Concretion

Submarine Growths and Imperial Wrecks

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ABSTRACT The ruins of wrecked ships are often so thoroughly dispersed by their submarine environments as to practically vanish. Sometimes, however, the conditions of a wreck's submergence create complex modes of material endurance. Concretion, which names both a substance that forms on certain immersed surfaces and the phenomenon of that substance's formation, is one such mode. Inspired by maritime-archeological objects and practices, this article asks how concretion—from the Latin concrēscěre for "to grow together"—marks and reworks imperial (and other) presences at the seabed. The article develops a hermeneutics of benthic becoming at intersections in literary studies, critical theory, cultural geography, and recent subsea turns in the oceanic (and more broadly environmental) humanities. Wrecky concretion, I argue, configures the thickening presences of empire's remains in the course of their underwater lives and in company with seawater, marine organisms, and inanimate beings. In this way, manifestly imperial presences actively coincide with others—and with the agencies, memories, and affects such presences may be understood to express (and not). Pivotally informed by Édouard Glissant's critical deeps, Derek Walcott's "The Sea Is History" (1978), and the politics of memory enacted by the Slave Wrecks Project and Diving with a Purpose, I observe a few of the ways that concretion may be punctuating and revising oceanic spaces, memories, and times. If the world ocean has long been unevenly composed by modernity, capitalism, and empire, it has also been reforming the wrecked stuff it receives into unanticipated configurations, growings-together that these pages provisionally ascertain.

KEYWORDS shipwreck, seabed, concretion, empire, oceanic humanities

Dwelling among the display cases and storehouses of terrestrial heritage institutions are countless examples of an object category known as "marine concretion." Take the four things represented in this picture, derived from the Maritime Archaeology shipwreck database of the Western Australian Museum (fig. 1). They are together called "BAT3382—Concretions," and in their present setting they are synecdochic of a larger and infamous ruin. In 1629, a Vereenigde Oostindische Compagnie (VOC, or Dutch United East India Company) ship called the *Batavia*



FIGURE 1. BAT3382—Concretions. Registration Number 3382. ID 1207. Western Australian Museum.

ran upon a reef amid the Houtman Abrolhos island and islet group, about thirty-six miles west of a coastline now affiliated with the Midwest region of Western Australia. (It is now and has in the past been affiliated with other places, too, prominent among them the land and sea country of the Yamatji people.) With the stranded survivors, the wreck site became the region of a secondary disaster in the form of a legendary, murderous mutiny enacted after the *Batavia*'s commander departed in search of aid. The vessel's submersed wreckage was rediscovered in the 1960s and excavated in the following decade. It has since occupied a distinct place in Australian settler historical consciousness.¹ For the lay observer who looks to "BAT3382" for relevant information, however, the image does not reward visual scrutiny with recognition or understanding. Unequally proportioned, pitted, mostly yellowish and lumpy, the things it depicts look like nothing more and nothing less than chunks of anonymous stone. Consulting the set's object description helps only a little. "Concretion, unidentified," it reads, "?w/ [sic] tin type metal."²

In English, the word *concretion* derives originally from the Latin verb *concrēscěre*, meaning "to grow together." The same root subtends "concrescence" and "concrescent," nominal and adjectival forms long employed, in diverse contexts, to denote states and modes of coalescence.³ As a term of art in modern maritime archeology, concretion names both the "substance" that forms on many surfaces—metallic ones, especially—when those surfaces are submerged *and* the "complex

phenomenon" of that substance's formation. For instance, soon after the *Batavia* left an unintended deposit of iron artifacts on the bottom of the eastern Indian Ocean, communities of coralline algae made their homes upon some of the nautical detritus. In dying, the algae left their calcium carbonate exoskeletons behind, creating a layer to serve as the basis of more algal life, and so of more exoskeletal layers. Thus growing, a concretion might eventually "merge" with "adjacent objects." It might even wind up as the sort of "large mass" suitable for the "secondary growth" of still "other life," from seaweeds to soft corals, as well as for the fortuitous settling of inanimate "debris." As for the substrates that become inhabited and remade, concretion sometimes causes the corrosion and dispersal of artifacts to actually slow down, as though acting to "protect" that which it envelops. In the same manner, in other words, that a drowned thing is overlayered by marine organisms, coalesces with what it adjoins, and gets covered by sundry unliving stuff, it may be maintained with a kind of obfuscatory care.

This article addresses concretion as simultaneously product and process, noun and verb. It hails submarine growings-together as ambivalent agglomerations of matter, history, and animacy. Though extensively indebted to maritimearcheological practices of description and interpretation, what follows works primarily from the hermeneutic orientations of literary studies, critical theory, cultural geography, and recent submarine turns in the interdisciplinary matrix of the oceanic (and more broadly environmental) humanities. These commitments do not suggest a refutation of the protocols of identification, excavation, and classification that have hauled the Batavia's concrescent things to land and into shipwreck databases. They signal, rather, one attempt to approach concretion's complexities through interpretive relations commensurate with its material, temporal, and agential multiplicities. As my opening example has perhaps indicated, I am suggesting that by arranging such relations, it may be possible to say more, and think differently, about the incalculable imperial (and other) remnants that have been lying at the bottom of the sea. For the philosopher Remo Bodei, "Concrescere . . . refers precisely to what grows by aggregation, in a dense and bushy way": thickly and—with regard to the functions of abstract reason—impurely. 5 Wrecky concretion configures the thick (and thickening) presences of empire's remains in the course of their "underwater life" and in company with seawater, marine organisms, and inanimate affairs. In this way, manifestly imperial presences actively coincide with others—and with the agencies, memories, and affects such presences may be understood to express (and not). This is the case while such objects reside undersea, and it is the case when and after they are drawn up to the surface of the waves and then to shore.

Concretion is one mode of oceanic becoming among others. The others defy easy summary, but it is worth acknowledging that they prominently include

material dispersions so total as to subvert embodiment and identity, conventionally construed.7 For a "blue humanities" devoted, in part, to defamiliarizing terrestrial definitions of environment, culture, and humanity, going underwater commonly entails access to realms of unexampled fluidity, mobility, and dissolution.8 These aspects of immersed ontologies have been crucial for the work of theorizing subsea realms' entangled aesthetic, conceptual, and temporal specificities—and they have pivotally informed recent studies of the constitutional aqueousness of maritime economies and militarisms.9 Concretion, meanwhile, confronts observation and imagination with solidities and fixations that indicate seas' surprising capacities to not only disperse the anthropic (and other) things they receive but to spectacularly encumber or "foul" them. 10 A counterintuitive expression of a more-than-liquid oceanity, fouling is among other things an interruption of marine movement and a mode of localization and memorialization—a placemaking that may literally be loaded with the matter of imperial history. 11 In other words, by drawing attention to comparatively solid things, I am emphasizing accumulation and fixity over circulation and flow. This emphasis does not imply a critique of the many priceless theorizations of marine liquidity that have transformed oceanic (and other) inquiries in recent years. 12 It represents, instead, an encrusted and encrusting supplement to one predominant spirit of flux.

Punctuating Atlantic "deeps," wrote the writer and theorist Édouard Glissant, are the "scarcely corroded balls and chains" that once encumbered the limbs of enslaved persons transported from Africa to the Americas. 13 Of course, if they afford a prospect of startling material continuance, Glissant's shackles also advertise, yet more starkly, the decompositions undergone by the bodies of those forced to wear them. In the midst of weird endurances and utter liquefactions, I am asking how concretion punctuates and revises oceanic spaces, memories, and times, as well as what habits of sea-reading — of thalassology, if that term will serve¹⁴ — may be best suited to interpreting the imperial and postimperial marks ocean floors are apprehending, holding, and remaking. An interpretive practice attuned to concretion pays heed to the agglomerated artifactual and ecofactual presences of marine zones while declining to assume that such attention will yield unified stories. This is a hermeneutic concerned at least as much with surface attachments as with excavatorial revelations, but it does not propose that either of these alternatives holds the key to accessing benthic meaning. The following attends in particular to concretion at the seabed and lingers deliberately along the edges of identification, individuation, classification, and their others. If the world ocean has long been unevenly composed by modernity, capitalism, and empire, it has also been reforming the wrecked stuff it receives into unanticipated configurations, growings-together that these pages will provisionally ascertain.15

1. Growings-Together

In December 1794, a Portuguese slaver known as the São José Paquete d'Africa sank near Cape Town, offshore from what was then the VOC-administered Cape Colony. The São José has the ignominious distinction of being one of the first vessels known to have attempted a slaving passage from Mozambique to Brazil. 16 Approximately half of the several hundred enslaved persons it carried drowned with the ship; those that survived the catastrophe were resold into bondage.¹⁷ In the late 2000s, researchers with the international and multi-institutional Slave Wrecks Project (SWP) began studying the site and identifying its materials in earnest. (The remains had been found in the 1980s but were opportunistically misidentified by their surveyors.¹⁸) By recovering "submerged stories," writes the historian and curator Paul Gardullo, the SWP has endeavored to bring to "knowledge" that which "has been considered unknowable" and to furnish "individuals and communities" with tools for grappling with "difficult histories." To haul "what is submerged" out of the sea and "above the horizon line," Gardullo explains, is to bring sunken things "back into memory for all to see." In the São José's case, this has partly involved gathering and recording "castaway objects" from the site. One unusually compelling piece of debris is a "concretized shackle," adorned with some kind of orangey mass.¹⁹ These irons are a remarkable testament to the networks, violences, and lives entailed by the enslavement by European powers of African people—"the most literal embodiment," even, "of the Middle Passage."20

Removing the "heavily concreted" shackle from what had been, for over two centuries, its seabed residence was not a straightforward task. In the first instance, its form had been so far altered—"blurred"—as to become "very difficult to recognize to the untrained eye" (fig. 2). Having nonetheless succeeded, "despite the concretion," to register the artifact's presence and to carry it ashore, the investigators were confronted with the apparently "impossible" task of discerning its "original shape" through such "thick" encrustation. By X-raying the remains, however, conservators were offered a view inside the "concreted structures," toward not only what "solid metal parts" might persist but toward "the outlines of what was once there."21 Such outlines reveal, in the words of the anthropologist Stephen Lubkemann and the archeologist Jaco Boshoff, "the ghostly echo of what once was." Here, concretion is reckoned to preserve the trace of what it grows together with even after the product at its center has been corroded—and so disappeared entirely. Without the assistance of an X-ray image, an echo like this is likely to go unrecorded: once the removal of the "hard substance" has commenced, it may be "difficult—if not almost impossible to tell where the concretion stops and where the original surface starts." This is a principle of union that simultaneously signals and maintains artifactual presence and resists the material alienation of that particular presence from the other things—"sand and shells and whatever else"—that have coalesced therewith.²³



FIGURE 2. Shackle from wreck of São José, Iziko Museums of South Africa.

This discussion is not building toward a critique of the SWP's practices as insufficiently sensitive to the other presences in evidence among the ruins of the São José. For the scientist and conservationist Alannah Vellacott, to recuperate slaving's remnants from the sea floor is to recuperate "the voices of people who didn't have a voice."24 Vellacott is part of an organization called Diving With a Purpose (DWP), committed, like the SWP, to investigating the locations and stories of the innumerable wrecks of the transatlantic slave trade. The first episode of Enslaved, a recent docuseries, depicts Vellacott and colleagues recovering objects from the ruins of a Royal African Company ship that sank in the Western Approaches en route from the Caribbean to England in the late seventeenth century.²⁵ One of the things the team brings back into memory is a submerged elephant tusk understood to have been purchased, along with enslaved persons and gold, from West Africa. Vellacott reflects on what the retrieval means:

That tusk was worth maybe even hundreds of lives of slaves. It's giving people like you [Kramer Wimberley, another DWP member] and like me an artifact to attach to. That tusk is a symbol of the pillaging of Africa, and I think that speaks really, really strongly. It can help a lot of people identify with that.²⁶

From approximately 108 meters below the surface of the North Atlantic Ocean, the DWP crew regain a material testament to early modern imbrications of empire, slavery, and what Vellacott aptly calls the "pillaging" of African life. "I'm literally above a ship that was carrying my ancestors," muses a DWP diver named Joshua Williams. "I'm free-diving above, kind of, a graveyard."27 Accessing and partly extracting imperial slave wrecks has the potential then to not just augment historical and archeological data but open previously unavailable channels to attachment, reverence, and mourning. This is manifestly true with regard to human ancestors, and it might also pertain to elephant (and other) lives that were lost to slaving's devastations.

Growing with the undiscovered (and never-to-be-discovered) majority of this planet's estimated three million shipwrecks are entities we might call "ecofacts," a term encompassing all the "unmodified or non-artifactual components of archeological sites." Extrapolating from the *Batavia*'s case, for instance, we could imagine incalculably abundant hosts of submerged artifacts cohabiting the submarine with algal and coralline organisms and with inanimate ecofactual stuff, from exoskeletons to sand. Even when found, these cohabitations can be inimical to recognition: as Wimberley, the DWP wreck diver, observes, many ruined ships resemble little more than "debris fields," practically indistinguishable from the "ocean bottom" as they are "grown over by coral." Through their expressions of "nonhuman sociality," coralline growings-over such as these partake of what the poet and ecocritic Joshua Bennett has suggestively termed the "afterlives" of chattel slavery. But as they lie (or will soon lie) out of identification's reach, fields of concrescent debris also evoke prospects of material remains that are at once enduring and illegible—and that pose unsettling questions for the possibilities and responsibilities of an oceanic criticism that frequently operates in realms of considerable and intensifying indistinction.

As categories, "artifact" and "ecofact" hopefully anticipate the conceptual, if not physical, disentanglement of original surfaces from the sand, shells, and whatever else that have been growing with them. The idea of such unravelment operates with particular force in undersea realms reckoned to both effect the total vanishment of the things they receive and to perform exceptional acts of preservation of some of those things. This paradox is conducive to a curious but widespread sense for sunken stuff as simultaneously "gone" and potentially salvageable in a state of unusual integrity.³¹ For many, wreckage coordinates this alternation between "disappearing" and "reappearing" with special material and metaphorical power.³² "Sunken treasures," writes the cultural historian Celeste Olalquiaga, come "to metamorphose, camouflaging into the hues and textures of the marine scenario, in the same way that loose memories and idle fantasies slowly conform to the irregular panorama of our psyche." For all that "ships" and "thoughts" might be transformed by drowning, contends Olalquiaga, "the best of their sunken cargo remains untouched, ready to be salvaged or plundered, resuscitated anew."33 This remarkable quasi-heroic holding out of artifactual identity among, and despite, the metamorphosing impact of the ecofactual scene threatens to not only subordinate or overlook other meanings but erase them through acts of "cleaning the marine concretion off," in theory or in physical fact.34

The idea that it might be possible to draw untouched treasures up from the seabed—to say nothing of extracting them from the depths of the psyche—chimes with a widespread tropology of "rescue" in submarine salvage. In an account of the Asian Art Museum of San Francisco's recent *Lost at Sea: Art Recovered from Shipwrecks*, the critic Edward Rothstein admired a group of stone reliefs and ceramics so "scrupulously restored" that they "scarcely reflect[ed] years underwater." ³⁵



FIGURE 3. Concretion of ceramics from the Hoi An shipwreck, approx. 1450–1500. Vietnam. Stoneware, stone, antler, shell, corroding iron, and remains of sea creatures. Asian Art Museum of San Francisco. Acquisition made possible by Betty and Bruce Alberts, Will and June Arney Roadman, Annie and Cameron Dorsey, Jean and Lindsay MacDermid, Rhoda Stuart Mesker, and Ann Witter. 2000.31. Photograph © Asian Art Museum of San Francisco.

The exception that proved the case was, for Rothstein, a large concretion that had grown together with a wreck sunk off Vietnam's Hoi An coast in the second half of the fifteenth century (fig. 3). This multiform thing, made and remade over the course of at least five hundred years, is characterized by its object description as comprising "stoneware, stone, antler, shell, corroding iron, and remains of sea creatures."36 Such a "jumbled" agglomeration is, in Rothstein's words, the sign of what the exhibition's artworks "had to be rescued from, at great expense and risk." 37 On these terms, the labor of rescue realizes its ultimate aim once a formerly submersed object has been terrestrialized so completely that its underwater life has become undetectable. A "resurrection model" is the historian and maritime archeologist Sara Rich's term for this strain in heritage practice, one that subordinates the "new lives" of seabed ruins to a drive to reinscribe lost artifacts "within the reign of the Anthropos."38

Scholars of critical oceanic materialisms have been increasingly committed to thinking past frameworks fixated upon terrestrializing rescue toward a sincere attentiveness to (for instance) "crystallization, sedimentation and encrustation." 39 At the same time, practitioners like DWP and the SWP are showing that recovering things from the seabed—and disentangling artifacts from ecofacts—can comprise an unsalvific articulation of a specific politics of memory.⁴⁰ That politics cautions against a hermeneutics of concretion that would simply valorize the interpretive provocations of agglomerative submersions. Recalling Glissant's "underwater sign-posts" that "mark the course," actively and ongoingly, of the genocidal trajectories of the Atlantic slave trade, this planet's sea bottoms might be meaningfully construed as the locations of incalculably numerous growings-together among imperial matter and its literal marine successors. "Bone soldered by coral to bone / on the tilting sea floor": with the poet and playwright Derek Walcott's coral-soldered bones and cowrie-clustered manacles in mind, an undisclosed, concrescent undersea is rightly recognized as not only resisting certain conventions in classification and story but as frequently holding histories intact while it also exceeds, reshapes, and even reanimates them.⁴¹

2. Interpreting Concrescent Sea Floors

In "The Sea Is History" (1978), Walcott's central speaker adopts a pose of paradoxical deference toward some voices entreating him to identify the whereabouts of and to reveal—his "monuments," "battles," "martyrs," and "tribal memory." About halfway through, the poet responds to a call to locate his "Renaissance" by inviting his interlocutor on a goggle-clad dive "through colonnades of coral // past the gothic windows of sea-fans."42 As such images suggest, this is a substantially inhuman sort of realm, a place "where the crusty grouper, onyx-eyed / blinks."43 It is, at the same time, a grimly anthropic scene, one "where the man-o-wars floated down."44 Among these wrecks and lives lie some remains that suggest the intermingling of human and other-than-human bodies: "these groyned ribs with barnacles / pitted like stone," advises Walcott's diver, "are the cathedrals." These monuments figure an unusually brutal species of irony, one that engages the layered and renewing violences visited upon peoples stripped of their homes, literally consigned to the depths (if not landed on distant shores) and then made answerable for their histories. They are also the ambiguous icons of strange perseverances, "groyned" like concrete breakwaters against the depredations of their subsea environment the perverse but generative remainders of imperial and slaving transits across and down through Atlantic and Caribbean waters.

Reading athwart the sort of colonizing, "transoceanic imagination" that has tended to render seas so much "aqua nullius" to be adventured over, the literary critic Elizabeth DeLoughrey looks to the poetry of Lorna Goodison and receives an impression of waters made "heavy" by "waste" and "wasted lives." This makingheavy, writes DeLoughrey, is comprehensible in terms of the "humanization" of seas becoming inscribed by (among other things) Glissant's scarcely corroded balls and chains and the "heavy metal pollution" that has long accompanied "European industrialism." Concretion may extend this principle of "more-than-wet" heaviness that impinges on marine imaginaries in general and conceptualizations of the seabed in particular. Empire's wrecks foul the ocean floor, but such wreckage is

made subject to oceanic rescriptions that may remember imperial matters at the same time that they reform and reimagine them.

It may bear iterating, in this connection, that what is actually left of submersed wreckage can prove miniscule in proportion to a vessel in its unwrecked entirety; frequently, indeed, seabed remains effectively amount to nothing. ⁴⁸ In some important respects, this intersects with the Black studies scholar Christina Sharpe's sense of the ocean as really comprising the "atoms" of persons thrown from slavers' decks and recycled as "nutrients" ever since. ⁴⁹ Wimberley reminds us, moreover, that whether truly disappeared or not, a drowning can give way to an oceanic growing-over so complete as to amount, for all practical purposes, to an erasure. But barnacle-groyned ribs are also a distinctively poetic opening to comprehending ocean floors as particular "residual landscapes" of imperial and capitalist disaster, sites that are both different from and ineluctably connected to terrestrial phenomena and landed ontologies. ⁵⁰

As examples of what conservation scientists often call "artificial reefs," imperial sinkings can produce novel habitats for benthic organisms, especially such epifaunal creatures as reside upon (as opposed to underneath, or in) marine surfaces. "It is the nature of marine species," write zoologist Martin Speight and ecologist Peter Henderson, "to seek out and settle on any and all suitable substrates."51 As Speight and Henderson acknowledge, the insight is not a recent one: "the Ocean," wrote the eighteenth-century natural philosopher John Ellis, "abounds so much with Animal Life, that no inanimate Body" immersed therein "can long remain unoccupied by some Species."52 What is relatively new about contemporary frames for valuing wreckage is their emphasis on the economic "benefits" to be derived from sites accessible to (for example) recreational fishers and the "dive tourism industry." In the terms of ecosystem services, shipwrecks furnish "copious amounts of new, clean, hard substrates for the settlement of many sessile and sedentary species," making them potential boons for "marine organisms and SCUBA divers alike."53 The apparently neat coincidence of ecological and recreational interests in settlements like these is enticing because it figures meliorative futures for formerly nautical matter. It is also, however, unsettling by virtue of its dubious claims to the newness and cleanness of craft that have been variously and complexly historied by their transoceanic careers.

The idea that a boat might be so ontologically refreshed by its submersion as to become new and clean may partake of the wider delusion that an ocean is historical only insofar as it functions as what Jeff Bolster calls a "two-dimensional, air-sea interface," a neutral conveyor of "vessel operations" and "cultural interactions." In this view, as a ship slips beneath the surface, it exits one temporal plane and enters a completely different one, where its prior being might be totally revamped as (for instance) an artificial reef. In some important respects, this runs directly counter

to a hermeneutics of shipwrecks as "pristine time-capsules" imagined as denoting historical information with unparalleled efficacy and charisma. But however opposed these trajectories—one toward comprehensive refurbishment, the other toward exquisite preservation—may appear, they nonetheless share an inability to reckon the ontological interminglings that drownings really occasion. They mutually incline, in other words, toward the stabilization of one state of being or another and so of the "associated identity formations" adhering thereto. Extrapolating from the cultural geographer Caitlin DeSilvey's account of "curated decay," we might say that for all their differences, the artificial reef and the time capsule are similarly resistant to sunken things' actual dispositions as "temporary arrangements of matter that shuttle between durability and vulnerability." By asking wrecks to perform as only one sort of object or another, an interpretive practice risks failing to exert what the philosopher Laura Quintana calls an "ethics of attention," one "open to the ambivalence of the ruined" and therefore sensitive to the "unforeseeable" in its unruly forms. The principle of the ruined and therefore sensitive to the "unforeseeable" in its unruly forms.

Concretion configures ambivalent presences and affords conditions for ambivalent scrutiny with unusual force. Its provocations are comparable to those of terrestrial ruins, but they are also irreducibly marine. Emblems and agents of what the geographer Philip Steinberg calls "oceanic forces," concretions are dynamic arrangements of matter, identity, and history. At once "textured" and "texturing," they are benthic forms and reformations that are simultaneously subject to the sea's structuring "opacity" and implicated in the making-opaque of artifactual presences (among others).58 For its students, concretion may express paradoxical tendencies to both reveal a wrecked ship's "alignment" and "extent" and suppress hoped-for "details" under "heavily encrusted" layers of "marine growth." What is withheld until the moment when such "encrustations" and "conglomerates" can be bodily removed or seen past is what the archeologists Donny L. Hamilton and C. Wayne Smith have called "the story of the wreck."59 Hamilton and Smith refer to the remains of the San Esteban, one of numerous Spanish "treasure ships" sunk in the Caribbean Sea, off the coast of what is known nowadays as the US state of Texas, in the mid-sixteenth century. 60 A concrescent criticism asks what spaces of withholding emerge from agglomerations such as these and what present "secrets" those spaces may be said to delineate and foreclose. 61

The story of the wreck cuts a specific historical and narrative figure from the layered oceanic and concrescent ambivalences that grow together with and from seabed stuff. On the one hand, it indexes the promise of salvage work, archeological and otherwise, for the tasks of physically recuperating the traces of and memorializing maritime pasts. And on the other, it is also, and perhaps inevitably, the sign of hermeneutic possibilities unexamined, of aggregative, dense, and obfuscatory oceanic growths literally cleared away. To leave such growths intact, in reality

or in theory, might lead to what DeSilvey calls "new ways of storying matter": of surfacing meaning that extends beyond cultural frames of reference, and inviting in other agencies and other narrative forms."62 Or it might, and more radically, entail a mode of attention that does not anticipate the sublimations of storyism at all: that hews, rather, to what Adrienne Rich named "the wreck and not the story of the wreck / the thing itself and not the myth."63 What we are undertaking to learn is what the thing itself means for the imperial and postimperial matters that reside on the sea floor. Those matters are apprehending other-than-human and (occasionally) human interest while being recomposed through and as the heavy, abundant, and encrusting contours of this planet's concrescent oceanities.

3. Imperial Rubble, Rescued and Not

Empire's ruins, and the worlds those ruins partly create, take distinctive — but also frequently indistinct-forms through wreckage at and from the sea bottom. As previous sections of this article have indicated, those forms mark and sometimes maintain artifactual, testimonial, and grave-riven presences. They are marine expressions, in this regard, of what the anthropologist Ann Laura Stoler has termed the "accruals of colonial aftermaths," the "settling" within "material ecologies" of "imperial interventions."64 At the same time, they punctuate the ocean floor with recolonizable substrates, unforeseen embodiments, and even new lives. They have been and are being entailed by the "other projects" that submersed places hold in store — entailed in the contemporary sense of being involved but also in the "obsolete" sense of being carved, sculpted, or embroidered.65 If they are empire's "durable forms," therefore, then their durability and morphology (to say nothing of their decay) may be mediated by and for entities that are insubordinate, materially and attitudinally, to wrecky stuff.66 Ongoing and processual, the ruins of drowned imperial ships both assert the violences of colonial and slaving histories and allow us to reimagine the residue of those violences along unruly trajectories. "Far from being a space without history," writes Steinberg, "the ocean is a space where history is never finished."67 Concretion's refinishings suggest states of imperial and postimperial "limbo" that merit heeding in themselves. 68

Since the early modern period, the "hybrid" matter of empire's shipwrecks has been the object of interpretive practices tending to both reveal and reinscribe the imbrications of coloniality, exploitation, and undersea-going. Regarding the collections of "aquatic artefacts" owned by Hans Sloane, who in the late seventeenth and early eighteenth centuries served England's Royal Society as its secretary and president, historian of science James Delbourgo has written astutely about the operations of an "encrusted natural history." Amid, for example, a Spanish coin salvaged from waters off Hispaniola and "covered," in Sloane's words, "wt. worm shells & corallin matter all over," Delbourgo recognizes "multiple histories," of "man-made objects" and "natural bodies," that have been "literally conjoined." Such conjoinings also encompass histories of accessing oceanic space and thus of the subsea labors—frequently unfree—that poor, Indigenous, and African divers performed while in the employ of imperial salvors. In certain important respects, Sloane's concrescent treasures imply the real and enduring hazard of a seaward gaze that functions essentially to gather and admire pleasurable incarnations of—and compelling convergences between—naturalia and artificialia.

These concerns intersect, richly and ambivalently, with contemporary efforts to recall the formal and epistemological affordances of pre-Enlightenment structures in organization and display—the Wunderkammern prominent among them where artifactual and other matters mingled in conditions of relative promiscuity.71 Regarding some objects called "sea sculptures," shipwrecked things formed on the seabed from Chinese ceramics, coral, and shells and displayed in London's Victoria and Albert Museum, art historian and curator Marion Endt-Jones has urged an interpretive mode predicated on entanglement, "juxtaposition," and "wonder."⁷² The call to wonder is an appealing one, and its particular relevance for critical archeological approaches to immersed wreckage has been the subject of some important recent theorizing.73 Still, to summon (for instance) the Batavia's concreted remains to view is to encounter some stuff that does not obviously rise to the standard of a charismatic curiosity. In Lost at Sea, Rothstein confronted a "nondescript gray mound," a "mass" appearing to organize its constituents "randomly."74 Concretion and its parts are on these terms receding from shapeliness and interest in proportion with the extent to which they are growing together.

In the sailor-poet John Masefield's "The Ending," a couple of English wrecks sing mournfully and wistfully from their "deathbed of ships" to a transoceanic vessel sailing overhead. One ruin, which "once was the Cromdale," laments its decline from "most delicate stag of the sea" to "nothing but jaggings of iron encrusted with shells, / Deep down among swayings of sea weed and whipping of fish." Another, formerly the Queen Margaret, complains that "scoured or heapt by the under-sea currents I lie / All crushed out of glory."75 Images of irredeemably entropic sinkings do more than accentuate the pathos of nautical disaster. They confront the wreckfisher with prospects of matter disarticulated, made rugged, and agglomerated by inhuman agencies. Part of what makes them horrible, in other words, is that they have been deprived of their characters and made subject to conditions of active and progressive—jaggings, swayings, whippings—mundanity. This is oceanity as a condition of what the historian Alain Corbin saw as "radically inaesthetic": worse than uglifying, these seas threaten to unform what they receive so much as to effectively erase them. 76 Importantly, the "nothing" that calls from the Cromdale's remains coexists with present somethings—aqueous, ferrous, shelly, invertebrate, algal, fishy, and so on. At the seabed, empire's maritime ruins inhabit a temporally and materially heterogeneous state, where transformative change—from the *Cromdale* and the *Queen Margaret* to "nothing"—coincides with the apparently total inertia of other-than-human swayings and whippings.

Masefield's poem registers a specific anxiety respecting the fates and meanings of drowned English craft, but it converges with an even broader sense that sea-bottom debris is mostly becoming more coarse, not more curious. "The bestkept secret of the heritage industry," writes the anthropologist Gastón Gordillo, "is that its ruins are rubble that has been fetishized."77 One of the things "The Ending" contemplates is the tragedy of once-glorious oceangoing artifacts becoming so materially unshaped that they risk leaving fetishization's compass altogether. "Jaggings of iron" is a somewhat obscure image, but it suggests matter indented and made uneven—"perforated," in DeSilvey's language⁷⁸—and it seems markedly unlike Walcott's poetic groynings. "The Sea Is History" ventures an ambivalent practice of leading its fictional guidee (and reader) down to the ocean floor and showing them visions of enduring human and more-than-human detritus of imperial slavery. That poem's addressee, a would-be fetishist, is carried "past the reef's moiling shelf" to a confrontation with a rubbly testimonial to racist imperial murder. But the fact that Walcott's ribs are entering concretion with sessile and stony others is a key aspect of, not an impediment to, the image's powers of making-present.79

Where "The Ending" elegiacally confronts the irredeemable loss of some of the nation's maritime fetishes to benthic disembodiment, then, "The Sea Is History" assays a poetics of concrescent memorialization, the success whereof relies in no small part on its irony and unidealism. The force of Walcott's plunge depends, moreover, on a sense of submersed lives and materialities as not erasing but marking the forms they continue to grow together with. To read of "cowries clustered white on the manacles / of the drowned women" is to encounter heterogeneous figures—of the particular marine violences suffered by enslaved women, of shelly circulations, of gastropod formations—disclosing meaning through (and not in spite of or underneath) ongoing encrustation. Walcott's work resists producing what the literary scholar Stephanie Jones calls a "recuperative historiography of the Black Atlantic." As well as serving as a wrenching emblem of historical loss, the unrescued locates memory abundantly amid a benthos that may unform and reassemble what it receives but hosts a good deal more than "nothing."

This reading of "The Sea Is History" has not attempted to simply square Walcott's imagery with empirical examples of encrustation or otherwise commit what the literary critic Patricia Yaeger called the error of "transforming literature into ecology." Still, the "The Sea Is History" did contribute, when published in *The Paris Review* in 1978, to a small but significant corpus of poetic growings-together: from the bryozoan-blurred "dead ship" of Robert Hayden's "The Diver" (1962)

to the "half-destroyed instruments" and "fouled compass" of Adrienne Rich's "Diving into the Wreck" (1972).⁸³ The point is not that Walcott's submarine imaginary was formed by these or any other predecessors but that "The Sea Is History" is one preeminent instance of a substantial and insufficiently understood group of twentieth-century poetic wreck dives. For Walcott and Rich, the stakes of these immersions were defined in no small part by the ramifications for justice of giving ample attention to wrecked things in themselves.

Like terrestrial rubble, imperial concretion gives rise to "spatial constellations" that both reflect and exceed the vectors and histories of their constituents. And in ways similar to, but also meaningfully distinct from, landed constellations, benthic growings-together take shape in places "inhabited" by other-than-human multitudes. He is and other ways, marine concretion is more than merely a submerged version of topside ruination. Underwater, banal bits and pieces—"from" the *Batavia*, for instance—coalesce in an atmosphere of multispecies and morethan-animate growths, multiple opacities, and "heterochronic" temporalities. They participate, in this regard, in what the postcolonial critic Vilashini Cooppan has recently called "oceanic spacetime," a condition characterized by "flows, exchanges, linkages, layerings, breaks . . . disjunctures" and striations. Moreover, *Batavian* and other residues indicate the potential for sea stuff to evoke the "fractal," "sedimented," and "spectral" even—or especially—when it is comparatively unliquid, even "hard." "sedimented."

The jaggings, swayings, and whippings of Masefield's "The Ending" possess the paradoxical power to console, insofar as they conjure drownings followed by total disappearances—these imperial craft, we are invited to imagine, leave no enduring disturbance in their wake. A concrescent criticism represents one node in an ever-widening project of disavowing the fantasy that the sea washes clean what it receives. It is inspired, not least of all, by a Walcottian poetics of characterizing the ocean floor, through exertions of critical imagination, with the remains that the depths accommodate and have always accommodated. Like Glissant's punctuated deeps, but with rather greater degrees and forms of corrosion in view, an attunement to imperial and postimperial concretion emphasizes its status—and its unruliness—as an articulation of "the ocean's materiality" among other and coconstituent presences.⁸⁷ These are spaces and times that conventional protocols of legibility and historicity may be unlikely to serve.

Up from below the surfaces of this planet's seas, practitioners from DWP, the SWP, and elsewhere recover the material evidence of enslavement and empire. Informed

by those works, this essay has sought a hermeneutic for reckoning the untold imperial wrecks that reside and will reside, legibly or inscrutably, along the ocean floor. Thinking from the material and formal banalities of the Batavia's concreted lumps, I have been asking what shapes, relations, and histories have been growing together with nautical remains. Rather than romanticizing or otherwise valorizing the unknowable, I have aimed to enhance the capacities of an oceanic criticism for characterizing a richly and multifariously presenced benthos. I am dissatisfied by a not uncommon sense — exemplified in the foregoing by Rothstein's account of Lost at Sea — for submarine growths as so much waste matter to be "cleaned" away, that artifactual being might assert itself anew.88 This feeling coincides with, and does not contradict, an appreciation for the voices, attachments, and identifications that are brought forth from the São José and other forgotten debris. What a concrescent hermeneutic serves, I have been contending, is a critical imaginary preoccupied by the vast, unrecuperable majority of this planet's imperial wreckage, fouled stuff that has been conspiring with the seabed to generate "new geographies" of growings-over, among others.89

These are geographies that no "pioneering ocean-floor mappers" will ever fully delineate and that no conservation laboratory will ever comprehensively discern. 90 Their critical relation is the responsibility, to some limited but nonetheless meaningful extent, of a seabed humanities attuned to—to riff on Alexis Pauline Gumbs's "Being Ocean as Praxis" (2019)—the "copoetic" scenes and unseens that comprise benthic unfoldings. 91 What is available for reading there can occasionally be construed as information but may be more integrally confronted on the terms of its intermediacy: as something artifactual and ecofactual but also anthropic and other-than-human. The hope is that this hint might place at least some of concrescent theory's interpretive tools at the service of archeologists, curators, and others inclined to recognize the ambiguities of the unidentifiable as the signs of other presences and as openings toward other literacies. Being entailed by such others may involve tarrying with epistemological impurities, and in this a concretionist is perhaps a little like Rich's diver/s, descending self-consciously to confront some "half-destroyed instruments" that the poet simultaneously observes and is. 92 Materially, affectively, and ontologically grown-together are these things themselves, empire's aftermaths and their becoming-subject to oceans that contain but also sometimes preserve, reform, and inevitably exceed them.

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Notes

- "The wreck of the Batavia and its associated land features," writes an archaeologist instrumental to its interpretation, "have become one of the most prominent aspects of Australia's archaeological heritage" (van Duivenvoorde, Dutch East India Company Shipbuilding, 3).
- 2. Western Australian Museum Shipwreck Databases, "BAT3382."
- 3. Concrescence derives from concrēscěre via the Latin concrēscentia, a noun of quality; concretion comes by way of concrētiōnem, a noun of action. Since the late nineteenth century, concrescence and concrescent have been used primarily in biology, embryology, botany, and dentistry to describe the growing together of cells, organs, the roots of teeth, or other body parts. When these words emerged in English in the early modern period, their mutual relationship appears to have been very close to synonymy. See the Oxford English Dictionary. I am—to adapt Raymond Williams—endeavoring to "recall the unresolved range" of these affiliated etymologies (Keywords, 72).
- 4. McCarthy, Iron and Steamship Archaeology, 90-91.
- 5. Bodei, "Italian," 517.
- 6. I borrow the quoted term from Randall, "Effects of Material Type," 52.
- 7. See for example Arabella Stanger's account of Sondra Perry's Typhoon coming on (2018), where Stanger observes that in declining to present "figural debris," Perry's interpolation of J. M. W. Turner's Slavers Throwing Overboard the Dead and Dying Typhoon Coming On (1840) evokes an "invisibilized state of social violence" ("Bodily Wreckage," 11).
- 8. Mentz, "Blue Humanities," 70.
- 9. For one example of the former work, see Cohen and Quigley, "Introduction"; for two instances of the latter, see Khalili, *Sinews of War and Trade*, and DeLoughrey, "Toward a Critical Ocean Studies."
- For one account of fouling's material and discursive ramifications, see Quigley, Reading Underwater Wreckage, esp. 63–93.
- 11. I am extrapolating from DeLoughrey, "Heavy Waters," esp. 704.
- 12. A partial list of such theorizations might include Jue, Wild Blue Media; Neimanis, Bodies of Water; Steinberg and Peters, "Wet Ontologies, Fluid Spaces."
- 13. Glissant, "Open Boat," 6.
- 14. I am invoking this term, with deliberate uncertainty, in what I take to be the sense briefly suggested in Anderson and Peters, "A Perfect and Absolute Blank," 17.
- For one influential account of the ocean as constituting, and coconstituted by, modernity, capitalism, and (implicitly) empire, see Connery, "Oceanic Feeling and the Regional Imaginary," esp. 288–89.

- I am grateful to Jaco Boshoff of Iziko Museums of South Africa for correcting an error in a previous iteration of this statement.
- The relevant secondary sources reflect minor differences in and uncertainties respecting 17. the facts of the voyage and its aftermath, so I have chosen to be circumspect in my account. Some reporting strongly indicates that the enslaved persons who survived the wreck were conveyed forcibly onward to Brazil. See for instance McGlone, "Humble Objects." Meanwhile, the anthropologist Stephen Lubkemann has contended that "some of the survivors were sold locally" and that this may entail the existence of "descendent communities in South Africa" ("Slaver Shipwreck Sao Jose Paquete D'Africa"). As for the number of enslaved persons transported by the ship, Charne Lavery gives a total of 512, while others frame the figure less precisely—as, for instance, "more than 400" (Lavery, "Diving into the Slave Wreck," 272, and Catlin, "Smithsonian to Receive Artifacts From Sunken 18th-Century Slave Ship"). These versions are hardly incommensurable, of course.
- 18. As Slave Wrecks Project cofounders Lubkemann and Jaco Boshoff write, an accurate identification was made possible thanks to the presence on the São José of antifouling copper, a technology that had not entered widespread use until the late eighteenth century, some decades after the improperly reckoned wreck purportedly went down (Lubkemann and Boshoff, "Journey," 42).
- Gardullo, "Meditation," 8, 10, 13. 19.
- Lubkemann and Boshoff, "Journey," 66.
- Iziko Museums of South Africa, "Preserving the Shackles." 2.1.
- Lubkemann and Boshoff, "Journey," 48. 2.2..
- Iziko Museums of South Africa, "Preserving the Shackles." 23.
- The vessel and its wreck are called 35F. The were found in the early 2000s, but little was then done to study the wreckage, let alone recover it (Dobson and Kingsley, "A Late 17th-Century Armed Merchant Vessel").
- Vellacott in Bienstock and Amponsah, "A People Stolen."
- Vellacott in Bienstock and Amponsah, "A People Stolen."
- Williams in Bienstock and Amponsah, "A People Stolen." 27.
- 28. Emery, "Ecofacts." For one instance of the oft-repeated figure of three million wrecks, see Crespo Solana and García-Rodríguez, "GIS Application," 342.
- 29. Wimberley in Bienstock and Amponsah, "People Stolen."
- Bennett, "Beyond the Vomiting Dark," 111.
- This sense is particularly widespread among narratives of anthropogenic sea-level rise. See, for example, Rush, Rising, 94. For an extended treatment of the trope of inundation as an agent of vanishment see Quigley, "Drowned Places."
- See Hamilton-Paterson, Great Deep, 126.
- Olalquiaga, Artificial Kingdom, 6-7. 33.
- Hamilton and Smith, "The Archaeological Role of Conservation," 301. 34.
- Rothstein, "Exhibition Review." 35.
- 36. See Cascone, "New Exhibition of Artworks."
- Rothstein, "Exhibition Review." 37.
- Rich, Shipwreck Hauntography, 18-20. 38.
- Endt-Jones, "Coral Fishing and Pearl Diving," 188. See also Quigley, Reading Underwater Wreckage, and White, "Sea Sculpture and/as 'Vibrant Matter.'"
- 40. I borrow the latter phrase from Baucom, "Specters of the Atlantic," 67.

- 41. Walcott, "Sea Is History," 115.
- 42. Walcott, "Sea Is History," 116.
- 43. Walcott, "Sea Is History," 116.
- 44. Walcott, "Sea Is History," 116.
- 45. Walcott, "Sea Is History," 116.
- 46. DeLoughrey, "Heavy Waters," 703-4, 708.
- 47. As later sections of the essay will explain in somewhat more detail, my concern for the "more-than-wet" derives from Peters and Steinberg, "Ocean in Excess."
- 48. See for instance Lavery, "Diving into the Slave Wreck," 271.
- 49. Sharpe, *In the Wake*, 40–41.
- 50. I borrow this from Mike Crang's discussion of Edward Burtynsky's "waste ships" in Crang, "Death of Great Ships," 1094.
- 51. Speight and Henderson, Marine Ecology, 208.
- 52. Ellis, An Essay Towards a Natural History of the Corallines, 102.
- 53. Speight and Henderson, Marine Ecology, 211.
- 54. Bolster, The Mortal Sea, 7.
- 55. For one important discussion, see Adams, "Ships and Boats as Archaeological Source Material," 299–300.
- 56. DeSilvey, Curated Decay, 8, 13.
- 57. Quintana, "Alternatives in the Midst of Ruination," 68-69.
- 58. Steinberg, "Blue Planet, Black Lives," 10.
- 59. Hamilton and Smith, "Archaeological Role of Conservation," 288.
- 60. Hamann, "Fieldnotes from Solaris," 116.
- 61. "Secrets" is Hamilton and Smith's term. See "The Archaeological Role of Conservation," 289–90. I adapt the idea of spaces of withholding from Baucom's discussion of Gayatri Chakravorty Spivak in "Specters of the Atlantic," 75.
- 62. DeSilvey, Curated Decay, 6.
- 63. Rich, "Diving into the Wreck," 23.
- 64. Stoler, "The Rot Remains," 2, 4.
- 65. "Other projects" is DeSilvey's resonant turn of phrase (*Curated Decay*, 11). These definitions of "entail" are drawn from the *Oxford English Dictionary*.
- 66. Stoler, "The Rot Remains," 2.
- 67. Steinberg, "Blue Planet, Black Lives," 5.
- 68. DeSilvey, Curated Decay, 2.
- 69. Sloane quoted in Delbourgo, "Divers Things," 153, 158, 176.
- 70. von Mallinckrodt, "Exploring Underwater Worlds," 311-12.
- 71. See for example Nixon, "Anthropocene," 16. For an oceanic inflection see Syperek and Wade, "Curating the Sea," 160.
- 72. Endt-Jones, "Coral Fishing and Pearl Diving," 188.
- 73. See Rich, Shipwreck Hauntography, 23.
- 74. Rothstein, "Exhibition Review."
- 75. Masefield, "The Ending," lines 89-90, 106-7.
- 76. Corbin, Le territoire du vide, 14. See also Quigley, Reading Underwater Wreckage, 31, 134-43.
- 77. Gordillo, Rubble, 9.
- 78. DeSilvey, Curated Decay, 6.
- 79. Walcott, "Sea Is History," 116.

- 80. Walcott, "Sea Is History," 115.
- 81. Jones, "Writing," 264.
- 82. Yaeger, "Editor's Column," 526.
- 83. Hayden, "Diver," 3; Rich, "Diving into the Wreck," 24.
- 84. Gordillo, Rubble, 20.
- 85. Baucom, "Specters of the Atlantic," 77.
- 86. Cooppan, "Time-Maps," 398, 410, 412.
- 87. Steinberg, "Blue Planet, Black Lives," 4.
- 88. For a pertinent discussion see Edensor, "Waste Matter," 317.
- 89. Steinberg, "Blue Planet, Black Lives," 12.
- 90. For the terms of sea-floor cartographic boosterism see Tani, "Understanding Oceans."
- Gumbs, "Being Ocean as Praxis," 342. 91.
- Rich, "Diving into the Wreck," 24.

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