Mapping the Once and Future Strait:
Place, Time, and Torres Strait from the Sixteenth Century to the Pleistocene

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Abstract

Thematically, this article tracks European imagining, "discovery," naming, and mapping of the geographical space between modern Papua New Guinea and Australia—called Torres Strait since the 1770s—and the local encounters with places and people which enabled or constrained that knowing from the early sixteenth century. The methodological focus is materiality. This cartographic knowledge was generated empirically in embodied encounters; materialized in charts, writings, or drawings; reinscribed materially in maps and globes; and translated into virtual materiality via high resolution digital imaging. The theoretical focus is time. Suspending awareness of later outcomes and nomenclatures, I approximate pasts as they might have seemed to diverse contemporary protagonists. This anti-teleological history is nonetheless episodic and chronologically sequential. I conclude by acknowledging other chrono-logics—Indigenous,

Ethnographic, Archaeological, and digital—which enfold that conventional trajectory and qualify or disrupt History's linear temporality.

Keywords

history, materiality, place, time, agency, Torres Strait

The geographical focus of this article is the space separating modern Papua New Guinea and Australia, called Torres Strait since the 1770s. The historical focus is the European imagining, "discovery," naming, and mapping of that space, or its absence, from the early sixteenth century; and encounters with local places and Indigenous people which enabled or constrained such knowing. The methodological focus is materiality, in a dual sense: human interface with the physical world; and the praxis of inscription (see Douglas and Ballard, this issue). Far from being a transparent reflection of external geographic reality, cartographic knowledge is irreducibly contrived and materially inscribed. From the early fifteenth to the mid-nineteenth centuries—roughly the era of European global exploration under sail—such knowledge was generated empirically in embodied encounters with actual places and often their inhabitants. It was plotted on paper using available instrumentation and historically fluid mathematical principles and reinscribed for wider circulation in engraved or lithographed maps and globes. As an historian who uses maps as historical resources, I mainly encounter them in high resolution digital formats through the escalating medium of virtual materiality.

The theoretical focus is time. Just as in everyday "vernacular" usage, "history" straddles "what happened" and what "is said to have happened" (Trouillot 1995, 2–4), so academic historians juggle History's double time of the "chronological unfolding of events" and the historian's act of enunciation (Barthes 1967, 68).[1] An anti-teleological strategy, suspending awareness of later outcomes and nomenclatures, camouflages the gap between existential and Historical time by trying to approximate pasts as they might have been experienced by protagonists. This experimental history is nonetheless structured as a chronologically sequential narrative. However, other chrono-logics enfold that conventional trajectory, qualifying or disrupting History's linear temporality. Ethnographic time classically freezes and eternalizes localized present moments in Indigenous histories. In Oceania, Indigenous time typically envelops pasts, presents, and futures and is grounded in particular places. Archaeology vastly expands a history of human deep time but is linear, relatively recent, and anchored in its own present by dependence on the sparse residues of presents past. A related, emergent chrono-logic is the digital representation of deep time as malleable virtual reality.

Imagining Places

The shifting interplay of imagination, speculation, and experience in the cartographic materialization of place demonstrates graphically the dependence of mapmakers' abstract knowledge on a steady diet of travellers' empirical knowing. By the late fifteenth century, European cartographers were committed to precise representation of places and their relationships, particularly in navigational charts, given prevailing canons and available technology. However, absent or limited information allowed fancy and conjecture to reign unchecked.

After reaching the East Indies in 1511, Portuguese travellers recorded stories from Malay pilots about the *Jlha De papua* (Island of Papua) (Cortesão 1944, vol. 1, 208, plate 27; vol. 2, 449). Europeans first saw the great island southeast of Maluku (Eastern Indonesia) in 1526–27 when Jorge de Meneses was blown off course and forced to "winter" in the "Papuan islands" (Castanheda 1551–54, vol. 7, lxii–lxiii)—probably Biak, north of modern Cenderawasih Bay. An anonymous Portuguese chart of about 1537 positions the [*Ilya*] *de dõ jorge* (Don Jorge's [Island]) close to an unnamed, disembodied stretch of coastline (Cortesão and Teixeira da Mota 1960–62, vol. 1, plate 52C). In 1528–29 and 1545, during unsuccessful attempts to return to New Spain (Mexico) from Maluku, Spanish mariners visited places and islands along the island's north coast. Scattered encounters with local inhabitants left toponymic imprints of Indigenous agency in several island names. Iñigo Ortiz de Retes called the mainland New Guinea in 1545 (Douglas 2014). News of these places from returning pilots was entered on the ever-emergent Spanish official master map, the *Padrón Real*, and filtered into cartographers' productions. The name *Nueva/Nova Guinea* appears on Iberian manuscript maps from about 1550, labelling a detached north coast, often strung with named islands (e.g., Anon [1550]; [Velho] [1560], folio 9v) (Figure 1).

Insert Figure 1

In his published world map of 1569, Gerard Mercator imagined New Guinea as an almost square island hovering above a vast *Pars continentis australis* (Southern continental region) (Figure 2). The north coast is well-defined and sprinkled with island names recalling Spanish encounters. The remaining margins are smooth and entirely invented. The sea passage south of New Guinea is arbitrary: "it is not yet known whether it is an island or a part of the southern continent." Ambiguity born of ignorance prevailed for the rest of the sixteenth century and into the next. Even within an atlas, Abraham Ortelius (1570, plate 1, cf. plate 2) depicted

New Guinea as either an island separated from *Terra Australis* by a seaway or a bulky peninsula jutting north from the hypothetical southern continent. The peninsular version was favoured by the early seventeenth century and into the 1630s.

Insert Figure 2

Knowing Places

From the 1620s well-informed mapmakers adjusted their representations of the relationship between New Guinea and any land to the south in response to empirical testimony—the material expressions of mariners' seaborne experience in supposedly confidential reports and charts submitted to government or company masters. If the uncertainty of near total ignorance licensed sixteenth-century cartographic fancy about New Guinea, the different uncertainty of partial practical knowledge encouraged Dutch circumspection. Dutch cartographers had close links with the pragmatic Netherlands United East India Company (VOC), which before 1650 actively sought commercial opportunities in unknown lands south and east of its Maluku footholds.

An altered balance of fact and conjecture is apparent in Hessel Gerritsz's (1622) map "Mar del Sur, Mar Pacifico" (South Sea, Pacific Sea), painted on vellum. As VOC cartographer from 1617, Gerritsz received Dutch voyagers' charts, maps, and reports (Keuning 1949, 56). He thus learned about the expedition in 1606 of a tiny vessel called *Duyfken*, sent by the VOC to explore trading prospects along the New Guinea coasts. The voyage's extant material residues are recorded rumours (Saris 1625, 385) and a copied chart (Vingboons [1670a]). Gerritsz's Pacific map is more empirical than more speculative antecedents, including his own earlier world map (1612), which imagines New Guinea in the Mercator tradition as a huge island off the northern promontory of *Terra Australis incognita*. The new map eliminates the southern continent and leaves a wide stretch of ocean between the *Custe vande Papouas* (Coast of the Papuans) and *Nueva Guinea* (Figure 3). The first term denotes the north coast of New Guinea charted by the Dutch voyagers Willem Schouten and Jacob Le Maire in 1616. *Nueva Guinea* labels a fragment of west coast with several place names from the *Duyfken* chart, which surveyed more than 300 km of this coastline, called New Guinea by the Dutch for the next half century. North of the coastline are two features separated by islands, also given names from the *Duyfken* chart: *'t Hooghe Eÿlandt* (the high island) and *Vúÿle Bancken* (foul banks/shoals).

Insert Figure 3

A legend on Gerritsz's map explains that the known "parts" of New Guinea drawn by Dutch discoverers are included but that information "found in the Spanish maps" and "not fitting well with these parts," is omitted. A cryptic but suggestive passage follows:

> These [parts] were sailed into with the yacht of Pedro Fernando de Quiros about New Guinea on 10 degrees westwards through many islands and dry banks and over 2, 3, and 4 fathoms for full 40 days. Presuming New Guinea not to stretch over the 10 degrees to the south—if this were the case—then the land from 9 to 14 degrees must be separate and different from the other New Guinea (Gerritsz 1622, translated by Mutch 1942, 322–323).

This "separate and different" New Guinea was part of the great land named New Holland following Abel Janszoon Tasman's voyage of 1644. However, the implied opening to the South Sea was unrecognized by the crew of the *Duyfken*, their successors on the *Pera* and the *Arnhem* in 1623, and Tasman. The failure was not primarily human. Though the Dutch hoped to find a strait (Mutch 1942, 320–336), they approached from the west and were repeatedly frustrated by reefs, tides, and prevailing winds—a striking demonstration of the material power of place to shape human knowing of places. The only surviving contemporary chart from these voyages was drawn by the *Pera's* chief pilot Arent Martensz de Leeuw (1623; Figure 4a). A substantial gap in his coastal outline is nearly closed by shoals, marked *drooghte* (shallows), and labelled *die droge bocht* (the dry or shallow bight), with *het hooge Landt* (the high land; the *Duyfken* chart's *Hooghe Eÿlandt*) to the south (Figure 4b). The captain Jan Carstenszoon (1859, 31) regretted having been "forced" to abandon their eastward passage. The force was topographic, since they had "sailed into the shallows as though into a cage."

Insert Figures 4(a), 4(b)

Martensz de Leeuw's chart, with its ambiguous *droge bocht*, inspired a radical transformation in Dutch public representations of New Guinea. Willem Blaeu's (1631) world map, scarcely altered since 1606, retains the venerable rendition of New Guinea as a peninsula of *Terra Australis incognita*. That year, his rival Henricus Hondius (1633) first published a chronologically hybrid world map combining a conventional vast *Terra Australis incognita* with *N. Guinea* reconfigured in line with Martensz de Leeuw's map and place names, including the *droge bocht*. Blaeu (1635), recently Gerritsz's successor as VOC cartographer, revised New Guinea similarly in a new map of the East Indies (Figure 5). Yet the world map published in

successive editions of Blaeu's *Atlas novus* before 1840 retains the anachronistic legacies of 1606–31.

Insert Figure 5

Once a Strait

The first European to navigate the elusive strait, albeit unknowingly, was the Spaniard Luis Váez de Torres, second-in-command of a fleet of three vessels led by Pedro Fernández de Quirós in 1606 to the place he named *Espíritu Santo* (in North Vanuatu). Separated from the other ships during bad weather, Quirós (2000, 278–285) headed for New Spain convinced he had discovered the Southland. Accompanied by Diego de Prado y Tovar (1930, 132–174), Torres (1878, 20–2) left Espiritu Santo with two vessels shortly after the *Duyfken's* return to port. He sailed far enough around Espiritu Santo to prove it was an island, rather than a continent, and eventually reached Maluku via the uncharted south coast of New Guinea.

On 12 July 1607, Torres wrote a brief report on his voyage to the Spanish king but it remained unknown and unpublished until the early nineteenth century (Burney 1806, 467–478), buried by a state now impotent to take new imperial initatives but determined to conceal such news from rivals. Torres's (1878, 21) few lines on the ships' passage south of New Guinea subvert the report's dry official prose by implying the contemporary sailor's vulnerability to the physical power of place. Navigating clumsy vessels with rudimentary wayfinding capacity in totally unknown waters, he could not "go forward due to the many shoals and great currents." The ships, driven more than three degrees to the southwest, were unable to rejoin the New Guinea coast for two months. There is no extant chart of the Spanish course but the master mariner-historian Brett Hilder (1980) combined astute maritime and archival practice to reconstruct the likely route.

Several signed, annotated sketch maps produced by Prado during the voyage and four drawings attributed to him were lost or little known until published by Francisco Coello (1878) and Ernest-Théodore Hamy (1907). Prado's (1930) narrative of the voyage was only found in about 1920 (Hilder 1980, 170). The ink and gouache drawings were evidently produced to illustrate the appearance, dress, and artefacts of people encountered between Espiritu Santo and far western New Guinea. Among the earliest extant visual representations of Oceanian people, their content and tone are subtly inflected by the emotional impact of encounters (Douglas

2018). One drawing ([Prado] [1607]) (Figure 6) depicts physically powerful people seen during landings at two islands "south of New Guinea," identified by Hilder (1980, 72, 76) as Zagai and Yam (Iama) (Central Islands, Torres Strait). According to the legend, the inhabitants were "corpulent" and bore "stone clubs[,] large spears and arrows." Prado (1930, 158–160) described "gigantic" men in Yam with bows too "strong" for the Spanish to bend and massive clubs. Torres (1878, 21) said they were "black", "very burly" people and also admitted that the Europeans "could handle none of their weapons."[2]

Rehearsing the conquistadors' ruthless Christian arrogance towards people considered "heathen" and "barbarian," the Spanish soldiers shot and killed at least two men: one on Zagai who refused to leave the top of a tall tree; and another on Yam during an attack on a Spanish launch. They kidnapped three women on Zagai "for the service" of the crew. Whereas the report of the dogged navigator Torres mainly evokes the power of place, the narrative of the aristocratic supernumerary Prado (1930, 158–160) is infiltrated by traces of local human agency. The soldiers' casual brutality was partly reaction to the Islanders' intimidating physical presence and menacing weapons and horror induced by the spectre of anthropophagy, when human skulls and bones were sighted in a settlement. The emotion provoked was expressed in the Spanish name for Yam: *isla de caribes muy grandes* ("island of very tall cannibals").

Insert Figure 6

Notwithstanding long elision of overt evidence of Torres's voyage, rumours about discovery of a strait south of New Guinea must have reached Gerritsz. Some Portuguese cartographers probably saw Prado's charts or Gerritsz's map (Hilder 1980, 137–41; Schilder 1976, 292). Unwilling to compromise his vast imagined *Austrialia incognita*, Quirós ([1610], folio 4–4v) selectively summarized a report from Torres in one of numerous "memorials" to the Spanish king requesting a new colonizing voyage. Torres, wrote Quirós, had sailed along a "great land in eleven and a half degrees [south latitude]" which formed a "continuous land" running "more than 800 leagues" to "near the Moluccas," passing close to "a great reef with a channel, and many islands." The wording ipso facto admits the existence of a strait, given knowledge of land on the other side. However, this knowledge Torres did not have. He probably passed through the southern channel which James Cook (1955, 385, 391, original emphasis) in 1770 named "*Endeavours Straight*," north of "*York Cape*," but Torres (1878, 21) reported only "very large islands" to the south. Another memorial sent to the king around 1630 by Juan Luis

Arias de Loyola (1963, 220, 236–237), a Chilean lawyer, described how Torres sailed far to the west after reaching the coast of New Guinea, always keeping it "on the right hand." Quirós was presumably his informant. Though Quirós's and Arias's memorials were printed at the time, both documents were blanketed by Spanish officialdom for well over a century.

Future Strait

Distorted traces of Torres's voyage nonetheless filtered into a few maps which inscribed Prado's Spanish place names along the southeast coast of New Guinea. A globe of 1625–30 by Michael Florent van Langren contains around a dozen toponyms directly attributed to Prado's charts by Hilder (1980, 54, 143–145). , From the end of the seventeenth century, some French maps reveal garbled familiarity with the toponymic residue of Torres's voyage. Pierre Mortier's (1700) grossly distorted map of the "Eastern part of Asia on the Ocean" (Figure 7) bears marked imprints of Spanish cartographic knowledge, evidently acquired via diplomatic connections in Portugal (Hamy 1907, 49). Mortier's strategy was incremental. *Nouvelle Guinée* is toponymically Spanish, including several of Prado's place names along the south coast. Most names along the *Terra des Papous* and around the coast of *Nouvelle Hollande* are Dutch. Mortier intimated the possible existence of two straits radiating from *Hogeland*, the island above the western coastline he labelled *Carpentaria*. After 1660, the regional designation Carpentaria—echoing a place name (*revier de Carpentier*) imposed in 1623 by Carstenszoon (1859, 47)—commonly differentiated the coastline south of Martensz de Leeuw's *hooge Landt* from New Guinea. One ambiguous gap hints at a passage south of *Nouvelle Guinée*. The other partly splits *Nouvelle Guinée* from the *Terra des Papous* between *Hogeland* and *Hoek van Goede hoop* (Point of Good Hope) on the north coast.

Insert Figure 7

The last name is a legacy of Tasman's first voyage of 1642–43. He was ordered to ascertain whether from New Guinea's north coast he could "perceive any channels or passages to the South," "to come quickly into the South Sea" (van Diemen et al. 1968, 33–35). In mid-April 1643, Tasman (1643) entered a "large bight"—probably modern Astrolabe Bay—where he "hoped to find a passage" but found "that there was no passage." It is named *die bocht van goeden hoopen* (the Bight of Good Hope) in the "Bonaparte Tasman map" (Anon. [1695]). Once owned by the geographer and collector Prince Roland Bonaparte, this map was believed to be by

Tasman but was probably drawn in the 1690s using charts from his voyages. Early in 1644, the VOC despatched Tasman on another expedition to New Guinea and "the unknown coasts of the discovered east and south lands," with orders to seek a route to the South Sea "within the great inlet [the *droge bocht*]" (van Diemen et al. 1859, 43, 49). No contemporary reports, journals, or charts survive from this voyage. However, its track is marked on the Bonaparte map, including passage across the mouth of a completely enclosed, heavily shoaled bay with a blurred label—probably the *Duyfken* chart's *vuyle bancken* (foul banks)—and *droog hoeck* (dry point) to the north. These pessimistic toponyms suggest that Tasman's efforts to reach the South Sea were again thwarted by geography. His employers were disappointed, notwithstanding their presumption that "the land of Nova Guinea is joined to the south land, and in consequence is one continent" (van Diemen et al. 1859, 49; Sharp 1968, 311–327).

Henceforth, VOC interest waned in the mud-choked or reef-clad shores of southern New Guinea and the "arid and poor" land of Carpentaria (Carstenszoon 1859, 45). The deterrent to further exploration was human as well as geographic. Martensz de Leeuw's chart (Figure 4a) has *Dootslagers Rivier* (Slayers River) marked near the first landfall of the *Pera* and the *Arnhem* on New Guinea's southwest coast. Like Prado's "island of very tall cannibals," this term is a cartographic relic of a particular episode of real or imagined Indigenous violence.[3] It negatively memorializes the actions of Kamoro-speaking people on the Mimika coast (Papua Province, Indonesia), who on 11 February 1623 attacked an incautious onshore fishing party from the *Arnhem* and killed 10 sailors, including the skipper (Carstenszoon 1859, 13; Harple 2000, 79). The name haunts the cartography of far western New Guinea at least until the end of the nineteenth century (Witkamp 1893). At the farther end of his voyage, Carstenszoon (42–47) recalled that a member of the *Duyfken's* crew had been killed by "the savages" at the *revier de Carpentier* in 1606. His human portrayals, shaped by confronting local agency, are consistently adverse: "the blacks" regarded the Dutch as "enemies" so that any landing involved "great peril;" he had never seen "men so wretched and poor." These are evaluations of conduct and lifestyle rather than race. In the mentality of Carstenszoon's (12, 46) "Lords and Masters" in the VOC (van Diemen et al. 1859, 52), the indifference to trade of these "wild and barbarous savages" and their "total lack of knowledge" of precious metals or spices damned these places as potential sites of commercial interest for 150 years.

As the most eminent seventeenth-century Dutch explorer, Tasman encountered, charted, and named lands unknown to Europeans, including Van Diemen's Land (Tasmania), New Zealand (Aotearoa), and Amsterdam (Tongatapu), Middelburg ('Eua), and Rotterdam (Nomuka) (all Southern Tonga). He established firm limits for the maximum possible extent of the Southland by circumnavigating at great distance, landing only in Van Diemen's Land. He surveyed the north and northwest coastline of the Southland. Henceforth, *Terra Australis incognita* vanishes from Dutch maps.

Ironically, however, Tasman's inability to penetrate the maze of reefs blocking the *droge bocht* helped perpetuate for a century a major cartographic distortion of the relationship between New Guinea and New Holland—a novel appellation first printed as *Hollandia Nova* on a wall map by the VOC official cartographer Joan Blaeu (1648). Tasman's empirical legacy is clear in the cartouche of the Bonaparte map (Anon. [1695]: "the large land of Nova Guinea" forms "*one land* with the first known South Land, and *all of it joined together, as may be seen from the dotted course-line*" of Tasman's vessels (my emphasis). A composite map of Tasman's voyages (Vingboons [1670b]) unambiguously renders the junction of the two land masses as a reef- and island-strewn bay, with *Droogt hoeck* to the north (Figure 8). New Holland and New Guinea are thus reconfigured as a single land mass with a gross proboscis. The motif of New Guinea as trunk to New Holland's torso is prominent in the re-imagined geographies of several mid-eighteenth-century French maps (e.g., Le Rouge 1748; Bellin 1764) (Figure 9).**Insert Figure 8**

Insert Figure 9

This vision of New Guinea as appendage of New Holland was rapidly dispelled after 1750 by the material logic of praxis. In 1756, the French royal geographer Gilles Robert de Vaugondy (1756) prepared a series of maps to illustrate Charles de Brosses's *Histoire des navigations aux terres australes* (1756), a highly influential agenda for the exploration and colonization of the "unknown austral world." In an earlier world map, Robert de Vaugondy (1748) depicted a gross New Guinea attached thickly to New Holland. But his new maps situate a wide strait between *Carpentarie* and *Nouvelle Guinée*. At its southwestern entrance, *Hogelandt I.* is divided from the mainland by a smaller passage. Spanish place names punctuate New Guinea's southeast coast (Figure 10). Neither the spur for Robert de Vaugondy's cartographic somersault nor the source of his detailed new knowledge of Spanish toponyms is clear. However, the widely-read Brosses was probably involved.

Insert Figure 10

A copy of Brosses's work accompanied Cook on HMS *Endeavour* in 1768. So did an advance copy of the geographer Alexander Dalrymple's *Account of the Discoveries Made in the South Pacifick Ocean, Previous to 1764* (Beaglehole 1955, clvii–clxiv). Dalrymple (1767, iv–xxvii, 82), whose "great Passion" was the "discovery of a Southern Continent," believed fervently in that continent's "more than probable" existence in the south Pacific Ocean, "extending from about 30^0 S. towards the Pole." However, his acquisition of a copy of Arias's memorial saw him temper that faith with the pragmatic conviction that "there was a passage to the South of New-Guinea" and include in his book a chart reconstituting Torres's track (Figure 11).

Insert Figure 11

In August 1770, after three months "intangled" amongst the "Shoals &c[a]" of the Great Barrier Reef that nearly claimed his ship, Cook (1955, 375, original emphasis) sailed north from Endeavour River where the vessel was repaired. He expressed the firm belief that "this coast … doth not join to *New Guinea*," but theory is no substitute for embodied experience. When Cook (1773; 1955, 385, 390) found, traversed, charted, and named "Endeavour Straits"—separating "York Cape" from "Prince of Wales's Isles" (Muralag, the Dutch *Hooghe Eÿlandt* or *hooge Landt*) (Figure 12)—his relief and "no small satisfaction" are patent in his journal: "by being able to prove that New-Holland and New-Guinea are two Seperate Lands or Islands, which untill this day hath been a doubtfull point with Geographers."

Insert Figure 12

Fewer than eighteen months after the *Endeavour* returned to England in July 1771, the mathematician Samuel Dunn (1772) published a new world map tracing Cook's route and celebrating "New South Wales Discovered in 1770." Possibly at the behest of Dalrymple—who had unsuccessfully sought to command HMS *Endeavour* and clearly resented Cook (Fry 2013, 113–122, 271–273)—Dunn renamed the seaway between New Guinea and Carpentaria. He called it "Torres's Straits" (Figure 13). Dunn's novel toponym gained traction with mapmakers in the 1790s (e.g., Arrowsmith 1790, sheet 6; Anon. 1792) and became standard terminology early in the new century.

Insert Figure 13

Some time after 1790, Dalrymple received and translated a copy of Torres's report to the King of 1607, which remained unpublished in Spanish until 1878. Dalrymple gave the translation to the navigator-historian James Burney who included it as an appendix in his multi-volume history of "discoveries" in the South Sea (1806, 272, 467–478; Fry 2013, 112, n. 57). By then, occasional British commanders, including William Bligh, had risked a westward passage through Torres Strait. Matthew Flinders systematically surveyed the Strait in 1802–03 and his published chart (1814b) tempted traders to make it a shortcut to Batavia and India from the British colony at Port Jackson. Yet an ominous nexus of place and navigation remained in the extreme physical and climatic dangers of the passage and the lengthy catalogue of ships wrecked on its islands or reefs ([Stone 2006]). That route was only viable for sailing vessels during the southeast monsoon season from April-May to November while the still more difficult eastward passage, which persistently thwarted the Dutch, was not achieved by Europeans until 1823 (Blainey 1968, 52–61; *Sydney Gazette*, 17 April 1823).

Ethnographic Time

Thus far, I have sketched an anti-teleological sequential history of the uneven inscription of navigators' experience, mainly in maps. Turning to other chrono-logics which qualify or subvert History's linearity, I begin with Ethnographic time. Transient lethal encounters in 1606 between Spaniards and Islanders in Zagai and Yam figure fleetingly in prose and drawings but any ethnographic potential was stifled by long suppression. Cook's (1955, 388) commentary on people seen between Cape York and New Guinea is sparse. Subsequent European encounters with Islanders were ephemeral and often violent until the 1840s when surveying expeditions by HMS *Fly* (Jukes 1847; [Melville] 1867), HMS *Bramble* (Sweatman 1977), and HMS *Rattlesnake* (Huxley 1935; MacGillivray 1852; Moore 1979) supplied better, but still scattered ethnographic pickings.

Ethnography, whether by travellers or residents, has a peculiar temporality. In Johannes Fabian's (1983) critique, Anthropology characteristically denies coevality to Indigenous subjects, putting them "out of time" (Thomas 1996). In historical terms, Ethnographic temporality can generalize particular local encounters in an ethnographic present into a reified society or culture, sometimes primivitized as primordial and timeless (Douglas 1996). A rich but narrow vein of ethnographic information about a segment of the insular-maritime domain of

western Torres Strait on the eve of its disruption by external trade, missionization, and colonialism is opened by the journals and sketchbooks of the marine artist Oswald Brierly, who served on HMS *Rattlesnake* in 1848–50 (Moore 1979). Brierly's relationships with Indigenous interlocutors were unusually egalitarian and he seemed oblivious to prevailing racial attitudes. During several weeks anchored near Cape York, he wrote and drew a valuable account of interacting mainlanders and islanders. His ethnographic understanding was informed by conversation with Barbara Thompson, a young Scottish woman who lived for five years with Kaurareg people of Muralag after a shipwreck and was "rescued" by crew of the *Rattlesnake* in October 1849. Thompson explained that the Islanders had "a general idea that their islands lie between two large countries, *kie daudthee* … to the south" (Kai or Great Daudai, Australia) and "*magie daudthee* to the northward" (Mugi or Small Daudai, New Guinea).[4] Valued articles moved back and forth along strings of islands scattered between the two mainlands (Moore 1979, 171, 210–211, 301–307; McCarthy 1939, 179–191).

Brierly's graphic rendering of a tiny sliver of Indigenous life, anchored in place and time, remained little known until David Moore (1979) published key sections of his journals. Before 1950, professional Ethnographic research in the Torres Strait Islands essentially comprised the immense scholarly production of the six-month-long Cambridge Anthropological Expedition of 1898 under the biologist-ethnologist Alfred Cort Haddon (1901–35), mainly based in Mer (Eastern Islands) but also Mabuiag (Western Islands). In the expedition's *Reports*, Haddon reconstructed "the past life of the islanders," "as a basis for an appreciation of the changes" concurrent with the concerted advent of Europeans and other foreigners after 1860. Field observations apart, Haddon rested this work of Ethnographic salvage on a dual foundation, each valued, but differently. One is episodic (vol. 1, xi–xiv, 101–102, 292–293; vol. 5, 9–121; vol 6, 1–63): "talk about old times" and "folk-tales" told in "jargon-English" (Kriol) or occasionally written by "the old men." The other is fragmentary and adventitious (vol. 1, xiii, 12–13; vol. 4, vi): observations recorded in the voyage narratives of the naturalists Joseph Beete Jukes (1847) and John MacGillivray (1852) and the artist Harden Sidney Melville (1867).

Haddon's equivocal attitude towards local knowledge is epitomized in two sketch maps of Mabuiag—one by himself, the other by an unnamed "Native" (1901–35, vol. 1, viii, 21, 57; vol. 5, 7–9) (Figures 14a, 14b). The maps imply the complex interdependence of ethnographer, "informant," and their respective eruditions. While Haddon (vol. 1, xi; vol. 5, 6) acknowledged

"information" conveyed by "our native helpers," he undoubtedly privileged its conversion into scientific knowledge in his own exegesis, as in his framed, labelled "Sketch map," thickly populated with vernacular names—which are notably absent from all the Pacific voyagers' maps reproduced in this article (Douglas 2014, 19–23; Douglas and Govor 2019). In contrast, the "Native's" map is left unframed and captioned only in the List of Maps. Haddon expressed "certain reservations" about its interpretation and seemed oblivious that this gift required creative appropriation of an alien representational convention to materialize politically-charged knowledge of clan names and their "distribution."

Insert Figures 14(a), 14(b)

Evidently more comfortable with the voyage materials, Haddon referenced them methodically. Nor was he alone. Despite their incoherence, these mid-nineteenth-century narrative snippets—supplemented by later publication of Brierly's journals and those of the *Rattlesnake's* assistant surgeon-naturalist Thomas Henry Huxley (1935) and the *Bramble's* clerk John Sweatman (1977)—are still cited by fieldworkers for their "wealth of evidence on the [precontact] culture of the peoples of this region" (Lawrence and Lawrence 2004, 22–3, 25–6; Lawrence 1994, 241–242, 259–266; Moore 1979, 257–313; Carter 2004 et al., 253, 255).

The physical world of sea and islands visited erratically by Europeans from 1606 to 1860, and very sketchily materialized in their writings, drawings, and maps, was evidently a dynamic, diverse Indigenous space for six to eight millennia. It remains one, if much altered after 1870 as Islanders became marginal actors in global commerce, embraced Christianity proselytized mainly by Pacific Islands missionaries, forged their own hybrid language (Kriol), were annexed as colonial subjects of Queensland, and eventually became engaged Australian Indigenous citizens (Beckett 1987; Davis 2004; Nakata 2007; Shnukal 1983).

Indigenous time

A wide range of materials—Indigenous oral literature, particularly traditions about cult heroes such as Kuiam, Waiat, and Bomai (Haddon 1901–35, vol. 1, 350, 380–385, 390–410; Lawrie 1970, 88–101; see Swain 1993, 84–99); Thompson's statements; Haddon's and later ethnographies (vol. 1, 410–414; vol. 5, 293–302; Lawrence 1994; Moore 1979, 301–307); archaeology (Barham 2000, 227–236); and Islander histories (David, Lui-Chivizhe, and Philp 2015)—strongly suggest that the islands, waters, and reefs between the two Daudai were

experienced locally not as a linear traverse from one point to another, as "Strait" denotes, but as nodes across a cosmos which spatialized time in shifting chains of exchange, marriage, headhunting, and ritual relations.

Formal Historical time is linear, secular, and teleological, progressing incrementally towards a known later outcome. Globally, time is experienced in multiple ways, according to context and circumstance. In Oceania, Indigenous people typically "navigate between the demands of past and future from the perspective of a constantly shifting present" (Ballard 2014, 110). Time—often embodied in genealogies or itineraries—is anchored in place, landscapes, and names as "something like 'space-time'" (Salesa 2014, 33–44).

Torres Strait Islanders are often inappropriately conflated with Aboriginal Australians as a single Indigenous populace (Robinson 2001, 29). However, their reported ideas and experience of time parallel the episodic, often entropic temporality described in several Melanesian cosmologies (Ballard 2014; Davis 1998, 139–140; McDowell 1985), more than the "enveloping," "cyclical and circular," place-embedded "everywhen" said to characterize Aboriginal Dreamings (Donaldson 1996, 193–195, 202–204; Stanner 2009, 58; Silverman 1997; Swain 1993, 13–113). Haddon (1901–35, vol. 1, 274–278, 374–414; 1920)—a moderate diffusionist interested in "migrations of cultures" (Roque, this issue)—regarded "tales" about the advent of "great hero cults" or "legendary persons" who introduced "new arts or better ways of doing things" as trustworthy general indications of what "has probably happened." That is, such stories are non-chronological histories implying an Indigenous dynamic for externally-motivated, episodic innovation and change.

In similar vein, modern Islanders identify successive epochs separated by sharp transitions or ruptures: *bipo bipo taim* (before before time, the creation period); *bipo taim* (before time, between creation and the arrival of Europeans, the Christian "time of darkness"); *athe taim* (recorded and popular history); and *our time* (living history) (Queensland 2010, 17). The arrival of London Missionary Society missionaries in 1871 is celebrated annually on 1 July as the Torres Strait national day to commemorate the Coming of the Light. However, the rigidity of the trope of rupture varies between Christian denominations. Anglicans qualify the schism between darkness and light by promoting Christianity's continuity with approved elements of Indigenous spirituality and ritual. Conversely, more recent Pentacostal denominations typically

demonize customary practices and beliefs and insist on a sharp break with the pagan past (Lahn 2004; Lawrence 2004).

Fracturing Historical Time

Archaeology the discipline is resolutely sequential and presentist (Lucas 2005, 32–60; Olivier 2008). However, the exponential expansion of Archaeological deep time since the late eighteenth century required terminological innovation which indirectly unsettles the linear temporality gradually infusing Western historical thinking from the fourteenth century (Lorenz 2017; Thompson 1967). Historically, the sixteenth century—known thus at the time—precedes the Pleistocene, which was invented by Charles Lyell (1839, 621) and given its modern meaning in 1840 when Edward Forbes (1846, 371, 403) reapplied it to "the 'Glacial epoch' … as a whole" (Farrand 1990, 16–18). Compounding irony, the Renaissance, to which the sixteenth century in Western Europe is historically assigned, is lexically almost contemporaneous with the Pleistocene, with an earliest usage of 1836 cited in the *OED Online*. Such retrospective labelling exemplifies Roland Barthes's (1967, 68) "introduction of enunciating [*l'énonciation*] into historical content [*l'énoncé*]." He saw the "goal" of this "paper-time" as being "'to complicate' the chronological time of history by confronting it with another time, that of the discourse itself."

The Archaeological deep time of the Torres Strait Islands has more than tripled since Anthony Barham (2000, 225, 300) and Melissa Carter (Carter et al. 2004, 234) dated their permanent human occupation to around 3,000 to 2,500 years ago, based on excavations in the small, volcanic Eastern Islands. However, recent archaeological work in the large, high Western Islands produced material evidence for "definitive and sustained human presence" during a "terminal land bridge phase" from 6,000 to 8,000 years ago; followed by sporadic occupation of now remnant islands by people from the southern mainland between 6,000 and 3,500 years ago; and permanent colonization by settlers from the northern mainland from about 3,500 years ago (David et al. 2004, 72–76; Wright 2011).

The skeletal Archaeological chronology of human presence in the Torres Strait Islands gains visual flesh from the dynamic chrono-logic of Matthew Coller's (2007) website *Sahul Time* (http://sahultime.monash.edu.au/). His digital representation of shifting virtual reality shows the space named for Torres waxing and waning in geological time. As sea levels rise and

fall over 100 millennia, that space divides or links the mega-continent formed during glacial maxima. A vast "drowned" area which "once connected Australia to New Guinea" was named Sahul Land by the geographer Thomas Griffith Taylor (1927, 52). The biogeographic label Sahul was extended to the entire bloated Pleistocene continent by the archaeologists Rhys Jones (1977, 2) and Alan Thorne (1977, 187). Chris Ballard's (1993, 17–19) critical etymology of Sahul traces its cartographic usage to a large submarine sandbank south of Timor, initially given the Portuguese label *baixos* (shallows, shoal) and subquently called Sahul—possibly a Malay or Makassan word—by Dutch mapmakers.[5]

Further illustrating the complication of chronology by discourse, archaeologists have reified Sahul ever since Jones proposed it. Some convert Torres Strait and the Gulf of Carpentaria into the "Torres Plain" and "Lake Carpentaria," convenient if anachronistic labels for re-imagined land, sea, and lacustrine formations fluctuating over 50 millennia (Allen and O'Connell 2008, 33, 36). These historical ironies spiral in the serendipitous resemblance of digitally reconstructed Sahul to the conjoined New Guinea-New Holland which reigned cartographically during the century after 1650, licensed empirically by Tasman's failure to find a strait where his VOC masters wanted one (Figures 8, 9).

Conclusion

In theme and method, this article exemplifies the power of place and human agency as key components of encounters and their material inscription, particularly in maps. While the impact of Indigenous agency in encounters is now widely accepted, no clear consensus exists on the parallel significance of place. Scholarly opinion is further complicated by the radical environmental determinism of some interpretations of cultural transformation in the Pacific (e.g., Nunn 2003). My pluralist perspective conceives the power of place as a key, but neither consistent nor determinant, element in specific human experience, here maritime navigation under sail. Conceptually, I address the paradoxical implications of different temporalities—Historical, Ethnographic, Indigenous, Archaeological, and digital. I problematize the teleology of Historical time by suspending knowledge of outcomes and try to dereify cartographic toponymy by avoiding reference to place names before they were invented. However, since these ploys cannot efface my present historical knowledge or positioning, and since a world

bereft of nominal markers defies economical writing, some strategic or “controlled” anachronism (Rubin 2017, 242–244) is justified in the interests of transparency and brevity.

My experimental narrative does not dislodge History’s linearity, normalized in global modernities as a scholarly arm of capitalist time (Smith 1996). Yet capitalist time cannot outface memory or other lived human temporalities, such as Indigenous time, with its considerable existential and moral weight to which Ethnography claims favoured access. But the generalized frozen particularity of classic Ethnography captures little of the deep histories of past and present Indigenous experience, embodied in people and actualized in their stories—Haddon’s “folk-tales”—objects, rituals, art, performances, and places. Archaeology and its digital representation at most infer broad biogeographical settings for changing Indigenous pasts. I conclude by emphasizing Indigenous capacity to accommodate other such temporalities while maintaining elements of their own. In similar fashion, the imposed umbrella term Torres Strait, like much colonial nomenclature, has been appropriated and naturalized by present-day Islanders engaged in their own politics of identity in modern regional or national contexts.

Endnotes

[1] Capitalized, History and Historical signify the academic discipline formalized from the early nineteenth century in Western Europe and North America and subsequently globalized. Upper-case Ethnography/Ethnographic and Archaeology/Archaeological also connote formal disciplines.

[2] The Englishman Flinders (1814a, xxiii, xxv), who sailed thrice through Torres Strait and as a midshipman with Bligh in 1792 endured a concerted canoe-borne attack from Zagai, echoed the Spanish opinion: the Islanders' bows were "so strong, that no man in the ship could bend one;" their clubs were "powerful weapons."

[3] Violent encounters with Indigenous Oceanian people are similarly commemorated in Magellan's *Islas de los Ladrones* (Islands of Thieves) for Guam; Schouten and Le Maire's *Verraders Eylandt* (Traitors Island) for Niuatoputapu in Tonga; *Moordenaars Rivier* (Murderers River), also on New Guinea's southwest coast; and Tasman's *Moordenaers Baij* (Murderers Bay) for Golden Bay in New Zealand.

[4] Haddon (1901–35, vol. 1, 208, 238–247) defined "Daudai" as the Islanders' name for an area of coastal Papua southwest of Kiwai Island. The word *koi* (*kai*) means "large, great, big" and *magi* (*mugi*) "small" in the Mabuiag dialect of the Western Kala Lagaw Ya language (vol. 3, 103, 109).

[5] Mid-sixteenth-century Portuguese manuscript maps depict a large, unnamed underwater bank south of Timor (Cortesao and Teixeira da Mota 1960–2, vol. 1, plate 97; vol. 2, plates 105, 156). Gerritsz's (1622) map of the South Sea is the earliest I know to name it Sahul.

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Figure 1: [Bartolomeu Velho], "Nueva Guinea," ([1560]), ink on parchment, detail, in [Portolan Atlas], folio 9v, The Huntington Library, San Marino, California, HM 44.

Figure 2: Gerard Mercator, Nova et aucta orbis terrae descriptio ad usum na vigantium emendate accommodata, (Duysburgi, 1569), engraving, sheet 6, detail, Bibliothèque nationale de France (henceforth BnF), Paris, GE A-1064 (RES).

Figure 3: Hessel Gerritsz, [Nueva Guinea], in “Mar del Sur, Mar Pacifico,” (1622), paint on vellum, detail, BnF, Paris, GE SH ARCH 30.

Figure 4(a): Arent Martensz de Leeuw, "Caerte van de ondecte custe ende plaessens van Nova Guinea 1623," (1623), pen and brush on paper, Nationaal Archief, Den Haag, 4.VEL 493.

Figure 4(b): Arent Martensz de Leeuw, [Die droge bocht], in "Caerte van de ondecte custe ende plaessens van Nova Guinea 1623," (1623), pen and brush on paper, detail, Nationaal Archief, Den Haag, 4.VEL 493.

Figure 5: Willem Janszoon Blaeu, India quæ Orientalis dicitur, et insulæ adiacentes, (Amsterdam, 1635), engraving, detail, National Library of Australia (henceforth NLA), Canberra, MAP T 222.

Figure 6: [Diego de Prado y Tovar], "Esta xente delas yslas questan alaparte del sur de la Nueva Guinea …," ([1607]), ink and gouache on paper, Archivo General de Simancas, MPD, 18, 083.

199x135mm (300 x 300 DPI)

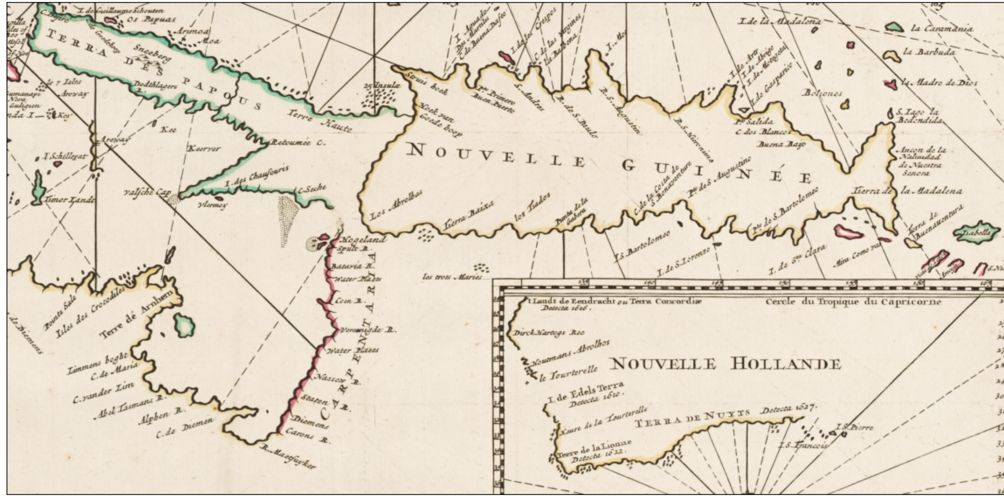


Figure 7: Pierre Mortier, Partie orientale de l'Asie sur l'Océan levée sur les mémoires les plus nouveaux, (Amsterdam, 1700), engraving, detail, NLA, Canberra, MAP RM 3465, http://nla.gov.au/nla.obj-232281876.

406x200mm (300 x 300 DPI)

Figure 8: Johannes Vingboons, [Karte von Tasmans Australienreisen 1642–1643 und 1644], ([1670]), pen and brush and watercolour on paper, detail, in "Atlas Blaeu-van der Hem," vol. 41 (30), folio 114–115, Österreichische Nationalbibliothek (henceforth ONB), Wien.

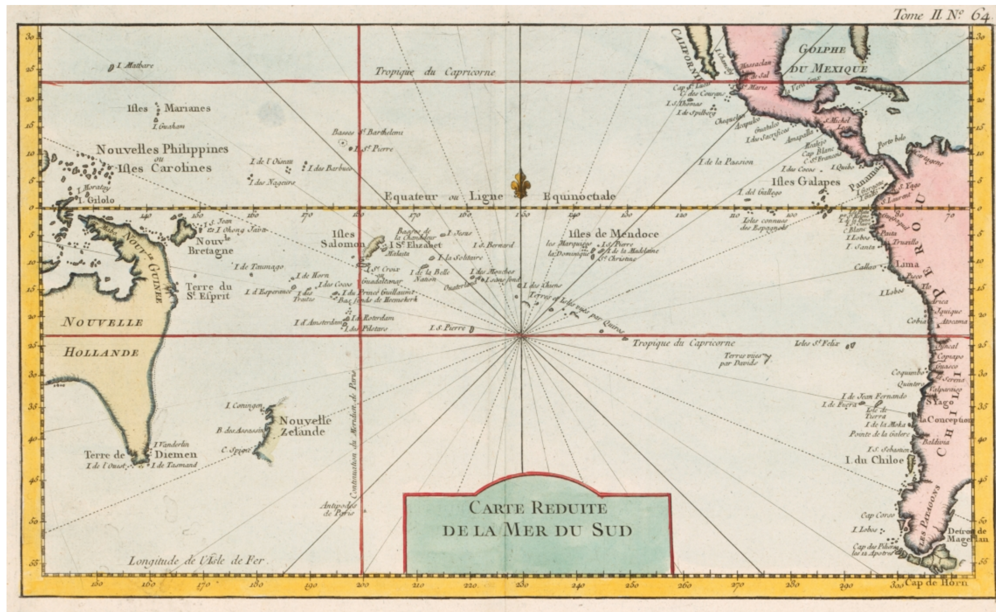


Figure 9: Jacques-Nicolas Bellin, Carte reduite de la Mer du Sud, ([Paris], 1764), engraving, NLA, Canberra, MAP NK 1570, http://nla.gov.au/nla.obj-230596189.

326x199mm (300 x 300 DPI)

Figure 10: Gilles Robert de Vaugondy, Partie de l’Australasie qui comprend la Terre des Papous ou Nouvle. Guinée …, (Paris, 1756), engraving, detail, NLA, Canberra, MAP RM 4155. http://nla.gov.au/nla.obj-232430557.

160x182mm (300 x 300 DPI)

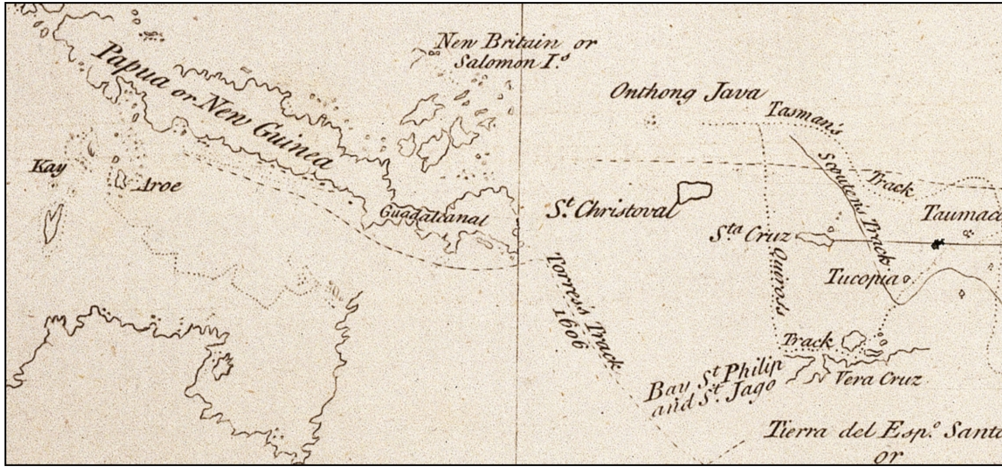


Figure 11: Alexander Dalrymple, Chart of the South Pacifick Ocean, Pointing out the Discoveries Made Therein Previous to 1764, (1767), engraving, detail, State Library of New South Wales (henceforth SLNSW), Sydney, Q77/41. http://library.sl.nsw.gov.au/record=b2070876~S2.

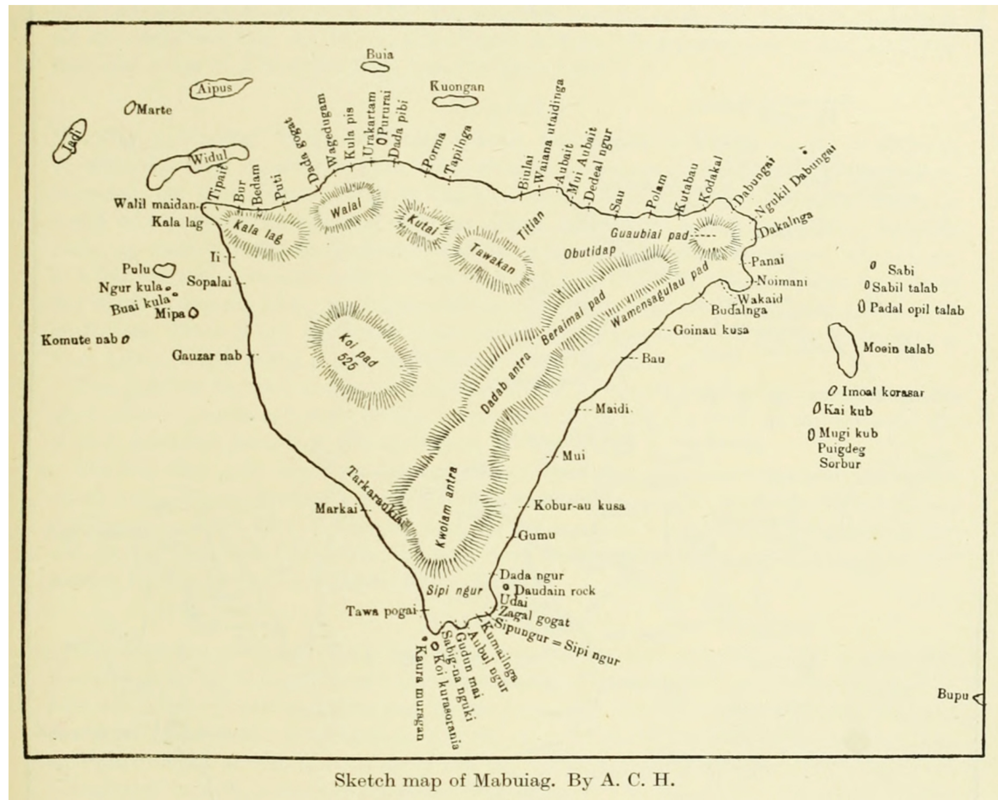
197x91mm (300 x 300 DPI)

Figure 12: James Cook, “Chart of Part of the Coast of New South Wales, from Cape Tribulation to Endeavour Straits,” (1770), engraving, detail, in John Hawkesworth, An Account of the Voyages Undertaken … for Making Discoveries in the Southern Hemisphere … (London, 1773), vol. 3, facing 589, David Rumsey Map Collection, Image 3403050.

200x154mm (300 x 300 DPI)

Figure 13: Samuel Dunn, Scientia Terrarum et Coelorum ... (London, 1772), engraving, detail, SLNSW, Sydney, Z/M4 00/1772/1.

150x108mm (300 x 300 DPI)



Sketch map of Mabuiag. By A. C. H.

Figure 14(a): Alfred Cort Haddon, "Sketch Map of Mabuiag: By A. C. H.," engraved sketch, in Reports of the Cambridge Anthropological Expedition to Torres Straits (Cambridge, 1935), vol. 1, 21, Internet Archive, https://archive.org/details/reportsofcambrid01hadd/page/n8.

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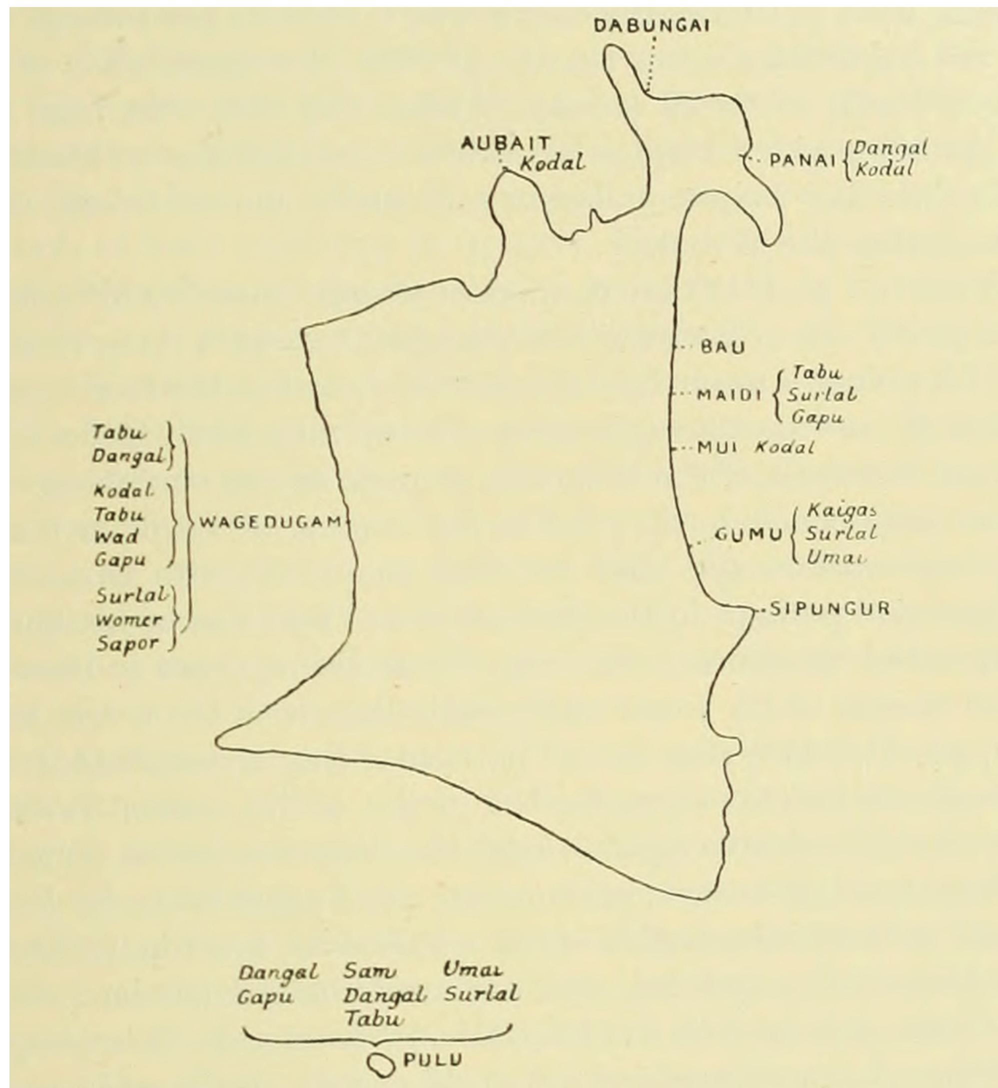

Figure 14(b): Anon., "Mabuiag Drawn by a Native, Showing the Distribution of the Clans," engraved sketch, in Alfred Cort Haddon, Reports of the Cambridge Anthropological Expedition to Torres Straits (Cambridge, 1935), vol. 1, 57, Internet Archive, https://archive.org/details/reportsofcambrid01hadd/page/n8.

150x162mm (300 x 300 DPI)