differentials across localities in order to plunder, trade commodities, exchange marine technology, and enrich their lives, constituting an Indian Ocean world of people bound together by trade, technology and shared mores.⁴⁸

State-Marginality-Resistance

In the porous India-Bangladesh maritime border, composed of littoral folk living in the ecologically vulnerable Sundarban islands, foregrounding its materiality becomes inevitable. The British found the difficulty of navigating these waters in the eighteenth century. The fluidity of this river-sea border is—both literally and figuratively—an inescapable reality. No matter how much effort is exerted in patrolling this border, the object of surveillance is constantly carried away with the waves of the ocean. Large fishing vessels may carry two flags, one Indian, the other Bangladeshi, to be used depending on which side of the border they find themselves on. This archipelago, geographically closer to the islands of neighbouring Bangladesh, sees an active contraband trade fostering the entry of illegal immigrants into India. Refugees embark on the littoral as climate change sees increasing cyclonic storms with attendant flooding. Both are stateless.

There can also be 'stateless nationalists,' imbricated within criss-crossing networks of race, nation and identity.⁴⁹ Where there are borders, there is also resistance—whether violent or quiet, organized or non-sensational.⁵⁰ Seen from this perspective, littorals may serve as a kind of laboratory for creative forms of local agency. People in littorals are skilful manipulators of passports and other badges of identity. Such forms of subterfuge allow people to take advantage of their interstitial position—for instance, by acquiring unofficial dual

48 Velasco, 'Navigating the Indonesian-Philippine Border': 114; Robert J. Antony, "Righteous Yang": Pirate, Rebel, and Hero on the Sino-Vietnamese Water Frontier, 1644–1684', *Cross-Currents: East Asian History and Culture Review*, E-Journal, 11 (June 2014): 4–30. <http://cross-currents.berkeley.edu/e-journal/issue-11>, accessed 23 February 2016.

49 Adapted from Velasco, 'Navigating the Indonesian-Philippine Border': 97–98, 106, 109.

50 Ibid, 97–98.

citizenship, or in circumventing customs agents in their cross-border dealings. Littorals here become a 'malleable resource', but they also increasingly manifest state power. As the state encroaches into the littoral, it becomes a highly functional barrier for keeping undesirable elements at bay. Much of the scholarship concerning regionalism and territoriality has typically emphasized the ways in which coastal regions press for autonomy from the national state.⁵¹ Sundarban's inhabitants frequently petition the government for autonomy in education, health and job creation, services which exist only in Kolkata. Pearson's littoral—autonomous earlier—is no longer isolated, asserting its right to move forward and demanding a greater role in regional policy making.

Globalisation-Degradation-Prosperity

Does the littoral have a future?

Is it utterly degraded or have other forms of agency imbued it with new life? The twenty first century need for water and energy foregrounds the littoral in national and trans-national planning. An Indo-Bangla initiative is building a 1320MW coal power station—expected to provide around 10% of Bangladesh's electricity generation—at Rampal, on the edge of Sundarban. The forest is a UNESCO world heritage site hosting endangered species such as river dolphins and Bengal tigers whose habitat will be damaged when the plant becomes a reality in 2020.

The littoral has emerged into the forefront as hub of terrorism, piracy and the illicit drug trade, and military modernisation consequently sees a maritime re-orientation. Paradoxically, the littoral is also focal in global economic prosperity. Increasing dependence on sea lanes is an outcome of this prosperity; this is now intertwined with maritime affairs. Regional waterways are strategic once again. Global flows are shaped by—and influence—trends in major sectors. As global

51 Octovianus Mote and Danilyn Rutherford, 'From Irian Jaya to Papua: The Limits of Primordialism in Indonesia's Troubled Past', *Indonesia* 72, October 2001: 115-40; Jacqueline A. C. Vel, 'Tribal Battle in a Remote Island: Crisis and Violence in Sumba (Eastern Indonesia)', *Indonesia* 72 October 2001: 141-58; Christopher R. Duncan, 'The Other Maluku: Chronologies of Conflict in North Maluku', *Indonesia* 80 October 2005: 53-80.

supply chains become more fragmented and countries specialise in production, flows of intermediate goods, as opposed to final goods, are soaring. This plays a major role in shaping the landscape, visible in the modernisation of ports across the Indian Ocean and the appearance of large container ports in its constituent seas.

The economic prosperity has a downside, implying a re-drawing of borders as littorals that compose national territories are constantly challenged by mobile spaces that destabilise and restructure national political and social environments. Conflicts erupt at intersections of mobility and territoriality on the littoral over conflicting insider-outsider claims, visible in child trafficking on the rise in Sundarban.⁵²

Environmental change, more than the effects of globalization and mass tourism, continues to destroy littoral livelihoods. Storm surge is a major cause for concern in several coastal areas along the eastern Indian Ocean. Many cities in Japan, China, India, Bangladesh and the Philippines with populations of over one million are located in the littorals, and nearly 40% of cities with a population of less than 500,000 are located on the shore. Such cities are threatened by rising sea levels; financial centres and political capitals such as Mumbai, Shanghai, Manila and Dhaka are presently at great risk.⁵³ It is estimated that there will be nearly a 40 cm sea level rise by the end of the twenty first century. The chemical composition of oceans would change, further exacerbating the climate crisis. Floods would affect 94 million annually from the 13 million at present. Many littoral areas and islands would sink into the seas.⁵⁴

52 David Ludden, 'Maps in the Mind and the Mobility of Asia', *Journal of Asian Studies*, 62, No. 4. (Nov., 2003: 1057-1078, 1066-7.

53 J. J. Lian, K. Xu, and C. Ma, 'Joint impact of rainfall and tidal level on flood risk in a coastal city with a complex river network: a case study of Fuzhou City, China', *Hydrology and Earth System Sciences*, 17, 2013: 679–89.

54 Toby Tyrrell, 'Anthropogenic modification of the oceans', *Phil. Trans. R. Soc. A* (2011) **369**: 887–908.

More than globalisation its handmaiden—technology—has impacted the littoral. Bulldozing of the ocean floor by trawling, introduction of new irrigation techniques and hybrid fish farming on the coast, as well as the increasing preponderance of cellphone towers—where there were lighthouses and windmills—challenges the landscape as never before. As Pearson notes: ‘It is not a matter of the end of littoral society, but rather that it has undergone, over the last century or so, more major changes, huge stresses, even transformations than was ever the case before this’ but the notion of the anthropocene suggests that the new phase of degradation started not with the globalisation of the 1990s but from the 1800s itself with the Industrial Revolution.⁵⁵ The British and the French started mapping the Bay of Bengal from the 1770s. The Andaman Islands were initially promoted for British settlement. By the 1780s shipping lanes were drastically altered to the detriment of centuries-old navigational patterns and routes, and it is significant that the very first railway lines in British India cemented this disjunction by linking the new British Indian ports with the interior. Older transportation links to markets and harbours on the littoral decayed.

One of the ways that the British and Dutch started to change long-term patterns of shipping was through the exploration and mapping of the maritime frontier. By the late 1890’s, knowledge of the littoral started to be compiled and collated. New bays and creeks were noted, depth-charts in fathoms were prepared, and drinking-water sources were all pointed out, rendering islands more transparent to traders and statesmen alike. By 1900, exploration and hydrographic surveying of the South China Sea island groups was common. Mining interests took the lead in new surveying operations and expeditions and mapping seas and coastlines became one of

55 Pearson, ‘Littoral Society’: 373; Will Steffen *et al*, ‘The Anthropocene: conceptual and historical perspectives’, *Phil. Trans. R. Soc. A* (2011) **369**: 842–867; Crispin Tickell, ‘Societal responses to the Anthropocene’, *Phil. Trans. R. Soc. A* (2011) **369**: 926–32; Pearson, ‘Territoriality and the Decline of the Ecotone’.

the most important steps in imperial processes of subjugation in Asia.⁵⁶

It is fruitful to see if Pearson's model can serve as template for other oceanic spaces. Although emphasising water history and littoral society as part of world-history, Pearson was ambivalent about oceanic history becoming world history:

'If we look at the three greatest oceans, we must at once admit that they are by no means homogeneous bodies of water...some are...more susceptible to world history analysis than are others...the variations are so profound that we may decide the Pacific, or maybe any other ocean, is simply not a category or template which we can use to write world history' (and) 'I have elaborated at perhaps too much length the difficulties of writing a history of the Indian Ocean ... rather than try to be purely maritime, the best we can hope for is to be amphibious, to move easily between land and sea Perhaps estuaries could provide us a clue: "Estuaries are of a dual nature: they let the river flow into the sea, and they let the sea make its way inland."⁵⁷

VI. Conclusion

Ten years since, the littoral has mutated but is still alive, fighting back and even regaining some of its energy. Mobility, global diasporas and Bollywood result in new evolving networks, these influxes reveal overlapping networks of race, nation, identity, cultural affinity and alienation forged over time.⁵⁸ Seen from this perspective, the littoral's contribution to world history is immense.

⁵⁶ Tagliacozzo, 'Hydrography, Technology, Coercion': 95-97, 100.

⁵⁷ Michael N. Pearson, 'Notes on World History and Maritime History', *Asian Review of World Histories*, special issue: Problematizing World History, 3, no. 1, January 2015: 137-51, 145, 148, 151; M. N. Pearson, 'Studying the Indian Ocean World: Problems and Opportunities', in H.P. Ray and E.A. Alpers eds., *Cross Currents and Community Networks: The History of the Indian Ocean World*, (New Delhi: Oxford University Press, 2007), 15-33, 28-9.

There are gradations of marginality on the littoral. If it has lost much of its agency—having become part of global capital—some occupations and cultures, while transforming, are still connected with peoples' location on the marge.⁵⁹ Many have migrated inland to lucrative jobs, yet retain links with their ancestral village on the littoral. Beliefs have migrated along with them: Bon Bibi, Sundarban's folk goddess and protectress, is worshipped as the Hinduised Bon Devi in Kolkata's deep south—entry point into Sundarban.⁶⁰ Instead of the littoral being encroached upon by the coast, the littoral may now be moving inland thereby reflecting a new dynamism, something Pearson did not anticipate.

58 Stephen Muecke, 'Cultural Studies' Networking Strategies in the South' *Australian Humanities Review*, 44, March 2008: 39-45; Isabel Hofmeyr, 'The Complicating Sea: The Indian Ocean as Method', *Comparative Studies of South Asia, Africa and the Middle East*, 32, Number 3, 2012: 584-90; Hans Dieter-Evers, 'Understanding the South China Sea: An Explorative Cultural Analysis', *International Journal of Asia Pacific Studies*, 10, No. 1 (January 2014): 77-93; Riwanto Tirtosudarmo, 'Flows and Movements in the Lands below the Winds', *Journal of Indonesian Social Sciences and Humanities* 4, 2011: 21-47.

59 Pearson, 'Littoral Society': 370-1.

60 Shatarupa Bhattacharyya, 'Localising Global Faiths: The Heterodox Pantheon of the Sundarbans' in this issue.