

Putting down “Roots” en route: Lewis Mumford’s Distanced View of American Design

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In Roots of Contemporary American Architecture (1952) Lewis Mumford conceived of a functional design aesthetic by imagining a uniquely American way of making things like colonial era farmhouses, sailing ships, clocks and axes. Mumford’s particular admiration for New England-built clipper ships calls to mind Le Corbusier’s absorption with the “rational assemblies” of transatlantic ocean liners, one of which, the RMS Aquitania, appeared on the cover of his book Vers une Architecture (1923). Both texts responded to a century of rapid technological change that introduced their authors to industrialised travel among other uniquely “modern” experiences. Both texts contributed variants on functionalist design theory to the architectural canon, the received internationalism of Le Corbusier’s text contrasting the explicit nationalism of Mumford’s. Le Corbusier let his preference for mass-produced automobiles, electric dynamos, and ocean liners speak for itself though he was inspired by his own voyaging on the liners. Mumford garnered support for his theory by co-opting two nineteenth century compatriots who also led peripatetic lives, the nineteenth century American art critics Horatio Greenough and James Jackson Jarves.

This paper explores representations of a functional design style by Mumford, Greenough and Jarves by means of their idealisation of American sailing ships. It contextualises their thinking by reference to biographical circumstances and particularities of ocean-going travel in their respective lifetimes, specifically, their voyages abroad and periods spent abroad that background their writing. It shows how all three critics and their essay contributions to Roots respond to new modes of industrialised transportation and experiences of long distance travel. They all invoke a uniquely American innovation culture positioned unevenly between parochial and cosmopolitan worldviews.

Keywords: Lewis Mumford; Horatio Greenough; James Jackson Jarves; American design; functionalism; ships and seafaring

The arguments and legacy of Lewis Mumford's collection of edited essays, the *Roots of Contemporary American Architecture* (1952), have become obscure, overshadowed by more sustained critical attention given to his earlier writing on architecture and his expertise in urban history and planning.¹ However, as a compilation of foundational literature directed to architectural practitioners and students as well as the broader public, the *Roots of Contemporary American Architecture* helped shape a way of thinking about the cultural dimensions of building aesthetics and technology in the decades following the Second World War. Mumford's editorial vision imposed a near common voice and project onto a collection of authors who were made to speak for an American approach to architecture portrayed as unique, progressive and alive. The authors spoke from great distances and dispersed quarters at times, a starting point for this paper.

¹ This paper includes excerpts from Lewis Mumford, *Roots of Contemporary American Architecture* (New York: Dover, 1972), unabridged republication of the second (Grove, 1959) edition of the work originally published (Reinhold) in 1952.

The paper is primarily concerned with two of the earliest essayists to be enlisted in Mumford's project. The first is Horatio Greenough (1805-52), the American sculptor and art critic who crossed the Atlantic multiple times, having spent most of his life in Italy. The second is James Jackson Jarves (1818-88), who prepared for his career as an art critic while working as a journalist in Hawaii before migrating to Europe as well. In several excerpted passages Greenough and Jarves praise what they perceived to be the organic evolution and functionalism of sailing ships, appropriating the category of material artefacts—the “architecture” of ships in no uncertain terms—to ground their criticisms of terrestrial building. By means of editorial gloss and commentary extolling the salutary lessons of the American clipper ship, Mumford incorporates Greenough's and Jarves' views into his own in order to background and legitimate Louis Sullivan's and Frank Lloyd Wright's contributions to the American architectural canon and promote their achievements before an international audience.

By tapping these distinctly American wellsprings of aesthetic criticism, Mumford diverges from Le Corbusier's European view of modernist architecture and its cosmopolitan reach. As a vessel captained to convey American colonial and nationalistic creative impulses, Mumford's clipper ship leaves Le Corbusier's transatlantic liner in its wake. Broadly speaking, as a category of artefacts the “ship” is thus obliged to travel far and wide, in “conceptual and actual terms” (as the conference CFP calls them) to make such a journey.

Stephen Kern writes about the collapse of distance owing to new modes of industrialized transport and communication, part

of the modern “culture of space and time.”² Taking its cue from Kern’s reasoning, this paper aims to show how history-writing—specifically the historiography of functionalism demonstrated by Mumford’s book and his editorial control over its contributing essayists—manipulated geographical understanding, thereby obscuring historical and experiential circumstances of long distance travel for the purposes of contemporary architectural criticism. The paper describes some of these changing circumstances, highlighting the voyages experienced (and endured, it seems reasonable to conclude) by Greenough, Jarves, and Mumford. It aims to complement historiographical analysis with historical details of relevant voyages, highlighting the contribution of industrialized transportation to modernity and its evolving character—the increasing frequency, the tedium as well as the inspiration of voyaging—along with the contribution of maritime technology to novel creative and intellectual networks.

² Stephen Kern, *The Culture of Time and Space 1880-1918* (Cambridge, MA: Harvard University Press, 1983).

“Observe the ship at sea!”

For his book Mumford collected and edited the views of twenty-nine architects, aesthetes and art critics (including excerpts of his own work). One of the earliest contributors, the sculptor Horatio Greenough, spent most of his life in Italy.³ He embarked on the first of many voyages to Europe at the age of twenty, retreating time and again to the marbled reserves of the Continent’s neo-classical art establishment, and to the company of internationally-renown sculptors who were also his teachers: the Dane Bertel Thorvaldsen, the Welsh John Gibson and Florentine Lorenzo Bartolini (a favorite of Napoleon).⁴

³ Details of Greenough’s life are taken from two sources: Charles Buell Dow, “Horatio Greenough and the Jacksonian Mood” (MA diss., University of Wyoming, 1959); and the “Editor’s Preface,” in *Form and Function: Remarks on Art, Design and Architecture*, ed. Harold Small, (Berkeley: University of California Press, [1947] 1966).

Returning to America first in 1826, due to illness, and repeatedly thereafter, Greenough completed commissions for American interests while reflecting on the state of the country’s art from afar. He is particularly well-known, indeed infamous, for his government commissioned statue of George Washington for the US Capitol rotunda. He returned again to America in 1843 specifically to supervise placement there of the ten and one-half foot high marble-draped, seated and Roman toga-wearing colossus.

⁴ Dow, “Horatio Greenough and the Jacksonian Mood,” 2-3

Demands of work and political troubles in Florence obliged Greenough to give up his studio in Italy and return to the United States permanently, establishing his new home in Newport, Rhode Island, where he wrote his lectures and essays on art, architecture and aesthetics. Greenough’s lifelong experience as an expatriate sculptor, modelling American historical figures and themes from the distant redoubt of

cosmopolitan Italy, makes for a complex biography and character. He was in part an aesthete in the “Jacksonian” mold, celebrating America’s history and wide-reaching political aspirations through his sculpture, though not necessarily recognizing his country’s homespun democratic traditions and multicultural heritage.⁵ Hence, in Greenough’s hands, his statue of George Washington arrived in the US Capitol rotunda like Caesar crossing the Rubicon.

Greenough’s writing on art became known to scholars primarily by means of a memorial volume of some written lectures and notes compiled by Henry T. Tuckerman, edited and published in 1853 shortly after Greenough’s death.⁶ In 1947, after a long period of relative obscurity, the essays were subject to a further selection by Harold A. Small and Greenough’s ideas re-packaged for a broader audience of architects, artists, critics and art students. The result was an attractively bound and jacketed volume, published by the University of California Press.⁷ The book was given the title *Form and Function: Remarks on Art by Horatio Greenough*. It established Greenough’s reputation as America’s original theorist and advocate of functional architecture, all the while reinterpreting architecture’s status as a distinctive art whereby beauty was defined as “the promise of Function.”⁸ For *Roots of Contemporary American Architecture*, Mumford narrowed the selection and focus even further, choosing only three of the essays from Tuckerman’s volume (which were also the ones included in Small’s collection) and combining them into one chapter under the heading “Form and Function” which was the title borrowed from one of the three essays.⁹

So what does Greenough say, or what is he left to say following repeated editorial operations? Greenough may have clothed his monument to George Washington in a Roman senator’s garb; however, like many aesthetes of his era, he was enamored with ancient Greek civilization so that the Greek ideal was both an inspiration and measure of artistic excellence and beauty. He was likewise suspicious of Victorian taste for the Gothic style that he believed was anachronistic, formally derivative and fundamentally alien to the American experience. The trick to valuing classicism over Gothic vaults, arches and buttresses was to see the former as something other and more than simply a style to be copied at whim like any other (the Egyptian, Roman, Gothic, etc.), but, rather, as a source of timeless certainties or lessons to be emulated in the present.

Among the objects and sources of exemplification for his principles, “the ship” was an imaginative trope that persisted

5 The phrase refers to the political thinking, particularly the mix of nationalistic pride and internationalist ambitions associated with the two terms of Andrew Jackson’s US presidency (1829 to 1837).

6 Henry T. Tuckerman, *A Memorial of Horatio Greenough: Consisting of A Memoir Selections From His Writings and Tributes to His Genius* (New York: G. P. Putnam & Co., 1853).

7 William R. Taylor, review of *Form and Function: Remarks on Art*, by Horatio Greenough, *The New England Quarterly* 22, no. 2 (1949): 264-66.

8 Greenough, cited in Taylor, review of *Form and Function*, 265.

9 Mumford, *Roots of Contemporary American Architecture*, 32-56.

through the vicissitudes of editorship. It sailed through (with prevarication) the multiple essay selections and the sequence of written passages accompanying publication of the Tuckerman, Small and Mumford compilations of Greenough's writing. In the one-hundred years of a discourse to which all three editions contributed, the ship comes across as an analogue of terrestrial architecture, complemented (though followed in priority and evocative appeal) by two additional analogies made between building's organic form and the bodies of animals and machines. Greenough urged his reader to:

Observe the ship at sea! Mark the majestic form of her hull as she rushes through the water, observe the graceful bend of her body, the gentle transition from round to flat, the grasp of her keel, the leap of her bows, the symmetry and rich tracery of her spars and rigging, and those grand wind muscles, her sails. Behold an organization second only to that of an animal, obedient as the horse, swift as the stag, and bearing the burden of a thousand camels from pole to pole! What academy of design, what research of connoisseurship, what imitation of the Greeks produced this marvel of construction? Here is the result of the study of man upon the great deep, where Nature spake [sic] of the laws of building, not in the feather and in the flower, but in the winds and waves, and he bent all his mind to hear and to obey. Could we carry into our civil architecture the responsibilities that weigh upon our shipbuilding, we should ere long have edifices as superior to the Parthenon, for the purposes that we require, as the Constitution or the Pennsylvania [famous American war ships] is to the galley of the Argonauts.¹⁰

Like Ruskin, Greenough believed the progressive evolution of shipbuilding provided far reaching lessons.¹¹ He was similarly impressed by warships, hence he renders historic vessels made famous by the American Revolutionary War analogous to Homer's ancient ship, the *Argo*. Mythological abstraction thus precedes additional performative and moral assessments. Mumford quotes Greenough in the *Roots of Contemporary American Architecture*:

If you will trace the ship through its various stages of improvement, from the dugout canoe and the old galley to the latest type of the sloop-of-war, you will remark that every advance in performance has been an advance in expression, in grace, in beauty, or grandeur,

10 Cited in Mumford, *Roots of Contemporary American Architecture*, 36-37; also in Tuckerman, *A Memorial of Horatio Greenough*, 124-25.

11 Ruskin's admiration for ships is observed by J. Templeman Coolidge, "A Gift of Two Ship Models," *Bulletin of the [Boston] Museum of Fine Arts* 33 no. 196 (1935): 25.

*according to the functions of the craft. This artistic gain, effected by pure science in some respects, in others by mere empirical watching of functions where elements of the structure were put to severe tests, calls loudly upon the artist to watch keenly traditional dogmas and to see how far analogous rules may guide his own operations.*¹²

12 Cited in Mumford, *Roots of contemporary American architecture*, 53. See also Horatio Greenough, *Form and function*, 121-22.

There was a rhetorical ethic involved in Greenough's and Ruskin's appropriations as well as a positivist empiric so that the language of "function" played multiple roles. Objects like ships and machines were made to serve a didactic purpose, for instance, an evocative source of analogical reasoning for a century rapidly transformed by developments in transportation and nautical technologies.

"Americans ... a remarkable people"

James Jackson Jarves came to ridicule the same aesthetic "blunders on terra firma" that Greenough did when he made the counterfactual case for ships. He pointed out the same mistakes of disingenuous, impractical and ostentatious architecture that could be remedied if only architects were to look to the sea for inspiration. Unlike Greenough, though, Jarves viewed the scene from even further abroad and from multiple ocean shores. As a young man Jarves lived for much of the 1840s among the native and international populations of the Hawaiian Islands, working as an entrepreneur, government agent, and editor of the *Polynesian* newspaper. He then also took up residence in Italy where he lived for most of his life, collecting so-called "primitive art" of the early Renaissance period. In Honolulu he wrote editorials extolling the virtues of Christian piety and American liberty while anticipating the Islands' entry into the community of civilized nations, largely thanks to the patronage of the Hawaiian monarchy by the United States government and US merchant community. From Florence, he wrote weighty books on art criticism with which he sought to sell cultural enlightenment to his compatriots across the Atlantic, while advertising his collections of Renaissance illustrative art, fabrics and glassware for sale to museum authorities in America thinking to enlarge their respective holdings of Italian art.

Like many nineteenth-century philosophers and critics, Jarves was well-versed with the language of "primitives"—a term that could both describe early forms of artistic genres and caricature certain types of people. He was alert to the "progress" of civilizations in which "the primitive" and their material culture

had roles to play. More so than Greenough, Jarves brought this language and a progressivist ideology to his art criticism, including his criticism of historicist architecture. He believed his writing and collecting played an important role to enrich the “aesthetic life and character” of Americans as a “distinctive race.”¹³

Jarves argued in one chapter in *The Art-Idea*, being a review of “American Architecture, Past and Present,” that ships exhibited a unique combination of love of work and inventiveness marking out the potential for genius in American design. These qualities were not evident in the fashion-conscious architecture of his day that he believed was an “incongruous medley as a whole, developing no system or harmonious principle of adaptation, but chaotic, incomplete, and arbitrary, declaring plagiarism and superficiality, and proving beyond all question the absolute poverty of our imaginative faculties, and general absence of right feeling and correct taste.”¹⁴ To the contrary, Jarves imagined:

*If the mechanical features of our civilization were left to tell the story, our ocean-clippers, river-steamers, and industrial machines would show a different aspect. They bespeak an enterprise, invention and development of the practical arts that proclaim the Americans to be a remarkable people.*¹⁵

Mumford extracted only a minor portion (about thirty percent) of Jarves’ chapter for his collection of essays in *Roots of Contemporary American Architecture*, thus sparing his readers the larger, remaining share of its author’s sanctimoniousness but also depriving them of a more nuanced and possibly disturbing reading of Jarves’ ideas. Mumford titled the segment “Love of Work” with which he sought to identify and share its author’s preoccupation with American enterprise, inventiveness and practicality. Several of the redacted passages are noteworthy for what they illustrate of Jarves’ religiosity and the racist ideas expressed by the critic.¹⁶

Mumford’s *Roots of American Architecture*

Mumford aligns the views of Greenough and Jarves with his own moralizing perspective on colonial era and nationalist sources for contemporary American design. He was sympathetic with Jarves, writing approvingly that the clipper ship—along with early American clocks and axes that Mumford adds to the collection—were sources for a distinctive American way of

13 James Jackson Jarves, cited in Mumford, *Roots of Contemporary American Architecture*, 69; excerpted from Jarves, *The Art-Idea: Sculpture, Painting and Architecture in America* (New York: Hurd and Houghton, 1865), 286.

14 Jarves, cited in Mumford, *Roots of Contemporary American Architecture*, 69; originally in Jarves, *The Art-Idea*, 286-87.

15 Jarves, *The Art-Idea*, 287; cited in Mumford, *Roots of Contemporary American Architecture*, 69–70.

16 Jarves, *The Art-Idea*, 292.

making things, one that aimed for practical functionality and simple elegance. These outwardly unself-conscious objects:

*...made the sensitive see that the new was not necessarily the ugly, nor were the products of the machine less beautiful in their own fashion than the more intricate forms of handicraft. Here the new style, shapely, naked, clean, was actually in process of formation.*¹⁷

17 Mumford, *Roots of Contemporary American Architecture*, 9.

Mumford fails to elaborate on the exact variety of ship he admires, a source of omission that adds to the generalizing thrust of his theory, writing obliquely how: “From the eighteenth-forties to the eighteen-eighties, the new practices that were to invigorate American architecture were confined mainly to the shipyards and the factory.”¹⁸ It is likely Mumford imagined an amalgam of two craft. The first was the fast sailing ships built in the 1840s and commonly known as “Baltimore” clippers. These were modeled on earlier vessels first built at Chesapeake Bay and subsequently launched from shipyards along the entire US eastern seaboard. Baltimore clippers were known for their practicality, speed, and maneuverability; they distinguished themselves while working the China tea and opium routes, along with providing other, equally profitable and sometimes dubious services.¹⁹ The second craft Mumford may have had in mind was the larger, faster, and narrower vessels commonly called “extreme clippers” by maritime historians. These were first launched to convey passengers and goods in the Californian (1849) and Australian (Victoria, 1851) gold rushes, and famously reduced sailing times to these and other distant destinations.²⁰

18 Mumford, *Roots of Contemporary American Architecture*, 9.

19 See Benjamin W. Labaree, et al., *America and the Sea: A Maritime History* (Mystic, CT: Mystic Seaport Museum, 1998), 223–24.

20 Honolulu, where Jarves was resident during both gold rushes was the most regular and important port of transit on both the China and California to Australia routes.

Though he may have described them as distinctively American like Greenough and Jarves, Mumford’s views on the practical and aesthetic value of sailing ships, clocks and axes was grounded in a broader sociology of material culture than theirs. It was reasoning that manifests a different source of critical distance than Greenough’s neo-classicism and Jarves’ primitivism(s) and so aligns the architecture of ships with terrestrial building in a different manner. This comes across clearly in *Technics and Civilization* (1934) where Mumford identifies three eras defined by the succession of socio-technological complexes: eotechnic (wood and water), paleotechnic (coal and iron), and neotechnic (electricity and alloys). Part of his philosophical scheme for describing the progress of civilization, Mumford’s analysis sets technology apart from mainstream history in order to trace—to invent, one could say—three trajectories for innovation. Consequently, as

Ed Kranakis observes: “what linked clipper ships and medieval water mills together [diachronically, in the eotechnic phase] was more important than what linked them [synchronically] to the societies in which they were created and used.”²¹ In short, Mumford establishes and distinguishes between the timeless aesthetic value of a manufactured object—including the clipper ship and village farmhouse—and their respective contributions to different socio-economic systems and times.

²¹ Ed Kranakis, ‘Surveying Technology and History: Essential Tensions and Postmodern Possibilities’, *Technology and Culture*, 46, 4 (2005), 808–9.

Mumford’s manipulation of chronologies, resulting, in effect, in the collapse of historical context, is paralleled by a broader pattern of compression—of distance, both “conceptual and actual” (CFP). There’s little understanding the historical or geographical circumstances of Mumford’s socio-technological complexes. It’s clear, particularly after reading his earlier and thoroughly moralizing book *Sticks and Stones: a Study of American Architecture and Civilization* (1924), Mumford simply preferred what he believed to be the social basis for wholesome communitarianism and pragmatism of early colonial America’s building practices.²² As his biographer, Donald Miller, observes, Mumford had been holidaying in the Cotswolds, in England, in the autumn of 1920, prior to writing the book—far from former colonial shipbuilding and seafaring centers like Boston and New Bedford. It was in the Cotswolds where the “splendid stone villages worked their subtle influence, bringing him closer to the [intellectual] tasks to which he would give most of the middle part of his life.”²³

²² Lewis Mumford, *Sticks and Stones: a Study of American Architecture and Civilization* (New York: Norton, 1924).

²³ Donald Miller, *Lewis Mumford, A Life* (New York: First Grove Press, 1989), 162.

Sea Voyages and Distanced Views

Miller’s advice alerts us to how biographical circumstance, specifically Mumford’s travels and the voyages of his nineteenth century predecessors, background their views, so that the history of industrialized transportation, first by sail, then by steam and diesel engine, provides us with an additional context for their aesthetic criticism. Greenough had ample opportunity to experience transport by wind, sail and steam first hand. To understand what this meant in terms of voyaging distances and times, consider the experience of another American patriot and traveler, one who narrowly escaped Greenough’s modelling and Greek love. Richard Saltonstall Greenough, Horatio’s younger brother who was also an artist (and spent most of his life in Rome), beat his elder sibling in the race to win the commission to sculpt Benjamin Franklin’s head. During his lifetime the statesman, diplomat and scientist made three return trips across the Atlantic. Franklin’s last return voyage was in 1775,

following an eleven year residency in London representing the Pennsylvania colony and just prior to the onset of the American Revolutionary War. He left his adopted home on March 1775 and arrived in Philadelphia on May 5, a journey of 47 days.²⁴

By 1825, just before Horatio Greenough's first return to America, the average crossing time from Liverpool to New York City was 23 days on ships operated by the Black Ball Lines. By 1845, twenty years later, "Atlantic ships had doubled in size and were not credited as a success unless they had made at least a single east-bound dash of 14 days or less."²⁵ In the year of Greenough's death and the Great Expedition of 1851, the Cunard Line introduced into service its first iron-hulled steam paddle-wheeler, *the Persia*, that set a new record with a 9-day, 16-hour Liverpool to New York voyage, travelling at just over an average speed of 13 knots or 24 km per hour. Biographical research has yet to reveal how Greenough spent his time on his voyages. (Franklin famously conducted oceanographic experiments though it's doubtful they sustained him for the entire 47 days of his final return voyage.) Regardless, the reduction in crossing times and falling passenger fares, certainly made many art commissions possible as well as the mobility of expertise essential to an international career and reputation.

The circumstances of Jarves' life and career were intertwined with mid-nineteenth-century growth in long-distant ocean travel and increasingly globalized channels of communication. Like Greenough he witnessed extraordinary developments in both arena in the 1840s and 50s. However, even with the introduction of fast-sailing clipper ships during this period, travel between the Hawaiian Islands and North American and European ports seems unimaginably distant and grindingly slow to contemporary sensibilities. Whereas biographical research so far has identified no less than six of Greenough's transatlantic crossings and the circumstances accounting for them, it's not yet known whether Jarves travelled more than the once from New England to Hawaii and back again. The distance, time and expense entailed would have been considerable. A feature in Jarves' newspaper *The Polynesian* (July 6, 1844), for instance, calling for establishment of a more regular, monthly packet ship service to eastward ports, estimated it would take the vessel, departing from Honolulu, 65 days to travel to New York City and 84 days for passengers to reach Southampton.²⁶ Another shipping notice (May 18, 1844) records a sailing time of 34 days between Tahiti to Oahu, the route of the pioneering Hawaiians.

From neither Honolulu nor Florence where his interests and career next brought him, did Jarves demonstrate much expertise

24 Dan & Jax Bubis, "Benjamin Franklin trips to England," *Revolutionary War and Beyond* (website), <http://www.revolutionary-war-and-beyond.com/benjamin-franklin-trips-to-england.html>, accessed February 22, 2019.

25 John B. Woodward, James E. Vance, et al., "Ship" in *Encyclopaedia Britannica* (online), June 22, 2018, <https://www.britannica.com/technology/ship/History-of-ships>, accessed February 21, 2019.

26 The routes would include overland journeying by horseback or stage across Mexico and voyage by steamer from Vera Cruz to Southampton. One way fares were estimated by the newspaper as US\$416 and \$614 respectively. According to the CPI Inflation Calculator provided by the US Bureau of Labor Statistics, this would amount to US\$13,962 and US\$20,607 respectively, in 2019 dollars. <https://www.officialdata.org/us/inflation/1844?>, accessed February 21, 2019.

or sustained interest in naval architecture (perhaps he was sick of having been on ships for so long) so his references to the functionalism of ships read more like cautionary tales than statements of much facticity and technological expertise. In his first book, the lengthy *History of the Hawaiian Islands* (1843) written while he was resident on the Islands, Jarves praised the legendary vessels of the first Hawaiians, possibly of Malay origins he believed, compared to the “frail canoes of modern times” that were “ill-adapted” to voyages of two or three thousand miles.²⁷ The language and ready-made formula of forms and functions allowed for such distanced assessments.

27 James Jackson Jarves, *History of the Hawaiian Islands*, 4th ed. (Honolulu: Henry M. Whitney Publisher, 1872), 12.

Lewis and Sophie Mumford left New York harbor for England on their first transatlantic voyage—the one that took them to the Cotswolds in 1920—on board the *RMS Adriatic*, an ocean liner of the White Star Line (the company that had also owned the *Titanic*). Among the *Adriatic*'s recorded voyages and times, the ship made the crossing from Liverpool to New York in 1912 in 9 days, shaving only 16 hours of the record set by *The Persia*, sixty-one years before. Many additional trips to Europe followed, including one in 1957 before he began writing the first draft of *The City in History*, and yet another in the summer of 1960 before finishing the book's chapters on ancient Greece and Rome with his first visit to ancient Greek sites at Paestum, Pompeii, Athens, and Delphi. For the serious intellectual of the period, travel could be an essential part of research. Mumford returned to the US from his 1960 trip onboard the *SS Mauretania*, a journey of “seven boring, rainy days” he wrote in his diary.²⁸ Owing to developments in the commercial passenger aviation industry, it would soon become possible to fly, far more readily, quickly and cheaply.

28 Miller, *Lewis Mumford, A Life*, 459, 461, 463.

By an interesting turn of history, or perhaps simply the mundane fate one owes to travel agents, available berths and preferred itineraries, Mumford made his second transatlantic voyage in 1925 on board the *RMS Aquitania*, Le Corbusier's much-admired ship—although the French modernist himself preferred to glamourize the vessel rather than travel on it. Mumford was heading to lecture in Geneva at the time of his 1925 passage. The voyage was one of 29 crossings (14½ roundtrips) that year, in which 28,215 passengers traveled on the vessel, an industrial workhorse.²⁹ Ten years after Mumford headed east across the Atlantic, Le Corbusier journeyed west, in 1935, on his first visit to America for a book tour to spruik *Vers une architecture*, a trip patronised by the Metropolitan Museum of Art. He travelled onboard the *SS Normandie*. Both Mumford and Le Corbusier relied on the regular service, speed and comfort of

29 Mark Chirnside, *RMS Aquitania. The Ship Beautiful* (Stroud, Gloucestershire: The History Press, 2008), 91.

the ocean liners, like many of their contemporaries, intellectuals and polemicists with professional networks across the Atlantic. However, only Mumford praised the Yankee clipper ship, co-opting the antiquated vessel as a uniquely American innovation and cultural symbol.

The distinction invites further comparison between the two classes of vessels and their unsteady performance as architectural metaphors.³⁰ There are at least two sources of ambiguity—two irregularities—that accompany Mumford’s appropriation of the clipper ship. Firstly, regarding the availability of synchronic versus diachronic contexts for mobilizing ship-as-architecture metaphors, the anachronistic disjuncture of a 19th century vessel’s representation as a post-war American icon in Mumford’s 1952 book is concealed behind rhetoric promoting the exceptionalism of American creative enterprise, much like mid-twentieth century American advertising co-opted the clipper ship to sell all kinds of things: Scotch whisky, automobiles and life insurance to name some of the products branded in this way.

Secondly, regarding universalist versus regionalist settings for modernist architecture, Le Corbusier’s faith in the cosmopolitan appeal of modernism is evident in his admiration for the ocean liner, planes and automobiles. By comparison, Mumford’s recovery of the clipper ship as forerunner of American modernism was part of a different agenda entailing his advocacy of regionalism and his American nationalistic emphasis in architectural historiography—hence his parallel retrieval (and extensive editing) of Greenough’s and Jarves’ writing.

Conclusion

Bringing Greenough and Jarves on board, Mumford (as editor and author) clearly aestheticized American sailing ships. A condition of purposeful adaptation—of an object’s form to its function, and specifically ships to changing circumstance—is conveyed in *Roots of Contemporary American Architecture*. Working to establish the meaning of such terms as “function” and “functionalism” as a design process, the book served demonstrative and polemical roles. Its narrative “made the sensitive see” (Mumford) something of the material conditions underlying astute perceptions of the novelty, dynamism, and beauty of constructed forms. In philosophical terms, the book contributed to an observation language and an empiricist conception of knowledge. These worked to establish as fact a fundamental opposition between form and function, between an audience’s perceptions of an artifact and the circumstances

³⁰ The author is grateful to the anonymous reader for their perceptions and provocation regarding the critical prospects of such a comparison, specifically the ambiguities of Mumford’s appropriation of the ship metaphor.

that give it purpose or made it work a certain way. This required critical distance, a generalizing perspective on the past—including parochial shipbuilding industries—that came with forgetfulness and contributed to Mumford’s standing as a philosopher, sociologist, and internationally-renown cultural critic.

By means of analogous reasoning and their references to ships, Mumford and the redacted essays construe relations between “the ship” and marine environment as fundamentally synchronous, the ship realizable in a succession of ideal forms and the ocean the source of timeless requisites for buoyancy, stability and movement. In other words the sea comes across in the essays as a provocative, but ultimately static domain for a series of innovative acts, the source of hydro-dynamic variables in shipbuilding and seafaring operations. Moreover, while the marine environment comes across as a domain that is clearly geographical in physical or territorial extent, the domain is indistinct and featureless, lacking geographical extension or *distance* in either a meaningfully determining or phenomenological way.