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A Journal of Pacific Maritime History

*Of Winds, Seas, and Stars:
Select Readings
in Pacific History*



Editor's Note

This volume of *Mains'l Haul* is a companion publication to our *Empires of the Wind* edition produced in 2017. The articles published in 2017 were written by faculty members of the Maritime Museum of San Diego's *Empires of the Wind* seminar series, funded by a grant from the National Endowment for the Humanities. This lecture series was designed principally for school teachers. The content of course lectures focused primarily on the role played by the Pacific Ocean in the history of the United States. As part of their instruction, faculty members also recommended essential readings for course participants.

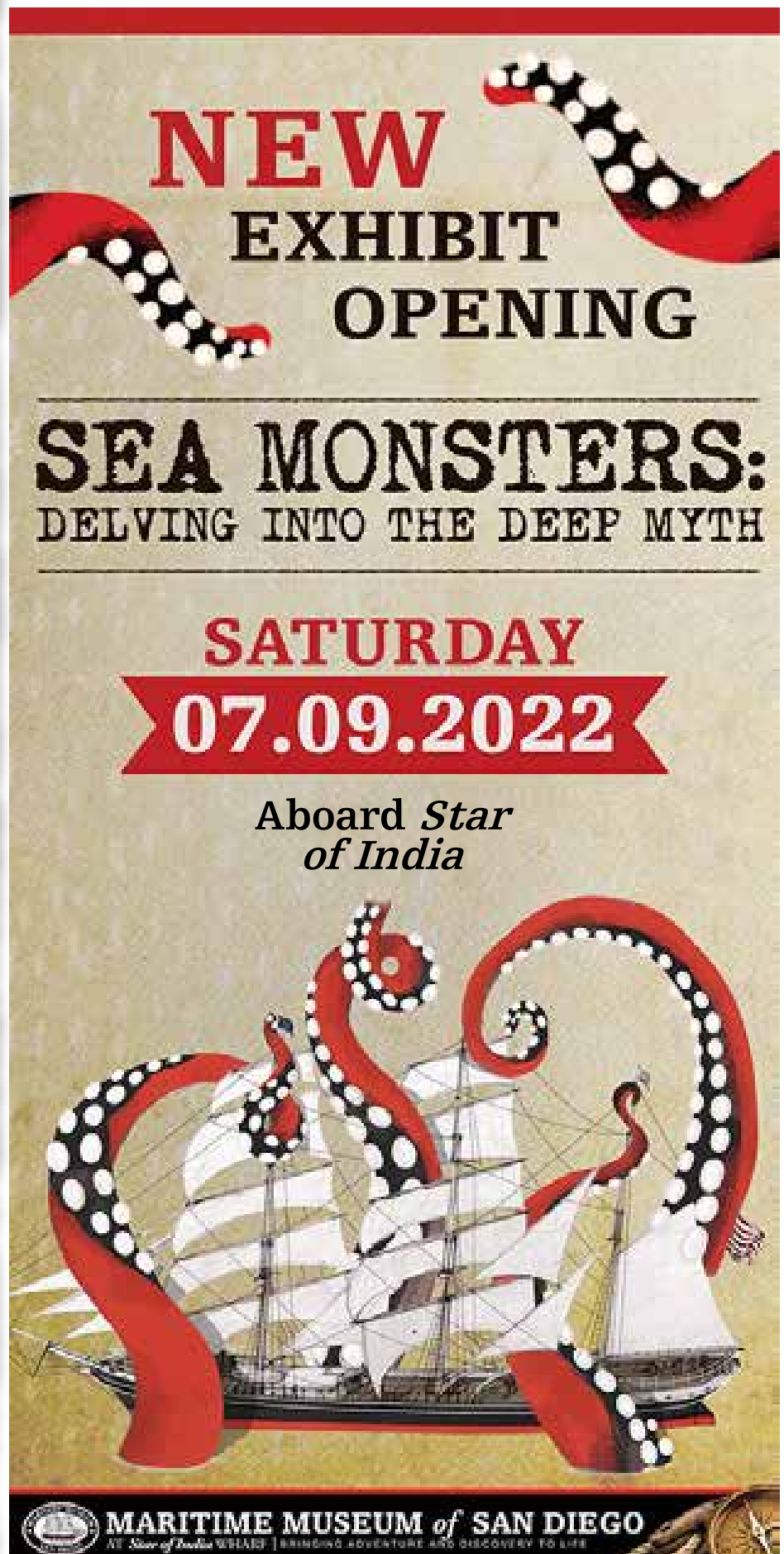
Many, although not all, of these recommended readings have been published as articles in *Mains'l Haul* over the past two decades. They are a testimony to the depth and breadth of research and writing found in this, North America's only peer-reviewed journal of maritime history and culture. These articles are now gathered together here in one volume and will form an invaluable resource for future course participants, and for all those interested in deepening their understanding of the influence of the Pacific Ocean on the history of North America.

Published together with these articles are the writings of two authors - David Igler and Thomas Osborne - that shed insight into the crucial role played by the Pacific in the history of the United States and the importance of writing and teaching history from this perspective. As such, these authors provide an alternative to the standard east-to-west narrative commonly found in US History textbooks. This Pacific-focused narrative both compliments other perspectives on US history and provides a fuller understanding of the way in which navigation and maritime culture have made vital contributions to American society, economy and culture.

This issue also republishes a seminal work by Ray Aker and Ed Von der Porten on the voyage of Francis Drake and his California sojourn. Aker and Von der Porten are no strangers to the readers of *Mains'l Haul*, having contributed to its pages important perspectives on Pacific-navigation and maritime archaeology in times past. We are privileged to include here excerpts from their *Discovering Francis Drake's California Harbor*, which highlight the significance of Drake's visit to California.

Finally, we publish here for the first time new illustrations from artist Gordon Miller, who again, is no stranger to our readers. Miller's paintings have graced the pages of our journal for many years. Here we are honored to share for the first time his newest project on Pacific navigation, combining his unique talents as researcher, artist and writer. Miller's illustrations vividly bring to life the extraordinary story that forms the foundation of the mission of the Maritime Museum of San Diego - the collection, preservation and interpretation of our common Pacific maritime heritage.

Front cover: *San Salvador* and *Victoria* sail past Point Loma and enter what would become known as San Diego Bay, September 28, 1542. Artist Gordon Miller



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MAINSAIL HAUL—An order in tacking
ship bidding, "Swing the main yards."

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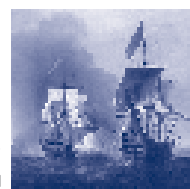
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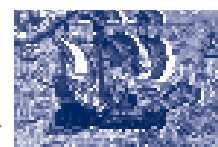
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Remembering Empires of the Wind

Susan Sirota, Vice President, Maritime Museum of San Diego

After returning to California from graduate school in Australia, Susan Sirota joined the staff at the Maritime Museum of San Diego in 1997. She began as an education consultant and curriculum writer and was subsequently appointed as the Museum's first Education Department Director. In that capacity Susan designed and managed the educational programs at the Museum for over fifteen years. During this time she oversaw four NEH Landmarks workshops hosted by the Maritime Museum of San Diego. Susan then became Director of Development for the conclusion of the *San Salvador* project before taking on the role of Vice President.

From 2009 through 2016 the Maritime Museum of San Diego hosted four week-long seminars, funded by the National Endowment for the Humanities Landmarks in federal awards. The seminar series bore several project names, most memorably “Empires of the Wind.” Any institution that has sought federal awards can attest that they are not easily attained. National academic awards are extremely competitive, their application process is arduous, and the pool of applicants is large and diverse. I am honored to share with readers our success story and to shine a light on the many people who assisted in the process of applying for the award and subsequently served in various capacities as staff, faculty and administrators of the same program.

The Maritime Museum of San Diego is graced with the generous contributions of time and talent from its many volunteers. The influence of some volunteers continues to abide, long after their time with us ends. Such was the case with a retired high school teacher, the late Bob Shaughnessy, a regular volunteer at the museum. It was Bob who suggested that we ought to apply for an NEH program because we had a lot to offer teachers in the way of resources and interesting ships. The idea stayed in my mind for a few years and then suddenly Bob was not with us. The project to construct one more “interesting ship” would also give impetus to the idea of using our unique museum and its many strengths as a basis for applying for an NEH grant.

By this time the Maritime Museum was getting ready for what would be our largest and most ambitious project – building a replica of the *San Salvador*. As Director of Education, I was tasked with designing the educational engagement for *San Salvador*, before, during and after she was constructed and launched. In line with the Museum's long-standing tradition of engaging our broader public as a source of inspiration and expertise, I felt that the concept of hosting a national teacher workshop might prove to be an effective means for classroom educators to help us craft and create original lesson plans centered on the newest vessel in our historic and replica fleet. Essentially, the potential NEH award matched our educational needs. Dr. Ray Ashley agreed, and the two of us put our heads together to

produce a proposal - largely inspired by Ray's vision - and a program based on my experience as an educator.

The intellectual rationale for the program challenged a more traditional approach to US history that envisions the process of territorial expansion as essentially one that unfolds from east to west across the continent. Our thesis instead sought to place the Pacific coast of North America at the center rather than the periphery of American history. Two articles by historians David Igler and Thomas Osborne, published in this edition of *Mains'l Haul* help to

underscore the validity of this Pacific-centered thesis. We found enthusiastic support among the academics who would participate as lecturers in the seminar series. We located relevant local historical sites and forged relationships with them. These fit neatly into our overarching narrative, supporting and augmenting the intellectual content to be delivered by our faculty members. And of course we had the fantastic ships of the Maritime Museum as our classrooms. This proved to be a winning combination for several applications for the grant.

Initially of course we had no idea just how successful our program would be. We did know we had the right team of instructors. Their lectures and the essential readings they recommended to participants continue to inspire and inform the Maritime Museum's interpretive and educational efforts beyond the life of the workshops. In accord with this ongoing mission, two issues of *Mains'l Haul* now provide resources based on the lecture

series and the recommended background readings: *Empires of the Wind* published as volume 53 in 2017, and this current issue, *Of Winds, Seas, and Stars* published as vols 56-57 in 2021-2022.

The program also produced a collection of resources, tools, and lesson plans that we eventually assembled together to create EXPLORE (Experiential Lesson Plans & On-line Resources for Educators) which is presently located on the Maritime Museum's website www.sdmaritime.org in the Education section. EXPLORE continues to grow and is now home to several educational videos, a Pacific Heritage Tour log, a gallery of images, DIY ship models, exhibit text panels, and background history for *San Salvador*.

It may well be five years since we last hosted the “Empires of the Wind” lecture series. Nevertheless the benefits of this program continue to live on, not only in publications like *Mains'l Haul*, but also in a variety of forms as an intrinsic part of the Museum's mission to collect, preserve and present our rich maritime heritage of the Pacific world. It lives on in the lesson plans drafted and taught by the many teachers who passed through the program. It lives on in the lives of their students. And we hope the experiences, the knowledge, and the “muscle memory” of the participants, organizers and instructors of “Empires of the Wind” will continue to inspire future generations.



Trading Places

The View of Colonial American History from the Pacific.

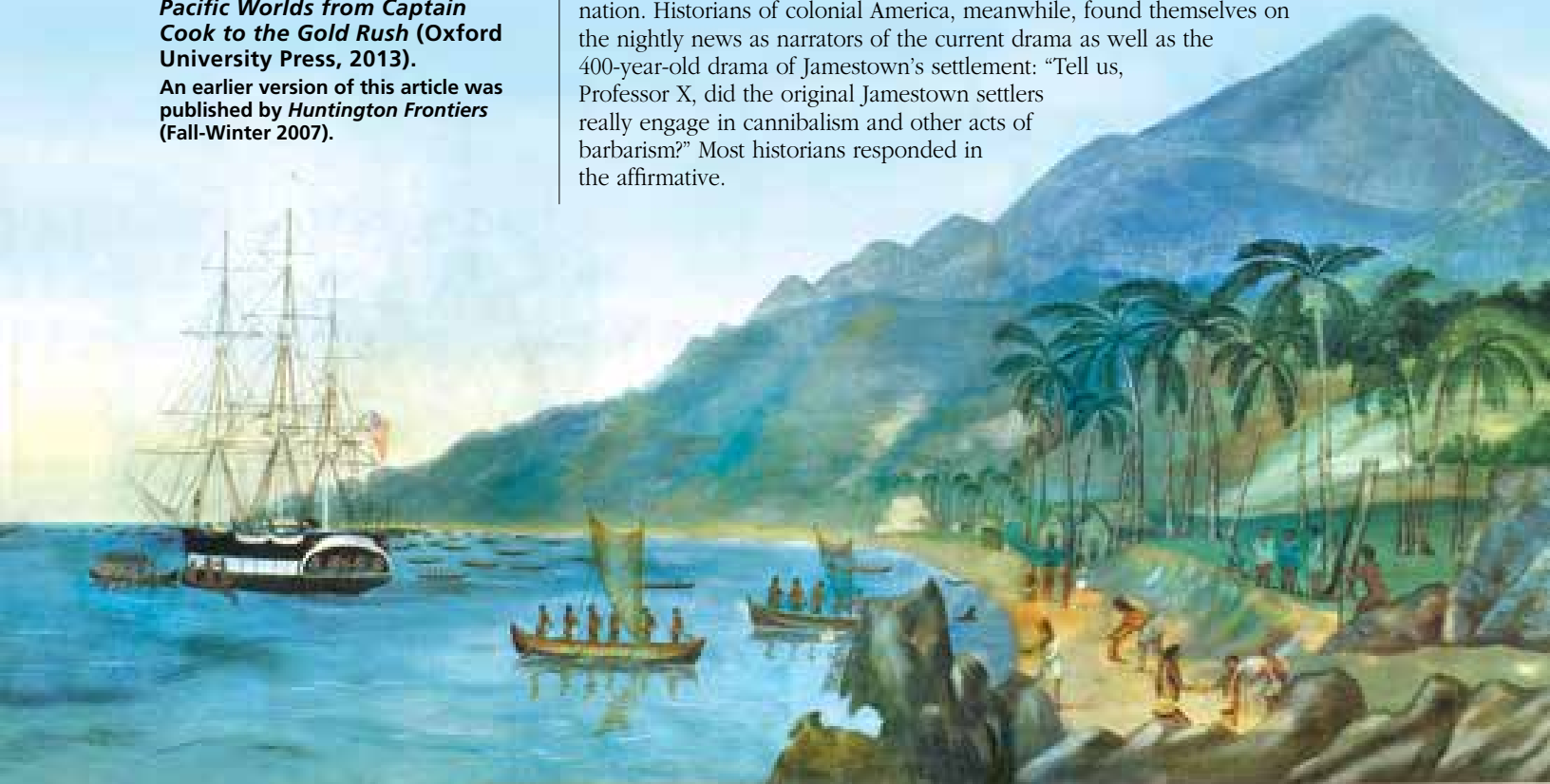
David Igler, Ph.D., Professor of History, UC Irvine

David Igler is Professor of History at UC Irvine. His research includes the American West, environmental history, and what he describes as the waterscape and regions west of the West – the Pacific Ocean – focusing on the period between 1770 and the 1850s. He is particularly interested in tracing geographic connections between the island Pacific, East Asia, the northern Pacific and the western Americas. He has published extensively on these themes, and explores them in depth in his book *The Great Ocean: Pacific Worlds from Captain Cook to the Gold Rush* (Oxford University Press, 2013).

An earlier version of this article was published by *Huntington Frontiers* (Fall-Winter 2007).

Historical anniversaries are highly significant events, but only rarely for the reasons reported by the media. While purportedly about the past, commemorations actually tell us far more about present-day culture, politics, and historical memory. For instance, Christopher Columbus' 1492 "discovery" received great fanfare at the 400-year mark in 1892, but flash-forward to 1992, and we witnessed a far more controversial "celebration." Frankly, Columbus did not sell well to a late-twentieth-century public well-versed in disease epidemics, enslavement, and catastrophic population declines among Native Americans.

Jamestown's quadricentennial – dubbed by the East Coast media as "America's 400th Anniversary!" – saturated U.S. media, and to a lesser extent, British news outlets as well. Museums across the nation, from the Smithsonian Institution to the Huntington Library, exhibited artifacts and documents to a highly interested public. Visitors to Tidewater Virginia toured the then recently discovered and excavated site of Jamestown, President George W. Bush waxed semi-eloquently about a "Tidewater settlement that laid the foundation of our great democracy," and Queen Elizabeth II accepted some credit for her nation's contribution to the origins of our nation. Historians of colonial America, meanwhile, found themselves on the nightly news as narrators of the current drama as well as the 400-year-old drama of Jamestown's settlement: "Tell us, Professor X, did the original Jamestown settlers really engage in cannibalism and other acts of barbarism?" Most historians responded in the affirmative.



If coverage of the 400-year anniversary often bordered on historical sensationalism, a significant question did make its way to the fore: To what extent does Jamestown represent our nation's colonial past? Jamestown, in the broadest of terms, represents a "first encounter" that led to sustained British settlement on the eastern edge of North America. In the context of "first encounters," such a permanent settlement was rare. More typical were encounters involving trade or rudimentary diplomacy. The new colony also provided a small toehold – and a very unstable one at that – for England's trans-Atlantic ventures in the 1600s. In this way, Jamestown formed an initial building block for the creation of what colonial historians now call the "Atlantic World." But, many of us will counter, the British Atlantic World is at best only one way of representing our colonial past.

The time has come for our nation to recognize – and possibly even celebrate – multiple versions of our colonial past: its international origins, its western slope, and that other oceanic world, the Pacific.

One specific avenue into the Pacific World is the study of California, both its indigenous history prior to "contact" and its colonial incarnation as Alta California (the northernmost province of New Spain, and later, Mexico). One aspect

of my research shows that Alta California was not only a Spanish and Mexican province, but also a site of burgeoning international commerce on the eastern edge of the Pacific Ocean. As such, it offers one view of the emerging Pacific World as well as a fresh perspective on our nation's colonial and more recent past.

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Trade vessels in early California tell us a lot about the types of connections forged between this colony and the surrounding world. Prior to the 1849 Gold Rush and California statehood the following year, commercial ships from at least twenty-two different nations or polities appeared on the coastline. Thus, many people from around the globe were well aware of California's opportunities before "the world rushed in" in 1849. A similar international convergence transpired elsewhere in the Pacific Ocean, from Peru to Hawai'i to Canton. Along coastal North America, trade vessels trafficked up and down the future U.S. territories from San Diego to Sitka. "The new account of American history in the 16th and 17th centuries," historian Karen Kupperman writes, "demonstrates that America was international before it became national." Kupperman sets her stance firmly on the Atlantic coast, and yet we find a remarkably similar convergence of nations and peoples by moving a century forward in time and 3,000 miles to the west. The future American

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The Manila galleon.
Artist Gordon Miller

Far West bordering the Pacific – meaning California and the Northwest Coast, as well as Hawai'i and Alaska – was also “international before it became national.”

The Pacific functioned much like the Atlantic Ocean as a historical space for the circulation of people, commercial goods, and ideas. And yet without considering the Pacific's influence on our nation's past, we risk isolating today's Asian Americans from their 150-year trans-Pacific heritage. Or try to imagine the American classic *Moby-Dick* without, as Melville wrote, “this mysterious, divine Pacific [that] zones the world's bulk about.” It would be a dry story, indeed. More broadly, think about when the United States emerged as a truly global economic player. One could argue it happened in the Pacific Ocean: By 1820 more American vessels than any other maritime nation crisscrossed the Pacific for purposes of trade, thereby linking the U.S. economy with the Atlantic, Indian, and Pacific ocean markets.

Many of those vessels visited the coast of Alta California; in fact, almost 500 U.S. ships traded along the California coastline prior to the Gold Rush. Some California-bound vessels are fairly well-known because they appeared in bestselling voyage narratives, such as the *Pilgrim* and *Alert*, featured in Richard Henry Dana's *Two Years Before the Mast*. Others are rather obscure, like the Spanish brig *Activo*, which for almost two decades shuttled supplies and soldiers from the Mexican mainland to the struggling Alta California missions. None of these vessels have the same celebrity status as the *Godspeed*, which crossed the Atlantic in 1607 bound for Jamestown, but California-bound ships can still offer symbols that more accurately reflect the broad range of early colonial encounters, not just British schemes for settlement.

My choice for such a symbol is the Spanish frigate *Nuestra Señora de Buena Esperanza*, which crossed the Pacific Ocean from Macao and entered California waters in October 1587. The *Nuestra Señora de Buena Esperanza* did not transport settlers for a new North American colony, but that fact alone makes it more representative of “first encounters” and America's colonial past. wwwPedro de Unamuno purchased this ship in Macao after Spanish authorities repossessed the two Manila galleons under his temporary command. Unamuno had goods – quite likely, contraband goods – for Mexico's markets, and the *Nuestra Senora de Buena Esperanza* appeared seaworthy enough for a Pacific crossing. Such a homespun private venture also makes it representative

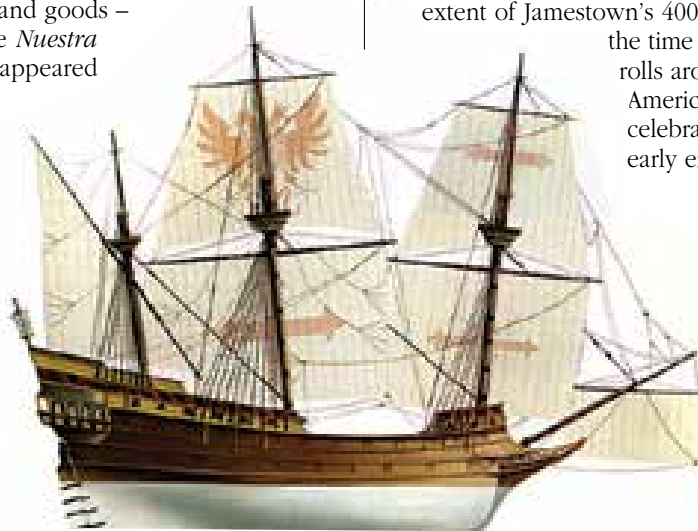
of our colonial past, as does the diverse crew of Spaniards, Portuguese, Luzon *indios* from the Philippines, and a Japanese cabin boy.

On October 17, 1587, Unamuno sighted a bay (now known as Morro Bay) on the coast of upper California, and the next day he noted “the smoke of many fires” just inland from the bay. The events that followed during the next two days could form a stand-in for any “discovery” and “contact” by Europeans in the Americas. Unamuno ordered a small party to “look about to see if there were any settlements or other signs of inhabitants, and to see if there were any minerals in the [area].” Finding neither the Indians who built the fires nor the hoped-for gold or silver deposits, Unamuno described the next order of business: he “quietly and pacifically” took possession of the land in the name of his king, Philip. That “pacific” conquest lasted less than two days. Chumash Indians attacked two different landing parties on October 20, and these “skirmishes” encouraged Unamuno to “hold council” aboard ship, where they “resolved that it was advisable to continue on our voyage...and not go ashore to the enemy.” The vessel sailed south without further ado.

In what ways does this incident – we can call the October 2007 celebration the “420th Anniversary of the landing of the *Nuestra Señora de Buena Esperanza* in Morro Bay!” – represent our colonial past? First, it shows that Native Americans frequently resisted and drove off European colonizers. Europeans were viewed as temporary guests at best, hostile invaders at worst; disease played a far stronger role in conquest and settlement than did superior military power. Second, a diverse and international cast of seafarers made landfall in the Americas during our colonial past. The British, as significant as they were to our national origins, comprised only one such group. Third, voyages for the purpose of trade rather than permanent settlement were far more typical of early American encounters between Europeans and Native Americans. Finally, the Atlantic Ocean and the North American eastern seaboard was only one site of contact, conquest, and settlement. The other ocean – the Pacific – provided a second, highly significant, avenue to the Americas and the future United States.

Alas, the 420th anniversary of the *Nuestra Senora de Buena Esperanza* in Morro Bay did not catch on to the extent of Jamestown's 400th celebration. However, by the time Jamestown's 500th anniversary rolls around, I'm willing to wager that American society will recognize and celebrate a much broader range of early encounters and colonial origins.

Mid-sixteenth-century Spanish galleon.



Teaching the US History Survey as if the Pacific Mattered (*a lot*)

Thomas J. Osborne, Ph.D., professor *emeritus*, Santa Ana College

Recently, Atlantic history has reshaped the way historians of the United States and the world have approached their research and teaching. Naturally, the Caribbean world is part of that construct since it was integral to the transatlantic slave trade and commodity exchange. As illuminating as the Atlantic history perspective has been for us, it begs the question: What about America's other maritime frontier—the Pacific?

The intent of that question is not to minimize the importance of the Atlantic world in contextualizing America's development. Nor is it to argue that the Pacific has been more important than the Atlantic in our nation's past. Instead, in raising the question, this essay argues for striking a more accurate balance between these two maritime frontiers by offering some thoughts and examples that would show introductory students that the

Pacific has mattered a lot throughout U.S. history.¹

Yet, curiously, no U.S. survey text treats the Pacific world with anywhere near the attention given the Atlantic seascape. When I took an otherwise valuable American Historical Association—Community College Humanities Association summer seminar at the Library of Congress in 2003 on “Trans-Oceanic Exchanges,” nearly the entire program was devoted to the Atlantic world, with a nod to trade in the Indian Ocean. The Pacific Ocean—the world's largest—was conspicuously absent.

Is that not odd? After all, students should know that the Pacific world has been an important factor in North American history since the peopling of the continent by Asian trekkers who crossed Beringia some 15,000 years ago and others who some scholars believe came by sea. More to the point, however, our survey students should learn that after the mid-1500s the Pacific took on

increasing importance in American history. The Manila galleon trade (1565–1815), connecting North America to both Asia and Europe, is a case in point. Sailing from Acapulco in Mexico to Manila in the Philippines, these treasure ships carried 50 tons of silver annually to

China in the 1600s, returning along the California coastline with cargoes of silks, porcelains, ivory sculptures, and other luxuries. The Spanish government required the galleons to enter the port at Monterey, California, before completing the voyage to Mexico. English privateer Francis Drake seized (stole?) 26 tons of treasure from one of these vessels in 1579, which led to his outrunning Spanish patrol vessels and sojourning along the California coastline that year. His landfall about 30 miles northwest of present-day San Francisco eventually resulted in England's claim to North America's Pacific

coast. Focusing almost exclusively on the Atlantic world, few, if any, U.S. history survey textbooks even mention these early links (the Beringia and coastal boat crossings excepted) between North America and the Pacific. Consequently, students end up with an Atlantic-centric view of their nation's past.

By the late 18th century the waters and adjacent lands along North America's western littoral became highly contested among Spain, England, and soon Russia. Yankee John Ledyard's voyaging with Captain James Cook's third expedition (1776–80) into the Pacific resulted in the publication of Ledyard's *Journal of Captain Cook's Last Voyage*, which Thomas Jefferson read eagerly. That account plus letters to the Virginian extolling the prospects of North Pacific commerce, quickened Jefferson's resolve to launch the famed Lewis and Clark Expedition in 1804. In the meantime Yankee merchants had begun trading at Canton in 1784, and

After all, students should know that the Pacific world has been an important factor in North American history since the peopling of the continent by Asian trekkers who crossed Beringia some 15,000 years ago and others who came later by watercraft along nearby coasts.

Thomas Osborne is professor *emeritus* in History from Santa Ana College in California. He has had a distinguished career in teaching and publishing. He served as chair of the History Department at Santa Ana College, and also on the Committee on Community Colleges of the Organization of American Historians. His book *Pacific Eldorado: A History of Greater California*, published by Wiley-Blackwell in 2013, has been adopted as a textbook by many colleges in California. *Pacific Eldorado* is in many respects his response to the lack of publications in the field that he identifies in this article.

Editor's note: this article was first published on April 1, 2008 in *Perspectives on History*. It is reproduced here with the author's permission.

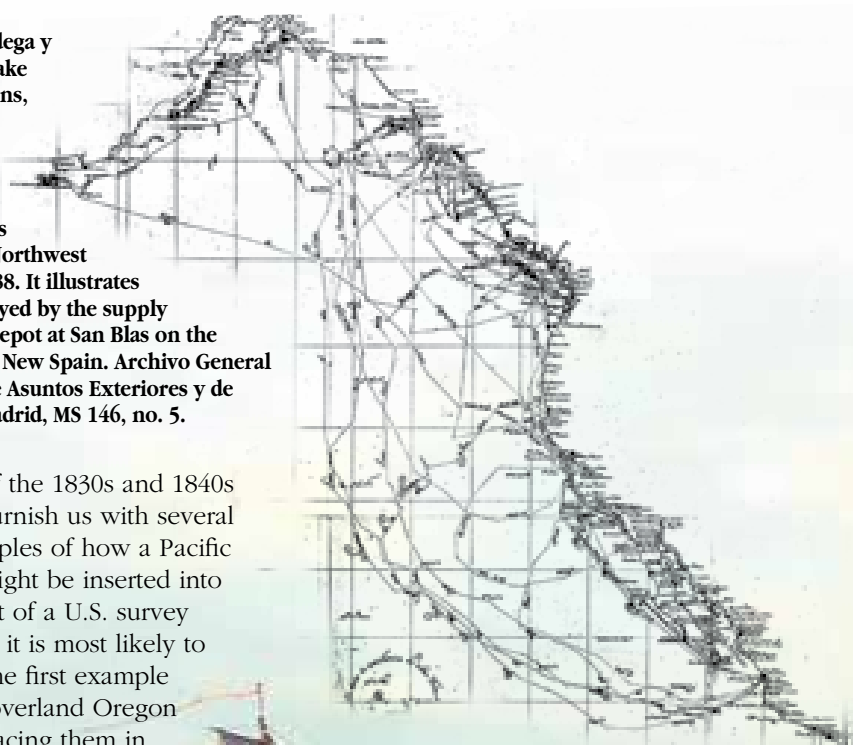
eight years later American Captain Robert Gray established the basis for what became the U.S. claim to the Oregon Country by sailing into the Columbia River. By the 1820s American China traders, whalers, fur trappers, sandalwood merchants, timber interests, and Protestant missionaries had established a Pacific maritime frontier that like a magnet drew the United States ever westward, invigorating its economy. The fortune that New Yorker John Jacob Astor made selling Pacific sea otter pelts at Canton was invested in hotels and railroads in his home state. Similarly, New England whalers in the Pacific during the first half of the 19th century contributed greatly to the growth of the American economy. Again, scarcely any of these developments have been covered in U.S. history survey textbooks. If textbooks do not cover these matters, how likely is it that history professors will supply this information to students?

James Cook sights the big island of Hawai'i, January 18, 1778.

Artist Gordon Miller

Produced by Bodega y Quadra in the wake of his explorations, this chart sums up the extent of Spanish reconnaissance of the Californias and the Pacific Northwest from 1774 to 1788. It illustrates the vital role played by the supply base and naval depot at San Blas on the western coast of New Spain. Archivo General del Ministerio de Asuntos Exteriores y de Cooperación, Madrid, MS 146, no. 5.

A scan of the 1830s and 1840s will furnish us with several examples of how a Pacific perspective might be inserted into the earlier part of a U.S. survey course, where it is most likely to be missing. The first example reframes the overland Oregon migrations, placing them in a Pacific context; the second focuses on America's first government-sponsored transpacific exploration.



Seen from a Pacific perspective, and not just as an epic overland venture, a new dimension is added to the narrative of the Oregon migrations of the 1830s and 1840s. According to one eyewitness account, Nathaniel Wyeth, organizer of two Oregon expeditions (1832 and 1836), reportedly said to members of the 1832 party: "By only going . . . over land, from the shore of our Atlantic to the shore of the Pacific, after we have there entrapped and killed the beavers and otters, we shall be able, after building vessels for the purpose, to carry our most valuable peltry to China and... our seal-skins to Japan, and our superfluous grain to various Asiatic ports, and lumber to the Spanish settlements on the Pacific."²

A clearer, bolder, statement of the Pacific perspective on the Oregon migrations would be hard to imagine.

Rarely do college level survey texts treat American expansion in Oregon in the broader transpacific context. Yet the scholarly literature has for some

time addressed this matter. For example, numerous articles in the *Oregon Historical Quarterly* describe and analyze Oregon's early 19th-century ties to

a burgeoning transpacific commerce and immigration to the Pacific Northwest. Unfortunately, these findings have not found their way into the U.S. survey textbooks and, therefore, probably not into college classrooms either.

So what do students have to gain by a reframing of Oregon's settlement narrative? A Pacific context will help them see that the Oregon migrations were about more than covered wagon trains snaking their way westward toward the fertile Willamette Valley.

In a broader sense that

narrative was also about U.S. participation in the international Pacific maritime fur, lumber, flour, tea, porcelain, silk, and opium trade connecting China, Russia, Britain, Hawai'i and the West and East Coasts of the United States.

Rarely do college level survey texts treat American expansion in Oregon in the broader transpacific context. Yet the scholarly literature has for some time addressed this matter. For example, numerous articles in the *Oregon Historical Quarterly* describe and analyze Oregon's early 19th-century ties to a burgeoning transpacific commerce and immigration to the Pacific Northwest.



The brig USS *Porpoise* was launched in 1836. In the summer of 1837 under the command of Lieutenant Charles Wilkes, she surveyed parts of the southern coastline of the United States. In August 1838 she joined the United States Exploring Expedition Squadron and traveled to the South Pacific before returning to New York, having circumnavigated the globe. After anti-slavery operations off the coast of West Africa, *Porpoise* was assigned to the North Pacific Exploring and Surveying Expedition. In September 1854 *Porpoise* lost contact with other vessels in the expedition and is assumed to have foundered in a typhoon. Bill's finely detailed model of the *Porpoise* forms part of the Maritime Museum of San Diego's exhibit explaining the charting of the seas.

While the Oregon migrations were underway, Commander Charles Wilkes led the First United States Exploring Expedition throughout the Pacific Basin. An authority on the expedition, David B. Tyler, concludes that America's sudden adoption of "manifest destiny" in the 1840s was due "in large part to the work of the first United States Exploration Expedition."³ Its charts and reports highlighted the value of Puget Sound and San Francisco Bay and Wilkes's *Narrative* catalogued information on the interior region. The American whaling industry, which became San Francisco – rather than New England-based by the 1880s, benefited greatly from the navigation charts that the expedition produced.⁴

Including a detailed discussion of the Wilkes expedition into the content of U.S. history survey courses will help students view the "manifest destiny" of the 1840s in a broader, more historically accurate transpacific context.

These are just two among many examples of how a Pacific perspective enriches students' understanding of American history in the decades of the 1830s and 1840s. Other historical happenings that could be discussed in our classrooms include: the 1842 Tyler Doctrine regarding Hawai'i (pledging the United States to uphold Hawai'i's independence); the 1844 Treaty of Wanghia between the United States and China (opening five Chinese ports to U.S. vessels and providing extraterritoriality); President James K. Polk's focus on Pacific ports as a major factor in his handling of U.S. relations with Mexico on the eve of the Mexican War; and the California gold rush that brought Argonauts from many parts of the Pacific Rim and Hawai'i into what was about to become the Union's 31st state.

As China continues on its trajectory toward great power status and Pacific Rim trade and immigration loom ever more important to the United States, students could only benefit from learning how the Pacific world has influenced American history for more than 400 years. The teaching of introductory U.S. history courses from both Atlantic and Pacific perspectives is long overdue. A major Pacific studies and teaching initiative, undertaken by our profession, would be a promising start.

Notes

- 1 Focusing more on historical research than teaching, David Igler reached a similar conclusion in, "Trading Places: The View of Colonial American History from the Pacific," *Huntington Frontiers* (Fall/Winter 2007). For a collection of fresh and insightful articles on what a Pacific perspective offers, see also "Toward a Pacific World," *Common-Place* (January 2005).
- 2 John B. Wyeth, *Oregon; or a Short History of a Long Journey from the Atlantic Ocean to the Region of the Pacific by Land* (Cambridge, Mass.: 1833).
- 3 See *The Wilkes Expedition: The First United States Exploring Expedition (1838–1841)* (Philadelphia: American Philosophical Society, 1968), p. 404.
- 4 Lloyd C.M. Hare, *Salted Tories: The Story of the Whaling Fleets of San Francisco* (Mystic, Conn.: The Marine Historical Association, Inc., 1960), p. 2. According to this same authority, by the 1880s San Francisco had become the world's leading whaling port.

From left, the Danish, Spanish, American, Swedish, British and Dutch factories, or bongs, line the Pearl River in this view painted around 1815 by Spoilum.

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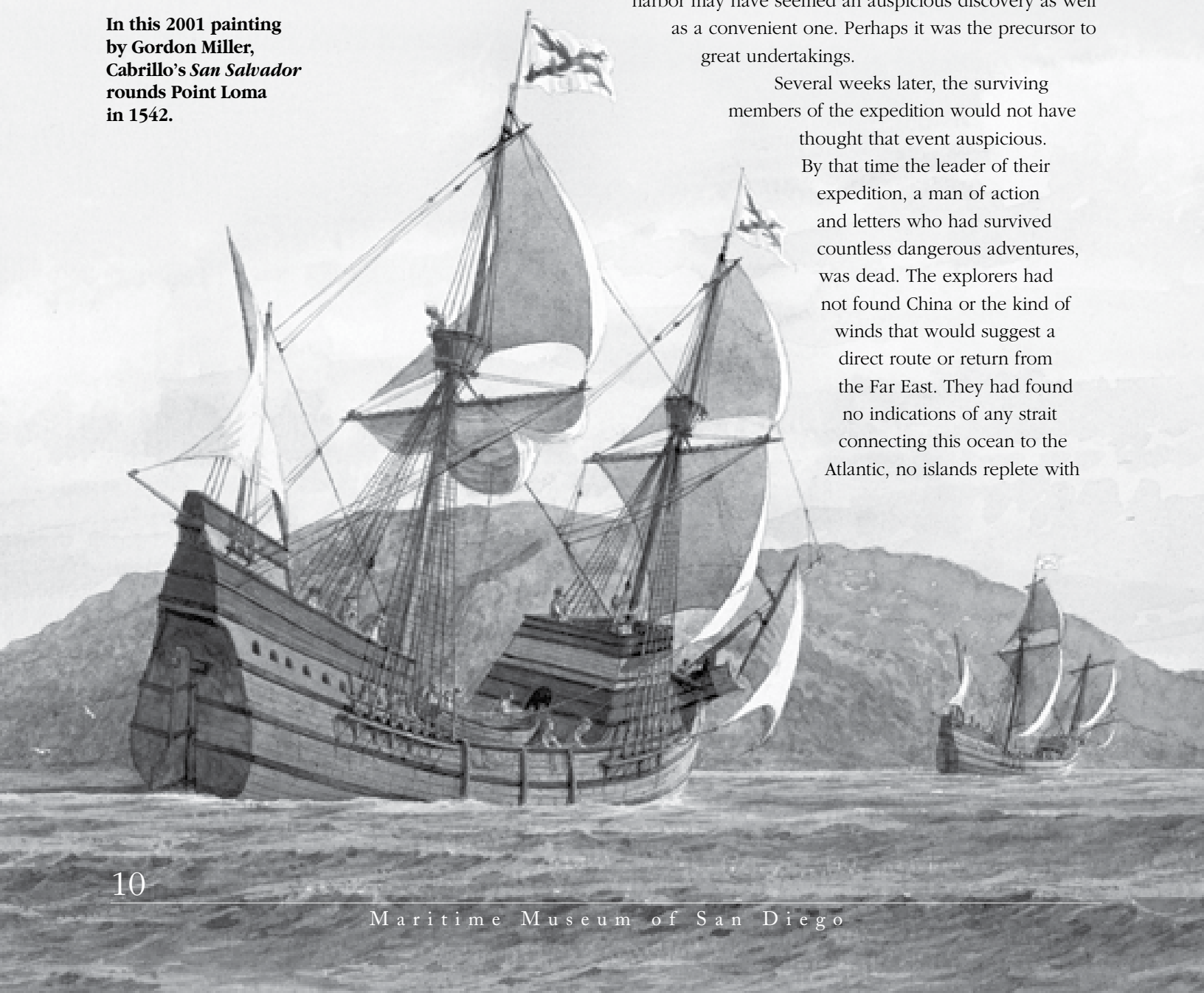
California's

By Raymond Ashley, Ph.D., K.C.I.

On 27 September 1542, lookouts on three Spanish ships working their way slowly up a barren coastline sighted a distinctive wooded promontory to their north. Its aspect seemed to indicate a good anchorage, perhaps even a harbor. They confirmed this impression by sailing into it the following day and anchoring in the calm water beneath the headland, adjacent to a little sand and cobble spit which offered good landing. Having just crossed into uncharted waters, the advent of so fine a harbor may have seemed an auspicious discovery as well as a convenient one. Perhaps it was the precursor to great undertakings.

In this 2001 painting by Gordon Miller, Cabrillo's *San Salvador* rounds Point Loma in 1542.

Several weeks later, the surviving members of the expedition would not have thought that event auspicious. By that time the leader of their expedition, a man of action and letters who had survived countless dangerous adventures, was dead. The explorers had not found China or the kind of winds that would suggest a direct route or return from the Far East. They had found no indications of any strait connecting this ocean to the Atlantic, no islands replete with



Origin Story

pearls, no great cities, no sources of silver or gold. Though the expedition had numerous encounters with the peoples who inhabited these lands, they did not seem members of complex and wealthy civilizations or proprietors of abundant resources. The ships had probed the empty ocean far to the northwest and had found only storms and death, neither of which held much value for the trading interests

of the Spanish empire. So unpromising were the prospects of this new land that more than two centuries would pass before any Europeans could be tempted to

establish a permanent settlement. The logs of the voyage, navigational information, first-hand accounts, and depositions would go missing from the historical record as would the flagship *San Salvador*; along with the only image ever painted of her. Even the names they had given to the places they discovered, such as the name they gave to that first harbor “El Puerto de San Miguel,” would be changed. Having failed in all aspects of their mission save one – to return and report what happened – the voyage would have seemed a disappointment best forgotten.

What they could not have known was that they had indeed sailed into waters of great undertakings. Sixty-five years before the first permanent English settlement on the North American continent, eighty years before the *Mayflower* crossed a much smaller ocean to New England, Europeans sighted, charted, and made first contact with the native inhabitants of

what would one day be the west coast of the United States. When the small *San Salvador* entered the harbor the Spaniards called San Miguel,

the galleon was perhaps the most powerful vessel in the Pacific Ocean. It was this same harbor that would one day project a strategic concentration of U.S. naval power. The coastline might have seemed unpromising, but California which is bounded by it today, if ranked as an independent nation, has the world’s sixth largest economy. All of these things, which from the vantage point of 1542 would have seemed so unlikely, came about in ways complex beyond imagining. Perhaps for the very reason that it was so preposterous and complex, we are

The logs of the voyage, navigational information, first-hand accounts, and depositions would go missing from the historical record as would the flagship *San Salvador*, along with the only image ever painted of her.

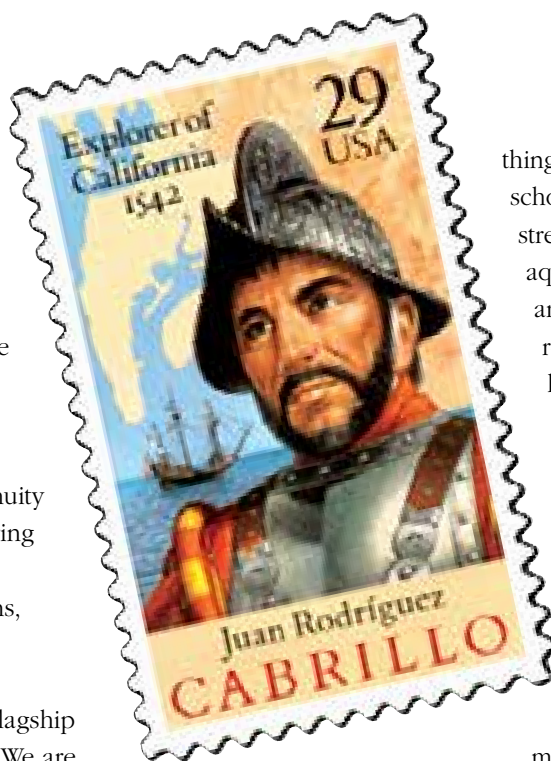


Raymond Ashley, Ph.D., K.C.I., has been president and CEO director of the Maritime Museum of San Diego since 1995. Dr. Ashley holds a BA in Anthropology from UC San Diego, an MA in Maritime History and Museum Studies from East Carolina University, and a PhD in History from Duke University. During his twenty-seven years at the Maritime Museum, Ray has overseen a significant expansion of its collection of historic and replica vessels. He guided the research, design, construction, and sailing of the galleon *San Salvador* - widely considered one of the most ambitious and successful projects ever brought to fruition at the Maritime Museum of San Diego.

drawn to that beginning as a way to explain, understand, and validate ourselves. From our vantage point, naturally, that beginning now seems equally as incomprehensible, alien and inaccessible. So much so that we have found only one certain means to take us to that strange shore, and ironically it is by the same means. For more than a century, with continuity and obsession, we have been conjuring in our commemorative imaginations that ship for which there are no plans, no precise dimensions, no images, and no known remains.

Juan Rodríguez Cabrillo, whose flagship she was, is almost as enigmatic. We are not entirely sure where he was born or into what circumstances, or when and why he came to the New World*. Though he is frequently spoken of as Portuguese, this was derived from a somewhat ambiguous reference in a 1615 compilation of Spanish voyages to the Indies by the historian Antonio de Herrera. His career was spent entirely in the service of Spain. We are not sure what the name Cabrillo signifies, as it was a name he gave himself toward the end of his life after he had acquired property and social standing to differentiate from all the other Juan Rodríguez's of his time. It is unclear where he learned the skills to build boats and ships, to navigate, or write reports. We don't know exactly where he died and though a cryptic artifact was found on Santa Rosa Island in 1901 that some people believe is his headstone, it is probably a fraud. We know he died in a wilderness far from home in mundane circumstances due to complications of either a broken leg or broken arm. And, of a life that was adventurous, dangerous, violent, and long by the standards of the time, he spent only the last eight weeks of it in California.

And yet, if one does an internet search of the name Cabrillo, it will likely turn up hundreds of



For more than a century, with continuity and obsession, we have been conjuring in our commemorative imaginations that ship for which there are no plans, no precise dimensions, no images, and no known remains.

things bearing his name: churches, schools, beaches, parks, freeways, streets, hospitals, hotels, colleges, aquariums, lighthouses, performing arts centers, shopping malls, residential complexes, retirement homes, marinas, yacht clubs, restaurants, daycare centers, and car dealerships. The second most visited National Monument in the United States is located on the headland he once gazed upon in making his landfall and is named for him.

A lonely windswept point on San Miguel Island has a monument to him, as do landmarks in every port in the state. His ship, the *San Salvador*, has appeared on the US 29¢ postage stamp, and can be found in art deco pictographs throughout Balboa Park, in the mural inside the Avalon Casino, in the outdoor atrium of the San Diego Municipal Complex, in the Santa Barbara Courthouse, and the center of the seal of the City of San Diego. The *San Salvador* sails in reconstruction as a children's

media center in the Point Loma branch library and is the subject of artistic renderings of the voyage by fourth graders throughout the state. None of California's millions of residents, visitors, political leaders, celebrities, or artists in all of its history have managed to inspire so much willingness to identify a pivotal point in our history as this mysterious individual who first sailed into its unknown territory and then vanished into its landscape a few weeks later. Ironically, though none of the names he invented for the places he saw survived, the name he invented for himself trumped all of them. For whatever he was in his life – conquistador, patron, community leader, shipbuilder, navigator, explorer – he has clearly become something else now. His subsequent career transformed events he could never have imagined.

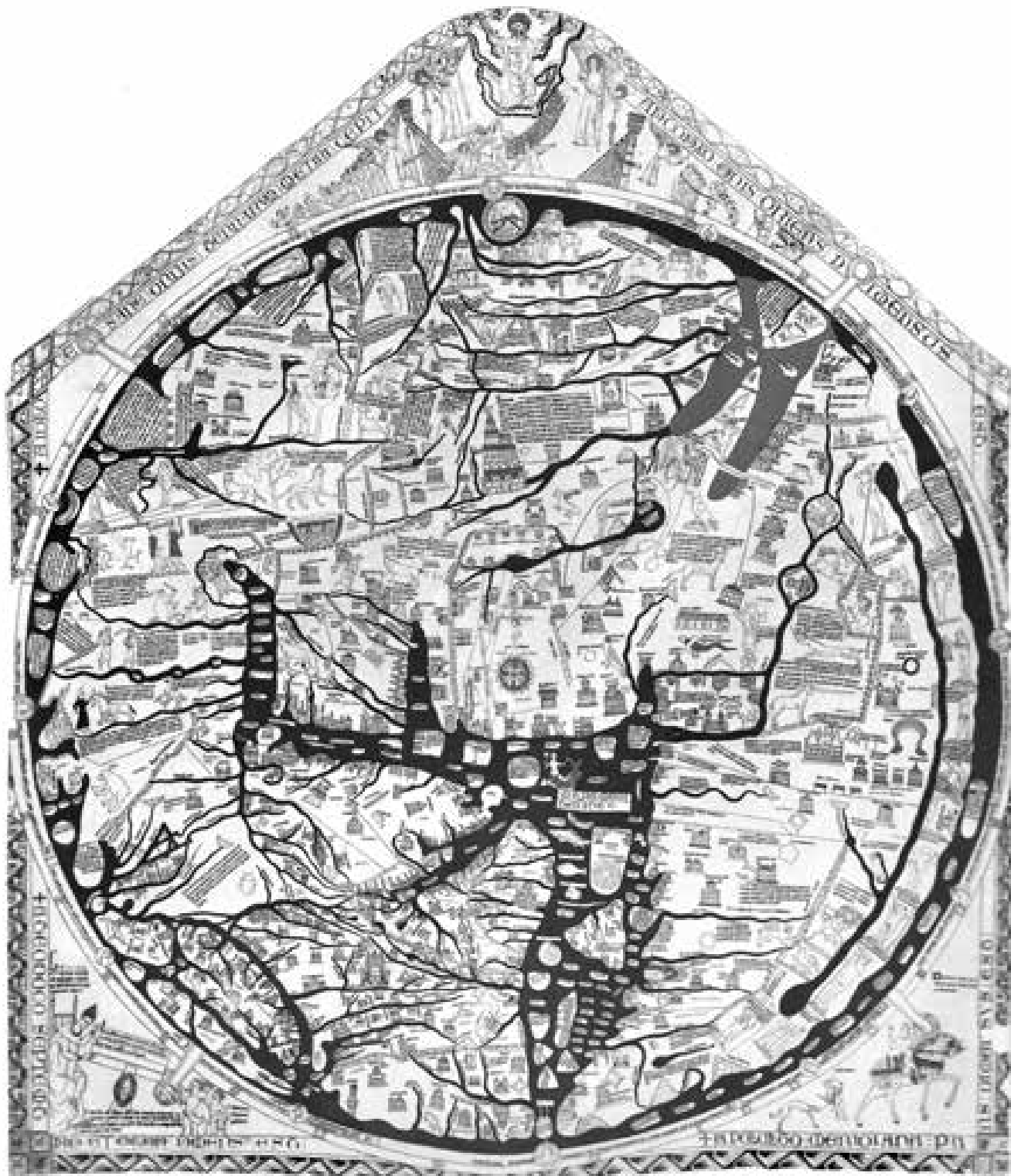
***Editor's note:** When this article was first published in *Mains'l Haul* vol. 51 (1-4, W/Sp/S/F 2015) this was the state of the question regarding Cabrillo's origins. Thanks to groundbreaking research by Wendy Kramer, Cabrillo's Spanish origins have been definitively proven. This research is published in *Mains'l Haul* vol. 55 (1-4, W/Sp/S/F 2019).

Transformative Worldviews - 14th Century to the 16th Century

To have a sense of the kind of worldview Cabrillo may have held as he attempted to probe its unknown extent, it might be helpful to have a view of that world, or at least a view of how it had changed so abruptly. When they conceptualized their known world, medieval Europeans prior to Cabrillo's time tended to think of it as a T inside an O, forming the continental divisions of Asia, Africa and Europe. Such T-O maps were oriented east-up, as east was believed to be the direction to the Garden of Eden. Jerusalem was located at the center of the world, as befit the site of Christ's resurrection. In fact, in its resemblance to a cross, the cartographic representation of world geography functioned as an augury of the Christian narrative and perhaps even contained clues to the prediction of the Apocalypse. In the most elaborate illuminated renditions, such as the fourteenth century Hereford Map, the Indian Ocean was shown as a closed sea, the Red Sea was pigmented red (naturally) and the more one moved outward from the center the more confrontations one might expect with monstrous creatures and races. Outermost of all and surrounding the known world was *Oceanus Mares*. This was not the ocean pathway to the Indies, however, it was the ocean of nightmares, marked in such maps by the iconography of death. In practice, the European medieval ocean was something best used as an efficient but tentative shoulder route, creeping from port to cape to port along the coast as though in a river, with occasional crossings to nearby shores, preferably those within sight. Even used in this way coastal navigation was problematic. In 1291, for instance, a well-funded and well-equipped expedition led by the Genoese brothers Ugolino and Vadino Vivaldo attempted to repeat earlier legendary exploits by Phoenicians and Carthaginians in sailing and rowing coastwise from the Mediterranean and around Africa to India. Their two galleys rowed proudly through the straits of Hercules (Gibraltar), altered course to port and were never heard from again.



T-O maps were not the products of a society one might predict would someday establish worldwide seaborne empires. In the middle of the fourteenth century, for instance (the time of the Hereford Map), one might have thought China the most likely candidate for such an enterprise. China was the wealthiest and most powerful society on earth for most of the preceding twenty centuries and possessed a well-developed maritime capacity, expansive oceanic trading networks, and a systematic approach to gathering knowledge. In keeping, the spectacular fifteenth-century voyages of Zheng He might have begun a cycle of seaborne empire had they uncovered anything the Chinese felt was really worth the trouble.



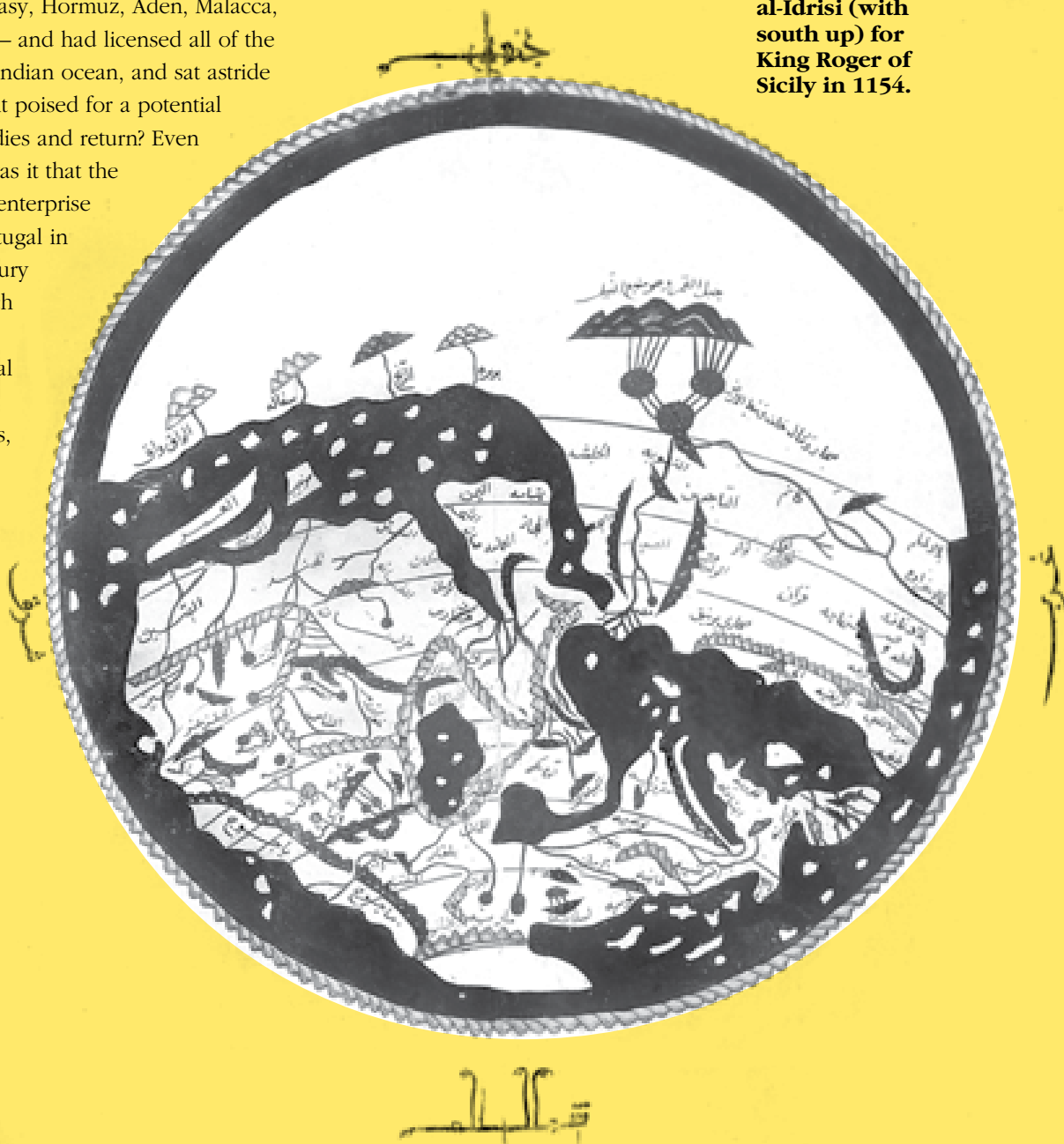
The fourteenth century Hereford Mappa Mundi, ca 1300, represents one of the most elaborate T-O maps framing a worldview laden with religious symbolism, and placing Jerusalem at the center of the world with the Red Sea moving outward from the center toward increasingly threatening forces.

By comparison to the Hereford map, the al-Idrisi map composed for Roger II of Sicily in 1154 from the compilations of Arab seafarers reveals a rational and useable cartography largely devoid of religious narrative. The map contains lines of latitude and depicts bodies of ocean as elements of a functional geography rather than as a symbolic barrier separating planes of existence. This too is understandable given the extensive Arab maritime trading networks which spanned the Indian Ocean and eastern Mediterranean. The Islamic world of that time also contained many libraries,

medical schools, and astronomical observatories known to the West. By contrast with an Arab world that was relatively cohesive in acceptance of other belief systems, Europe was deeply religious, fractious, violent, involved in failed crusades, and in retreat. By the middle of the fifteenth century that retreat was beginning to look like a rout when the Ottomans took Constantinople, the city which had stood as a European bastion in Asia for a thousand years and, perhaps as ominously, the Venetians and Genoese began to gradually lose to the Ottomans their options as intermediaries in the spice trade as well as their access to the forest resources that underpinned their naval power.

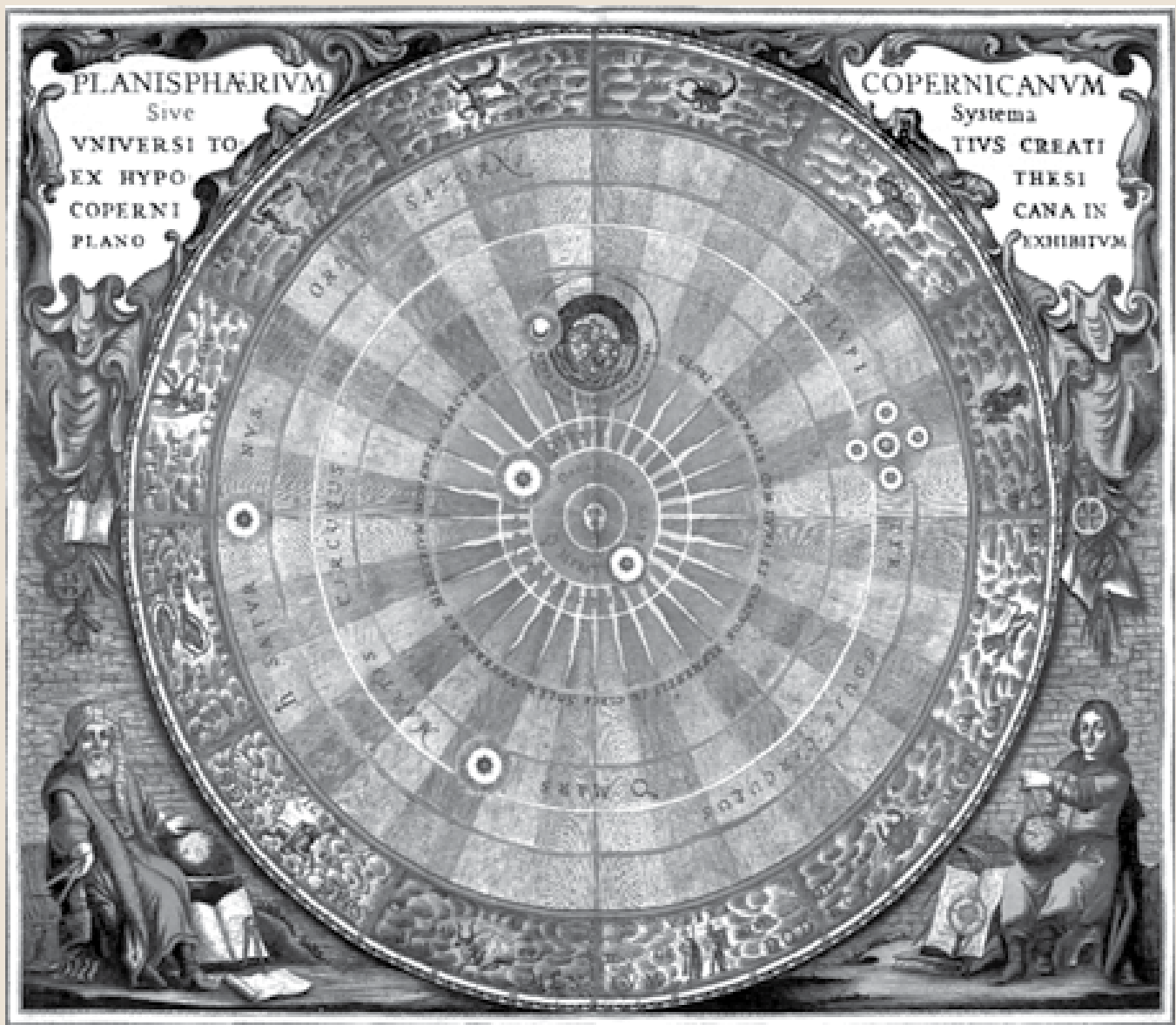
To what then, can we attribute what seems at this distance like a metahistorical role reversal? How was it that, by 1530, less than a century after the fall of Constantinople, the maritime empires of Spain and Portugal controlled most of the world's strategic maritime choke points – Gibraltar, Calais, Malagasy, Hormuz, Aden, Malacca, the Isthmus of Darien – and had licensed all of the maritime trade of the Indian ocean, and sat astride the American continent poised for a potential Pacific route to the Indies and return? Even more amazing, how was it that the combined worldwide enterprise of both Spain and Portugal in the mid-sixteenth century was achieved with such breathtaking economy of force; an institutional establishment of soldiers, sailors, factors, functionaries, and political leadership that seldom numbered more than 10,000 men?

This map was drawn by the Moroccan cartographer al-Idrisi (with south up) for King Roger of Sicily in 1154.





commodious hull capable of standing up to heavy seas for months at a time while carrying enormous weights in cargo, provisions and armament; sufficient artillery to destroy any other type of vessel and to deter attack from other European ships; and a rational system of navigation which fixed positions in absolute rather than relative systems of reference, facilitated depiction of wind systems, and was recognized as a means to substantiate claims of ownership. The system was more than just the ships. It relied on interlinked support institutions such as shipyards and ordnance foundries, systems for procurement of timber and naval stores, victualling depots, boards of trade, navigation institutions which codified practice and collated, produced, and protected secret geographic information, and which along with military engineering, artillery, and mining institutionalized the role of mathematics and instrumentation in investigating and manipulating the natural world for gain. These ships and their supporting institutions were not simply the machinery of profit-seeking ventures, they were essential components of modern states. Going beyond the hardware, the requirements of navigation for oceanic trade and empire imposed across these institutions a rational view of the world which affected and reinforced change in the larger paradigm. At the very moment when Cabrillo's ships sailed



Copernicus's world system challenged the traditional view of the solar system by placing the sun at the center with the earth, moon and other planets revolving around it. Andreas Cellarius, *Harmonia Macrocosmica seu Atlas Universalis et Novus* (1661).

into the bay they named San Miguel, a Polish astronomer on the other side of the world was completing work on a treatise that dispensed with an overly elaborate theocratic version of the universe that had prevailed since antiquity and proposed instead a far simpler arrangement based on quantified observation that placed the sun at the center of our planetary system. Copernicus's *De revolutionibus orbium coelestium* would become the founding work of the scientific revolution. While the voyage of the *San Salvador* was certainly not the first early modern expedition, it may have been the last such voyage of the medieval world.

As the galleon and her consorts made their way up the Baja California coast, *San Salvador* represented the furthest salient of this technological revolution into unknown regions of persisting medieval fantasies. The first wave of this revolution had carried Cabrillo as a young man across the Atlantic to the West Indies and then to Veracruz with Pánfilo de Narváez to join with Cortés' army. He contributed to its momentum with the boats he constructed for the amphibious attack across Lake Texcoco, which took the Aztec capital, and again when he built Alvarado's fleet of ships for the discovery of a

new route to China, *San Salvador* among them. And the surge was cresting still in 1542, when she carried Cabrillo to his final destination and starring role in California's origin story.

As the episodes of Cabrillo's life and the Voyage of Discovery he made are the subject of other papers within this issue of *Mains'l Haul*, we will pick up the story of his career as it continues after his death. Though it failed in its primary objectives, Cabrillo and his voyage enjoyed an immediate but brief afterlife in cartography and in the litigations over his estate in Guatemala. The geographical information gleaned from the voyage, including the harbor of San Miguel, found its way into European maps in subsequent decades, though examples such as Paolo Forlani's map of 1566 persisted with the notion that China lay at the end of a manageable coastal voyage to the northwest bisected by a strait that connected the Pacific to the Atlantic via an all-water route across the top of North America. Perhaps more importantly,

information concerning the prevailing westerly winds that stymied their attempts to follow the coast may have helped crack the code of Pacific wind patterns necessary for development of a two-way transpacific route between New Spain and the Indies. This route became practical in 1565 when the Spanish established themselves in the western Pacific with a base in Manila. The voyage itself was the longest regular trade route of the age and its eastbound leg was one of the most dangerous routes of maritime history. In an effort to locate harbors of refuge for the eastbound galleons making their way to Acapulco after months at sea, the merchant explorer Sebastián Vizcaíno in 1602 conducted the second survey of the coastline Cabrillo had explored. It was Vizcaíno who took advantage of Cabrillo's faded presence in the records, and lack of precision in his descriptions and latitudes, to rename the prominent islands, headlands, and bays, including Cabrillo's first harbor in Alta California, San Miguel, which he renamed San Diego. Vizcaíno's

voyage also produced the earliest large-scale maps to survive in which we can recognize familiar geographic features of California's coast depicted in rational form. In overwriting Cabrillo's geography and place names, Vizcaíno nearly succeeded in erasing him from history.

Cabrillo Reclaims California

Many years later when the ships of other nations roamed the Pacific at will, Spain seized upon the colonization of California as a strategy for the defense of its Pacific monopoly by denying the use of it as a

base to other European sea powers. In the end, it proved to be a futile defense. The exploration, classification, interpretation, and exploitation of the Pacific became a primary objective for the entire European Enlightenment, led by Britain, France, and Russia. Following the age of great Pacific voyages of exploration, the distant Spanish outpost became

Mexican and then American, as succeeding waves of immigrants from around the world poured into California searching for gold, land, and livelihoods. Until late in the nineteenth century, most of those immigrants came by sea and many of them were of seafaring stock.

By the late nineteenth century California's teeming offshore waters and expanding demand for protein made fishing seem an especially attractive livelihood to immigrants from traditional fishing communities with similar climates and topography, such as mainland Portugal and the Azores. Given the insecurities of immigrating to a new land from half-way around the world, it's hardly surprising that some of them should find a special connection, identity, and sense of ownership in the heroic exploits of a great seaman explorer who not only made the first claim on their new homeland, but was a countryman from their storied past. The mystery and ambiguity of Cabrillo now was an advantage, a figure who could be claimed both as Spanish and Portuguese. Moreover, for an entire state

As the galleon and her consorts made their way up the Baja California coast, *San Salvador* represented the furthest salient of this technological revolution into unknown regions of persisting medieval fantasies.

presumed in the spare rendering of the facts: no baroque cartouches, pictograms of ships and sea monsters, foliated compass roses, or portraits of explorers associated with national claims of territory.

It is noteworthy that in 1886 the U.S. Coast and Geodetic Survey produced a chart by George Davidson called “Landfalls of Cabrillo and Ferrelo [sic] on the Pacific Coast” (Bartolomé Ferrer was *San Salvador’s* chief pilot and Cabrillo’s successor in command of the expedition).

This was no ordinary nautical chart with notations reporting reefs and changes in magnetic variation. Rather, through a succession of notes and stories associated with the places they had

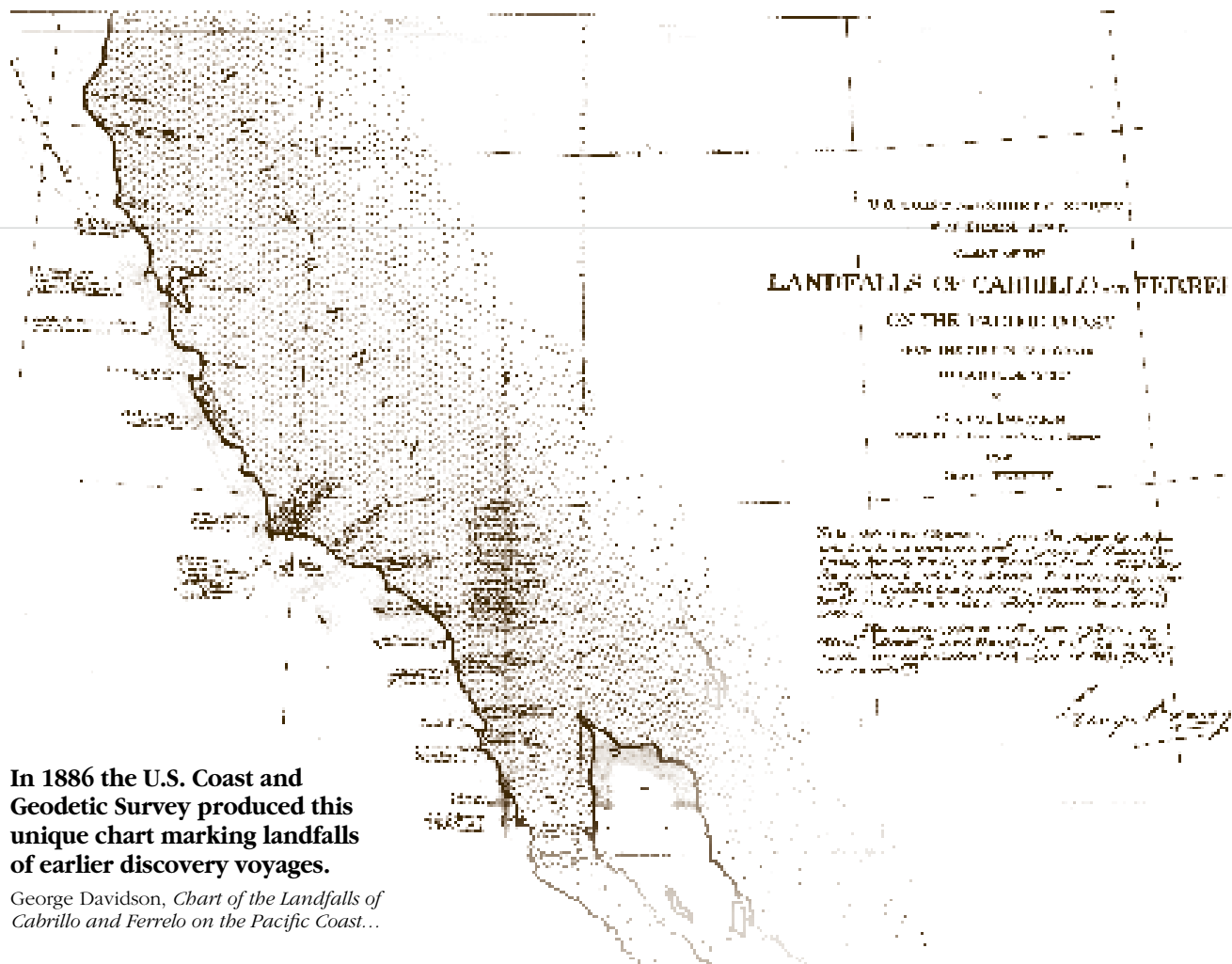
explored during the voyage, all carefully arranged in proper coordinates, Davidson filled his geography with signifying narrative, in principle not unlike what

the T-O maps had once done in depicting a medieval world centered on Jerusalem and ringed by a sea of death.

At one stroke Davidson had reversed Vizcaíno’s notations and through the offices of the U.S. Coast Survey, Cabrillo claimed the territory once more, precisely at the moment in California’s history when the first wave of Portuguese immigrants were pouring

into California and ranging its bays, coastlines, and offshore waters in search of fish. *San Salvador* had begun her voyage back to life.

It is noteworthy that in 1886 the U.S. Coast and Geodetic Survey produced a chart by George Davidson called “Landfalls of Cabrillo and Ferrelo [sic] on the Pacific Coast” (Bartolomé Ferrer was *San Salvador’s* chief pilot and Cabrillo’s successor in command of the expedition).



In 1886 the U.S. Coast and Geodetic Survey produced this unique chart marking landfalls of earlier discovery voyages.

George Davidson, *Chart of the Landfalls of Cabrillo and Ferrelo on the Pacific Coast...*

CABRILLO ENTERING SAN DIEGO BAY.

On Sept. 28 A.D. 1542, Juan Rodriguez Cabrillo in command of two Spanish ships, discovered & entered the Bay of San Diego, which he described as "a land-locked and very good harbor"



1542 SAN DIEGO 1892

In 1892, Cabrillo landed once again in San Diego to commemorate the 350th anniversary of his first landfall in what was now the United States. Though there was no *San Salvador* to debark from when Cabrillo stepped ashore from a launch rowed to the foot of Grape Street, the moment served as the grand finale of a celebration that included a military parade down Broadway, speeches by civic leaders and throngs of spectators at the landing site. Two years later, it was deemed necessary to dignify the proceedings by the inclusion of Cabrillo's flagship. Since no galleons were readily available the organizers chose the most exotic watercraft at their disposal to portray *San Salvador*, so the Chinese abalone junk *Alta* was pressed into service. In subsequent years *Alta* became progressively more "galleonized" with the addition of a fo'c'sle, stern castle, and yards. Eventually, many of the great period sailing vessels on the West Coast portrayed *San Salvador* in landing reenactments: *Rendezvous*, *Swift of Ipswitch*, *Baghera*, *Argus*, *California*,

Pilgrim (now *Spirit of Dana Point*), *Red Witch*, *Lynx*, and *Californian*.

San Salvador also materialized as a focal point in historic narrative art. A sculpture of the ship was proposed by Alan Hutchinson in 1913 (the year Cabrillo National Monument was established) to accompany a monumental statue of Cabrillo, which was to have been erected on the spot of the old 1854 Point Loma Lighthouse after that superannuated structure was demolished. Fortunately for the career of what is now one of San Diego's most beloved structures, the plans to destroy the lighthouse were rescinded and neither the heroic monument nor the ship sculpture came to be. Today, if one goes to Cabrillo National Monument, one finds the heroic nature of the explorer conveyed by a *Padrão* (the stelae once erected on prominent headlands by Portuguese navigators to mark both the furthest extent of their explorations and their ownership of the route) sculpted by Alvaro de Bree and contributed by Portugal to the Pan American Exposition at Treasure island

in 1939 and installed at its Point Loma location in 1949. Not far away is the iconic (and wildly fanciful) bronze sculpture of the *San Salvador*, which has been a fixture at Cabrillo National Monument since 1935

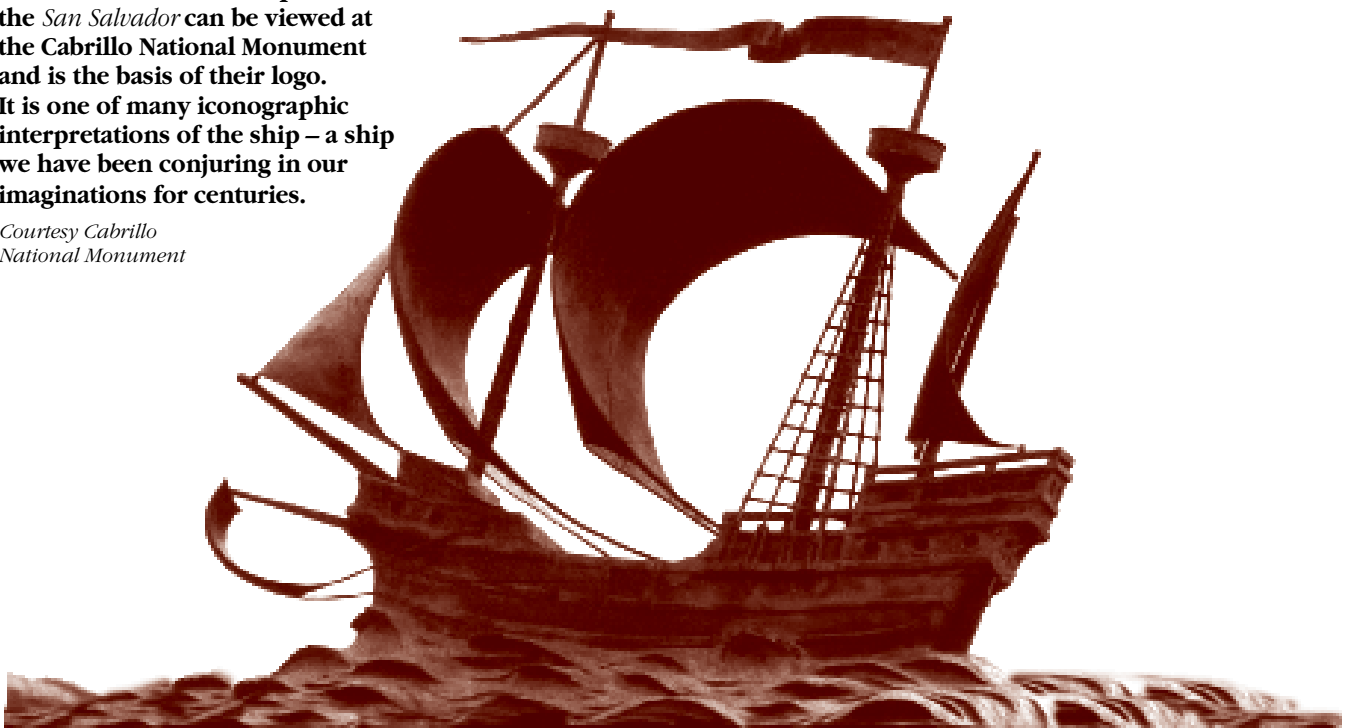
and the basis of its logo. In the decades to follow, a number of West Coast artists from Duncan Gleason to Richard DeRosset have found *San Salvador's* voyage an apt subject for their narrative art. More recently, the *San Salvador* has even served as the basis for narrative forms of architecture, as in the children's media center

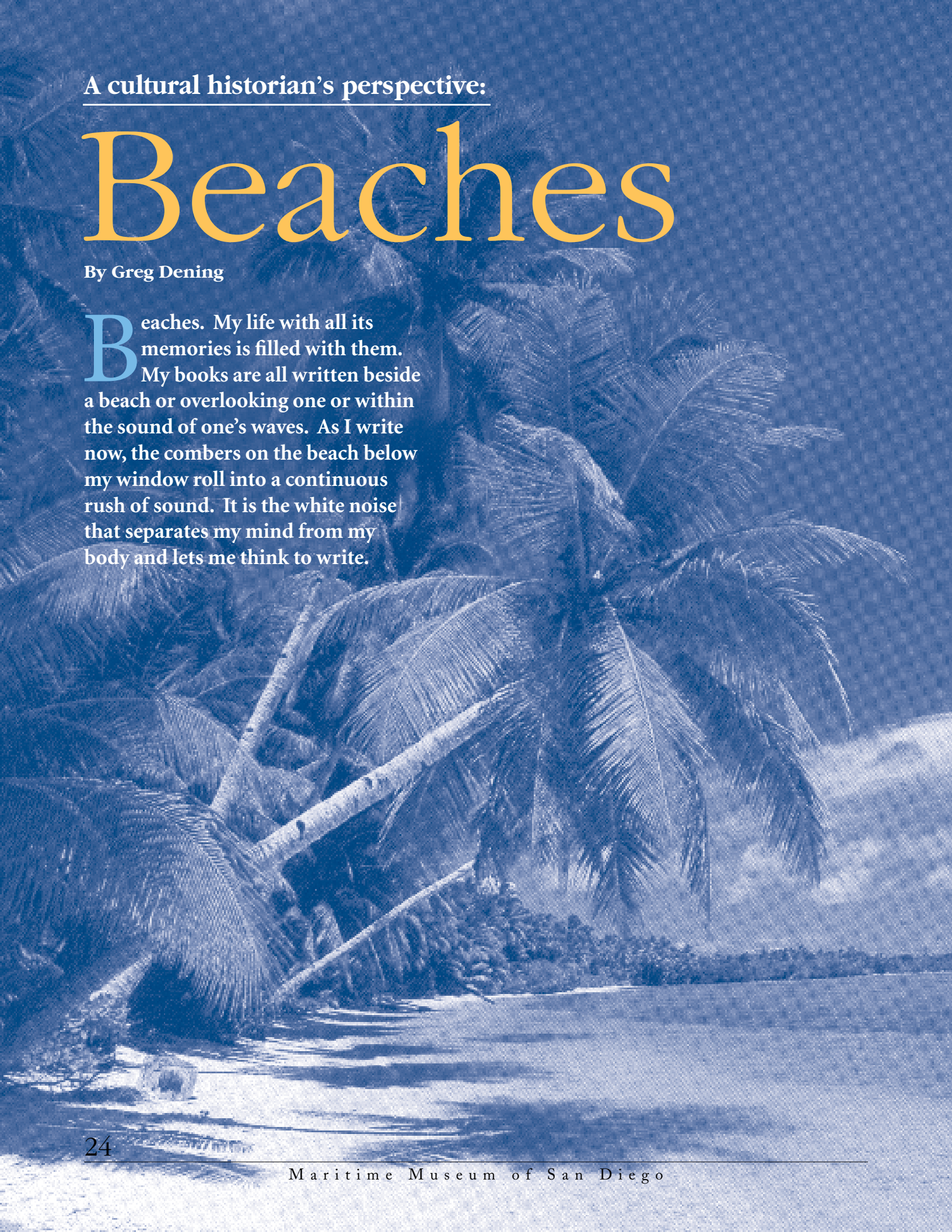
at the Point Loma branch library. In the accumulation and distribution of such representations in public art, in public performances and landing reenactments, in the telling of the Cabrillo story as part of the California curriculum standards, and in the assignment of Cabrillo to place and business names from national monuments to strip malls, the *San Salvador* has grown to become the ubiquitous, if subliminal avatar of the California and especially the San Diego origin story. We have been building the *San Salvador* in our imaginations for generations. Now it is time for her to materialize in tangible form.

In 1892, Cabrillo landed once again in San Diego to commemorate the 350th anniversary of his first landfall in what was now the United States.

This fanciful bronze sculpture of the *San Salvador* can be viewed at the Cabrillo National Monument and is the basis of their logo. It is one of many iconographic interpretations of the ship – a ship we have been conjuring in our imaginations for centuries.

Courtesy Cabrillo National Monument





A cultural historian's perspective:

Beaches

By Greg Dening

Beaches. My life with all its memories is filled with them. My books are all written beside a beach or overlooking one or within the sound of one's waves. As I write now, the combers on the beach below my window roll into a continuous rush of sound. It is the white noise that separates my mind from my body and lets me think to write.

There is hardly a week that I don't walk a beach. These days I can't walk their soft white sand. There is too much pain and too many reminders of mortality in that. A dune to cross to reach a beach drains energy and resolve. No! The beach I walk is the hard wet sand at the sea's edge. It is an edge that moves with the tide and each wave in the tide, of course. So, unless it is taken barefoot, the walk meanders just beyond the reach of the largest wave in a set—always the seventh, don't the fishermen say?

This glistening strand between high and low tide is my freedom trail. I lose myself as I walk. I write in my mind; the waves are my worry beads. The last reach of the sea soaks into the sand. On one side of me, colonies of gulls and terns dry themselves on the white sand. On the other, the sea side, gannets dive into the troughs between breakers. Occasionally dolphins are to be seen surfing in the green transparencies of the waves. In the soak of the sea life stirs almost immediately, as the crab holes bubble. Worms and burrowing mollusks probe just below the surface, sucking life from the brine seeping into their world. Sandpipers ballet after the retreating waves.

This wet stretch between land and sea is the true beach, the true in-between space. Among the peoples of Oceania about whom I write--the *maohi* of Tahiti, the *enata* of the Marquesas, the *kamaiana* of Hawai'i--it is a sacred, a *tapu* space, an unresolved space where things can happen, where things can be made to happen. It is a space of transformation. It is a space of crossings.

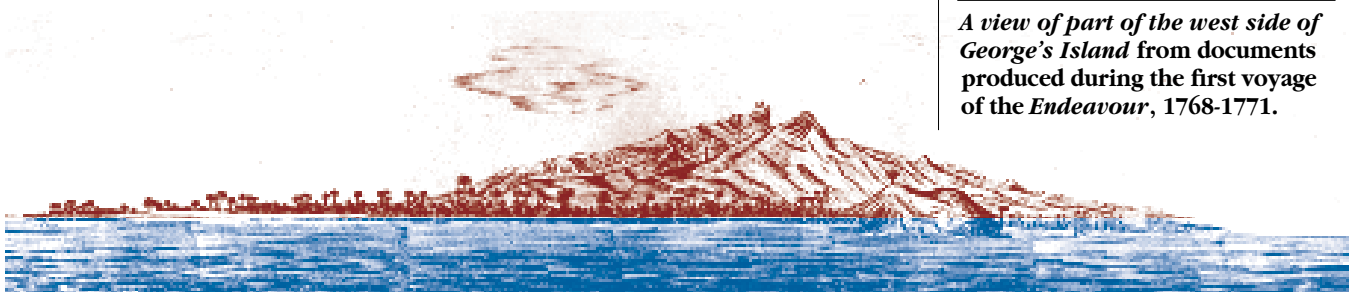


Portrait of Captain William Bligh by J. Ruffell. From the frontispiece of Bligh's *A Voyage to the South Sea...* (1792).

CAPT. BLIGH.

Greg Denning (1931-2008) was one of Australia's most eminent historians and anthropologists. Denning focused his research and writing primarily on the South Pacific, vividly describing and interpreting the historical encounters between indigenous Pacific island peoples and European seafarers. He taught at Melbourne University and the Australian National University, Canberra. Among his most important works are *The Marquesan Journal of Edward Roberts* (1974), *Islands and Beaches* (1980), *Mr Bligh's Bad Language* (1992), *The Death of William Gooch* (1995), and *Performances* (1996).

A view of part of the west side of George's Island from documents produced during the first voyage of the Endeavour, 1768-1771.



A view of part of the west side of GEORGE'S ISLAND taken from the Ship at anchor in BAY OF BASS



Taputapuatea, drawn from
the seaward side in 1792.

Let me take you to a beach to show you how. The time is 1789. The place is Matavai, a bay on the northwest coast of the island of Tahiti. It is the place of the first, violent and awful encounter between the *maohi*—the native islanders of Tahiti—and the European intruders in 1769. In the twenty years prior to 1789, James Cook has anchored there four times. The French under Louis de Bougainville and the Spanish in various expeditions from Peru have done the same. The latest visitor had been William Bligh, collecting breadfruit in the *Bounty*. Now the *Bounty* is back after the mutiny. Fletcher Christian and eight mutineers bargain with the rest that if he could take the *Bounty* to some place of settlement—he didn't know where—he would leave the rest either to fulfill their dreams of paradise or to take their chances with the British navy, which would inevitably come looking for them.

The beach at Matavai is a black sand beach. This was a somewhat upsetting discovery for Marlon Brando when he filmed “Mutiny on the Bounty” there in 1965. It wasn't his idea of a “real” Tahitian beach at all. So he imported thousands of tons of good white New Jersey-type sand to make it right. Didn't I say that this in-between space of a beach was a space where things are made to happen?



The black sand beach at Matavai curves around the bay and ends at a point of land just opposite the passage through the reef through which first the *Dolphin*, then the *Endeavour*, then the *Resolution* and then the *Bounty* had sailed. The English had noted the point in 1769 and called it “Morai Point.” “Morai” is how they heard the Tahitian word marae, a sacred

Above: *The Dolphin* at Matavai, from Hawkesworth’s *Voyages*.

Below left, another *marae*, drawn in 1792.





Cook's *Endeavour* lies at anchor at Matavai in his 1769 drawing. Taputapuatea stood just south of "One Tree Hill."

space. It was indeed a sacred space. Tahitians called it *Taputapuatea*: "Sacrifices from Abroad."

There were several *marae* called Taputapuatea through the "Society Islands," as Cook had called them after the Royal Society, which had sent him to Tahiti. The most important, the original and the most sacred was at Raiatea, a hundred miles to the northwest of Tahiti.

These *marae*—to call them "temples" is to say too much and too little—had all the same characteristics. They were all on a point of land. They all stood opposite a passage through the reef which itself was deemed sacred. They had two parts: a seaward side on which canoes beached bearing human, animal and vegetable sacrifices, and a

landward side which was a treasure house for the most sacred icons and ritual paraphernalia of the people whose *marae* it was. The landward side was also a place of feasting, dance and mythical and historical song. This partition of landward and seaward sides had its own symbolic beach, a transition zone between gods and humans. It was a stone, *tepa*, on which the god-chief of the place stood and had the sacrifices offered to him. There he pantomimed eating the eyes of the human sacrifices. On that stone he was clothed in the feathered wraps that were the symbols and title of his power and authority.

Deep in Tahitian mythic understanding of themselves was a polarity that they negotiated by ritual and theatre. The *marae* Taputapuātea with its landward and seaward sides and its stone “beach” was the mythic and ritual space where the polarity was negotiated. Land and Sea were the basic oppositions, but the associations with these two poles ran wide and deep. Land was Native; Sea was Stranger. Land was Life, Legitimacy, Fertility; Sea was Death, Power, Sacrifice. The “beach,” *tepa*, was the place where the power of Violent Strangers—the ancient Polynesian chiefs who had come across the sea—was assuaged with sacrifices brought through the sacred passages in the reef. *Tepa* was the place where naked power was given authority and legitimacy by being wrapped in the feathered symbols that were their title to the land.

In September 1789, Fletcher Christian came and went at Matavai in the *Bounty* in a day and a night. He left the sixteen mutineers who had chosen to take their chances at Tahiti and kidnapped about the same number of Tahitian women, throwing those he deemed too ugly or unsuitable for his purposes into the sea as he left. The sixteen mutineers came to Tahiti with not much other than the clothes they wore, some muskets and other weaponry, three gallons of Madeira wine each, and a few useful tools. The five months they had spent in Tahiti collecting breadfruit for Bligh had taught them a smattering of the language, and some understanding of Tahitian cultural practices. They

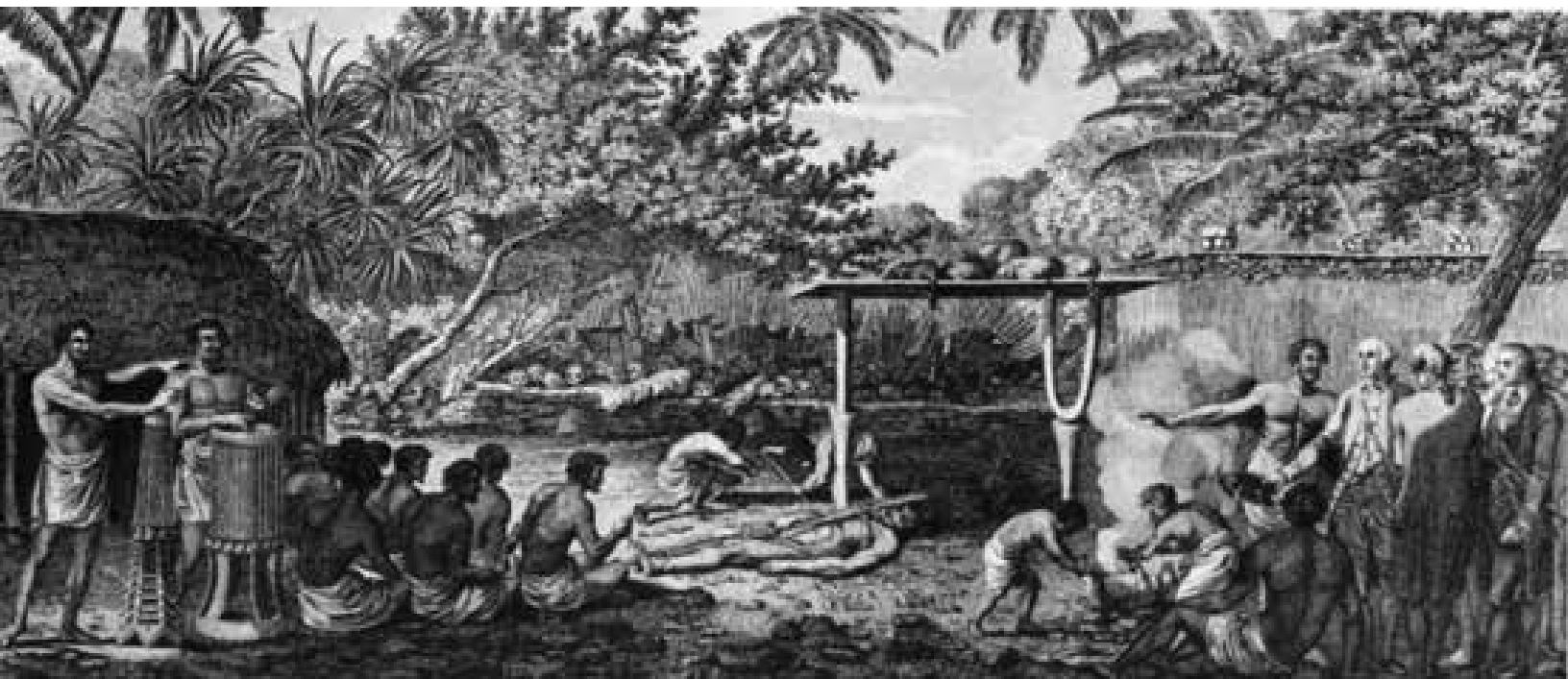


A portrait of Cook by John Webber, like this one, was a sacred object in the *marae*.

knew that Tahitian greed was not so much for European goods as for the native goods—red feathers, clubs, drums, statuary—that the mutineers had stolen or exchanged at the islands the *Bounty* had visited after the mutiny. The *Bounty* men knew that their own safety depended on their making *taio* with Tahitians—friendships in which the individual’s name, person and all social relationships were exchanged. They knew too that with their muskets they were an intrusive power in the politics of the islands.

It is not to my purpose to tell the dismaying and intriguing story of the

eighteen-month stay of the mutineers at Tahiti, which ended when Captain Edward Edwards of HMS *Pandora* captured them and took them back to England for trial. Here I am talking of beaches. The mutineers discovered that theirs was a different sort of beach now that there was no *Bounty* in Matavai to dominate the scene with its cannons. They now had to bow to much that before they easily overrode. In fact, their first bowing took place at the *marae* Taputapuātea we have been talking about. They presented themselves, armed, to the boy-chief—Pomare was his name—who had title to the land where they wanted to stay. They came to the *marae*. Pomare was seated on the shoulders of one of his servants. (Should Pomare’s feet touch ground, that ground became *tapu*, sacred, and inaccessible to others.) Tahitian protocol demanded that all who



Captain Cook considers the “man-long plantains” at a Tahitian *marae*.

approached Pomare should bare their shoulders and their head and bow to the ground. This the mutineers refused to do. They were Englishmen, they said, and did not bare shoulders to anybody and besides, their own king demanded that they wear hats when they were armed. “Maitai!”—“fine!”—the Tahitians said. Put some Tahitian bark cloth on your shoulders and take that off. Then give our king an English salute.

Two beaches had been crossed in this one incident, don’t you think? Two parties had bent to one another. Two parties had been relativised a little in their cultural perceptions. Two parties had to be inventive, create something new. That is what happens when beaches are crossed. In the in-between space of a beach, something new is made. Both sides give a little but lose nothing.

Around Pomare at Taputapuatea were all the sacred treasures of his people. There was an icon of the god ‘Oro and all his feathered accoutrements. ‘Oro was the god of sacrifice. Prominent among the treasures was a painting of Captain Cook by John Webber. (The latest

portrait of Cook by Webber to come on the market was acquired by the National Gallery of Australia for over a million dollars!) All ship’s captains who came to Matavai were asked to sign their name on the back of it. It was wrapped in a red cloth and kept reverently in a chest among the skulls of famous warriors who had been killed or sacrificed. (In a little while, skulls of mutineers Charles Churchill and Matthew Thompson would join the collection, as would the red hair of the Bounty’s barber. He was deemed a most powerful man, since he touched other’s hair and kept in his cabin a collection of his own “skulls”—models of the latest hairstyles in London.) Along with the portrait of Cook, the mutineers were surprised to find a print of Zoffany’s painting of Cook’s death in Hawai’i. Bligh had tried to keep Cook’s death a secret from the Tahitians. So did Fletcher Christian, who explained Bligh’s absence on his return to Tahiti by saying that Bligh had stopped off somewhere with Captain Cook. In a strange coincidence, a Swedish ship, the *Mercury*, had called at Tahiti between Christian’s first return to Tahiti and his

last. The *Mercury* people told the Tahitians of Cook's death and left the Zoffany print to prove it. Then the *Mercury* sailed on, passing the island of Tubuai where Christian had temporarily holed up and was building his Fort George. The ship did not stop at Tubuai but passed it in the night and saw the fires that the mutineers had lit, nearly discovering Fletcher Christian and the *Bounty*.

I haven't made my full point yet. We need to go forward a year into the mutineers' beachcombing story. Two of the most uncontrolled and violent of them are dead. Thompson in a fit of jealousy has murdered Churchill and the Tahitian *taio* of Churchill has murdered Thompson.

Churchill and Thompson had raped and murdered Tahitians, flogged and mutilated them. The rest of the mutineers must have been relieved to see them gone. The most remarkable of the mutineers, James Morrison, the bosun's mate with the star of the Garter tattooed on his breast and the order's motto, *Honi soit qui mal y pense*, tattooed around his thigh, had built with huge ingenuity the small schooner *Resolution*, using strange woods, makeshift tools and unskilled labor. The *Resolution* was to be Morrison's means of escape, and that of whoever would go with him. The making of the *Resolution*, however, changed the mutineers' relationship with the Tahitians. They were much more deeply in Tahitian debt because of it. And the Tahitians realized that they had the last say in whether the mutineers could escape. They alone could supply the matting that would form the *Resolution's* sails. The mutineers wouldn't get the matting—unless they joined the wars that were endemic on the island.

The mutineers went to war for Pomare, and won victory for him. Tahitian politics were changed forever. These latest strangers from the Sea brought an uncontrolled and uncontrollable

The mutineers went to war for Pomare, and won victory for him. Tahitian politics were changed forever. These latest strangers from the Sea brought an uncontrolled and uncontrollable new violence to the Land.

new violence to the Land. Their muskets and their scorn for the old rituals of Tahitian battle had brought death from the Sea in new ways, and had given the Pomare clan a sovereignty over the whole island that had never happened before. The Pomare clan immediately sought recognition for this new form of power in their boy-chief from all the powers of the island. They organized a "right-handed" procession around the island—right hand (signifying Life) towards the Land, left hand

(Death) towards the Sea; we would say 'clockwise' in token of how other mythic forms shape our own imaging. The procession began at Taputapuatea in Matavai. It was preceded by a British flag on a pole. The boy-chief Pomare led it, "flying" on the shoulders of his servant. Behind him, his people danced under the canopy of a Union Jack extended by yards of white tapa bark cloth. The procession proceeded very precisely along the in-between space of the soak of the sea.

The purpose of the procession was to receive acknowledgment of Pomare's sovereignty in the form of human sacrifices. Thirty of these canoe-borne Sacrifices from Abroad then came through the sacred passage at Matavai and were beached on the seaward side of Taputapuatea. All through the weeks of these events, the mutineers were not allowed to move from their houses unless they moved from Sea to Land first over the "beach" of Taputapuatea.

When the day came for Pomare's inauguration, the

Herman Melville, five years after he jumped ship in the Marquesas.



mutineers assembled at Taputapuatea. They found the boy standing naked on his stone “beach,” *tepa*. Before him were laid out his people’s treasures—the painting and print of Captain Cook, the feathered image of the god ‘Oro, the skulls of Churchill and Thompson. Prominent was the red and yellow feather wrap, *maro ura*.

This wrap was a historical register of Tahitian politics. At critical moments in the cultural life of the congregation of the *marae* patches of feathers representing human sacrifices were sewn on to the wrap. There was one remarkable patch: the red bunting with which Captain Samuel Wallis of the *Dolphin* claimed possession of Tahiti for King George III in 1767.

Sacrificial foods, dozens of slaughtered hogs, mountains of breadfruit, coconuts and taro—for the god ‘Oro, for Pomare, for the priests and for the communion feast of the congregation—lay at Pomare’s feet as well. The thirty “man-long plantains,” as the Tahitians called the corpses of human sacrifices wrapped tightly in coconut leaves and tied to poles, waited. The stench of them, now several weeks dead, was barely tolerable.

The priests offered their “man-long plantains” to Pomare by peeling back the coconut leaves covering their heads like a banana skin and scooping the eyes out. These Pomare “ate” – he probably mouthed eating

the eyes, rather than actually eating them. When the violence in him was assuaged by these sacrifices from the Sea, his authority was acclaimed by wrapping him in the *maro ura*, the symbol of his title to the land.

Then with the peculiar mixture of acclamation and

defamation that was characteristic of Tahitian worship—and no doubt with the same archness of gesture with which he “ate” the sacrificial eyes—Pomare was covered with semen and feces by his worshipers. Or, they may have pantomimed the pouring as he had pantomimed the eating of the eyes. Their chief was a god. He was also the excrement of the gods. (This uplifting and then downputting is usually also part of the coronation ceremony in Westminster Abbey—but not quite as dramatically as in Tahiti).

Pomare’s “beach” was a very in-between space.



Yesterday, when I completed that last sentence, I thought I needed some in-between space of my own. I went for a walk on my favorite beach. It was the first day of the Southern Hemisphere’s summer. The tide was low. The soak of the sea was a glistening twenty yards

wide. The beach curves for five miles in the shelter of hills just a road-width back. There is a fishing harbor at one end behind a rock groin. Squid boats shelter there. I see their lights at night like UFOs on the horizon of the sea. At the other end of the curve, the beach ends, as so many Australian beaches end, with a small stream riding against a rocky headland. That stream is always my walking goal.

This first day of summer was brilliant. Pale blue sky, deep blue sea. Miles of white, white foam. What is it that the oceanographers say? At any one time two percent of the earth's surface is under sea foam? The breeze beats against the green, green hills. The spring rains still hold their effect. It is a steady breeze, just right for the hang-gliders who float above my head. *That* is an in-between space that I haven't dared try.

I'm thinking beaches, of course, as I walk. A very rewarding thing happened to me recently. *Fenuaenata*—The People of the Land, the Marquesans—through their Association Eo' Enata, published a French translation of my book *Islands and Beaches* in a splendid edition. It was a great honor. I was humbled to be giving these sad and silent islands a history that they could never before read.

Islands and Beaches was an important book for me. It was the book I always had wanted to write when forty years ago I discovered that the history I wanted to write had two sides, a history both of the native islanders who came into the Central Pacific two thousand years ago and the strangers who "discovered" them four hundred years ago. I needed to see these island cultures through the eyes of strangers who for the most part couldn't "see" what they were seeing. Explorers, missionaries, whalers, traders made texts of what they saw in their journals,

letters, diaries, books. But what attracted me most of all were the beachcombers, those who left their ships and "went native"—those who crossed beaches.

Beachcombers. There were hundreds of them in the years I was interested in, the mutineers of the *Bounty* among them. They were a peculiar

breed. They were as varied as humanity itself, and as good and as evil. They were always a scandal to the societies they left, deemed traitors. They took freedoms that other men (there were no women among them in these years) didn't dare or want to take. They soon found that their beaches were dangerous places. If they were wise, they did not bring any material goods with them. These would be taken from them, with their lives if they resisted. What they

couldn't bring with them was all the cultural and social support, including language, that made them who they were. To survive, they had to enter into native society in some way, its language first of all. They had to bow to the realities of politics and social relationships. They had to be good mimics and actors. They had to be able to read gestures and understand the ways in which power and class and gender can be in a color or a shape or a look.

So for me, who wanted to see across the beach, the beachcombers' eyes saw more than most. I began to "see" the Land—Fenua—The Marquesas—through the eyes of two beachcombers, Edward Robarts and a lone nineteen-year-old missionary beachcomber, William Pascoe Crook. They both wrote long manuscripts of their experiences in the Land. *Islands and Beaches* grew out of that seeing.

Islands and Beaches freed me in many ways. It gave me courage to take risks in the theatre of cross-cultural writing. The beach metaphor allowed me to escape the

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tunnel vision of an island topic and to discover the many ways in which there are *liminal*—“threshold”—spaces in life. I experimented structurally in the book, balancing the two requirements of the historical endeavor, narrative and reflection, in a quite explicit way. I gained a freedom especially by giving back to *Enata*—The People—of *Fenua* something of their own identity in how they named themselves and their islands. But more importantly, how they structured their identity in the opposition of native (*enata*) and stranger (*aoe*). It was a first and small step in inverting the priorities of our cross-cultural gaze.

I tell you this because my present work, maybe half done, is called *Beach Crossings*. I’m going back to the beaches where I began. It is a little humbling to think that for forty years I’ve crossed the same beaches over and over again. But the miracle is that it is not actually the same beach that I’m crossing, and I’m not the same person crossing it.

Maybe it is self indulgent, but that gives me the concept for the book *Beach Crossings*. I’m using the beach crossings of Fenuaenata as a sort of mirror to my own beach crossings in life. I’m trying not to make it the Mirror of Dorian Gray! But it is pretty scary. It is not so much that the answers to the questions are frozen still, young and handsome. They aren’t. It’s the questions that are frozen. The problematic for which one has changing answers is rather scarily constant.

For me, I think, the constant issue has been how to describe process—how to describe the continuities and discontinuities of cultural existence

in the present tense—not life, but living; not belief, but believing; not science but “sciencing;” not empire, but “empiring.” How to catch life, belief, science, empire not as if they were still frames in a moving film, but as if the illusion of the film’s

movement was their actual reality. The beach above all is a stage in the theatre of the processes of living.

As part of *Beach Crossings* I’ve completed what I would call an ethnography of Herman Melville’s beach crossing in Fenuaenata. His beach crossing for me is the three and a half weeks he spent on Nukuhiva after deserting from the whaler *Acushnet*, enlarged by his four years’ experience in Hawai’i and Tahiti and on a variety of whalers as well as the frigate

United States, enlarged again by his eighteen months reading and writing back at home in the Berkshires, Massachusetts. These readings and writings gave shape and language to his memories, gave sight to his unseeing eyes on the beach. His beach crossing for me begins July 9, 1842 when the twenty-three year-old Melville and Toby Greene stuff hardtack down the fronts of their sailor’s frocks, slip away from the shelter of a canoe shed in the rain and scramble up the ridge behind to find a path and escape from the bay—where not only their whaler, but a French fleet is anchored. (The fleet’s 2,500 soldiers and sailors have their own business to attend to: they are about to take possession of *Les Iles Marquises*.) Melville’s beach crossing for me is from that day until November 14, 1851, nearly ten years later—the day *Moby-Dick* is published—when Melville gets into his horse and dray and drives from his home in Pittsfield over to Lenox to have dinner

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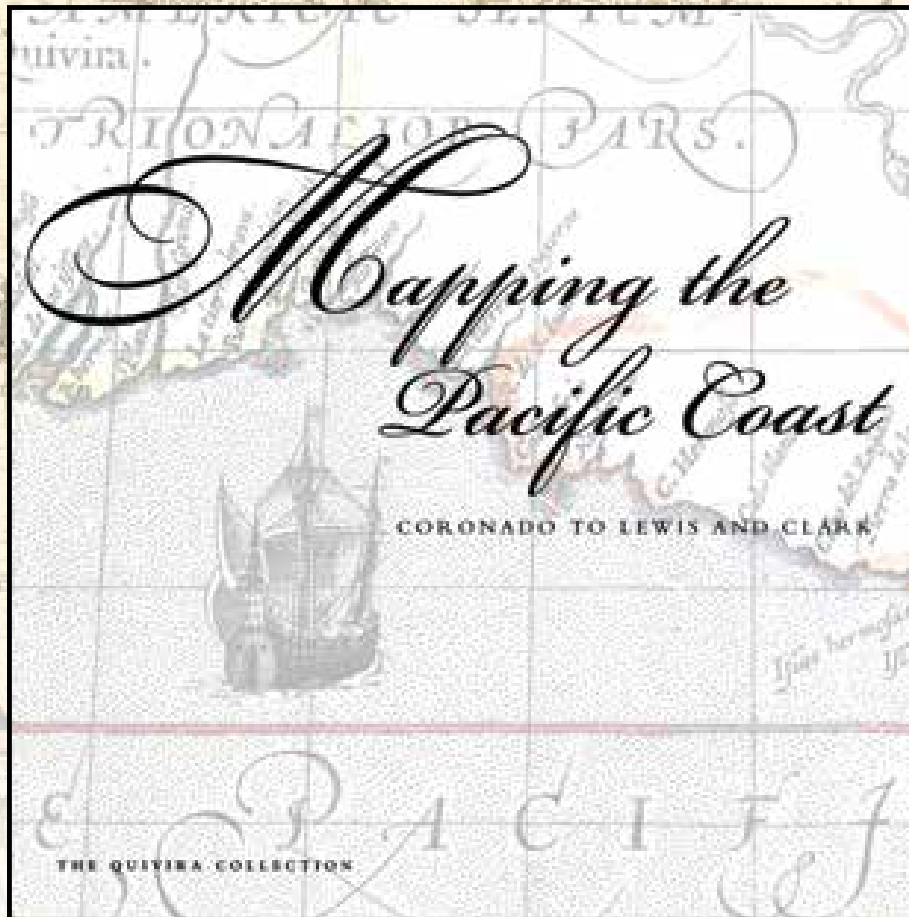
with Nathaniel Hawthorne in the Curtis Hotel. Hawthorne has just finished *The House of the Seven Gables*. Melville had dedicated *Moby-Dick* to Hawthorne “In token of my admiration of his genius.”

These hours with Hawthorne were among the happiest of Melville’s life. He wrote to Hawthorne afterwards: “From my twenty-fifth year [when he began *Typee*] I date my life. Three weeks have scarcely passed at anytime between then and now that I have not unfolded within myself.” It is this “unfolding” in reading and writing that I take to be his beach crossing.

Over the previous five years Melville had written *Typee* and its near-sequel *Omoo*. He had felt the genius within himself and wrote *Mardi* to prove it—not for the money that the public was prepared to pay, but for all his ambitions for American literature. *Mardi* was a commercial and literary disaster. In disgust he set himself to write something that the public would buy. He wrote *Redburn* in three weeks; *White-Jacket* in twenty sittings.

Then, having done his duty and now quite determined to be the self that had unfolded within him, he wrote *Moby-Dick*.

For me, the mirror in Melville’s beach crossing reflects the unfolding that reading and writing stirs. Reading weaves experience into something else, enlarges it, deranges it. Reading is a dance on the beaches of the mind.



by Henry Wendt

The maps and illustrations in the Quivira Collection date from 1540 to 1802, a span of 260 years or so. These dates also bracket a period of history unprecedented for the general expansion of knowledge and information. After all, the use of the printed word began with the Gutenberg Bible of 1455. The first application of the new technology of printing to maps and geographical knowledge coincides almost exactly with Columbus's first voyage in 1492. Thus the maps in this collection span the transition from the European Renaissance to the Age of Enlightenment and bear eloquent testimony to the expansion of useful knowledge.



Editor's Note: The exhibit, *Mapping the Pacific Coast - Coronado to Lewis and Clark - The Quivira Collection*, was on display 2010-2011 in the Gould Gallery at the Maritime Museum of San Diego. The maps presented in the following pages are from this extensive exhibit and from the book of the same name. The author and Collection's owner, Henry Wendt, has kindly given us permission to reproduce a few select maps, with his accompanying text, in *Mains'l Haul*.



Abraham Ortelius

Maris Pacifici
Antwerp, 1589

One of the most important maps appearing in Ortelius's popular atlases, this was the first map devoted to the Pacific Ocean, the discovery of which is memorialized by the depiction, with the legend, of Ferdinand Magellan's flagship *Victoria*. This map quite accurately depicts *Nova Hispania* (Mexico) and the California peninsula. The west coast of America is, however, elongated, with a bulge along the 40° N latitude (just north of San Francisco Bay). Nevertheless, many of the place-names from Cabrillo's voyage of 1542-1544 are shown along the coast, including *Cape Mendocino* and *Cape de San Francisco*. *Quivira* is shown to the northeast of *Cape Mendocino*. Japan is moved farther west closer to the coast of the Asian continent. Note the depiction, in the upper left corner of the map, of the Great Wall of China (as reported four hundred years previously by Marco Polo, who even at this date was believed to have been the only European to have seen it).

Maris Pacifici suggests a large continent in the Southern Hemisphere. This assumption, widely held at the time, resulted from calculations of the landmass in the Northern Hemisphere and the theory that there must be an equivalent mass and weight in the South in order to balance the earth on its axis.



Cornelis de Jode

Quiviræ Regnū
Antwerp, 1593

This is the first map devoted exclusively to the west and northwest coasts of North America and comes from Cornelis de Jode's atlas entitled *Speculum Orbis Terræ*. Having been issued in only one edition of the atlas, this map is extremely rare.

The title, *Quiviræ Regnū*, means Kingdom of Quivira. The city of Quivira is positioned on the banks of a river situated below *Cape Mendocino* and above *C. de San Francisco*. The map is beautifully decorated with imaginative drawings of buffaloes, natives in their tents, an Asian ship suggesting trade with the Orient, and two sea monsters. The *Strait of Anian*, separating the two continents, is prominent, as is the Northwest Passage. The implication is, of course, that if one could find a route from Europe to the Kingdom of Quivira, preferably via the Northwest Passage, the Quivirans would point the way to the western route to Asia and thus the spice monopolies of Portugal and Spain could be broken. This notion inspired much European exploration of North America and, in particular, influenced Louis XIV of France, who commissioned several attempts to find the Northwest Passage and who also instructed the Comte de Frontenac to proceed overland to Quivira after founding a city (New Orleans) at the mouth of the Mississippi.





Jodocus Hondius

Septentrio America
Amsterdam, 1606

This beautiful and handsomely illustrated map of North and South America appeared in a general world atlas first published by Hondius in 1606 and it was reprinted many times until 1630. It is a stereographic projection with the curvature of the earth displayed by curving longitudinal lines that join at each Pole. Central and South America are portrayed quite accurately, but the extreme western extension of North America is exaggerated. Hondius was one of the first cartographers to include the discoveries made by Sir Francis Drake's raiding expedition against the Spanish empire and Drake's resulting circumnavigation of the globe between 1577 and 1580. On this map present-day California is labeled *Nova Albion*, which is the name given it by Drake, and *Quivira Regnum* has been pushed a little farther north toward *Anian Regnum*.

Inset in the lower left corner is an illustration of Brazilian natives making a local drink. The large ship in the Pacific opposite *Nova Albion* is a Japanese sailing vessel with a large anchor on the bow.





Nicolas Sanson

Le Nouveau Mexique, et La Floride
Paris, 1656

Although not the first map to depict California as an island (the credit, or blame, for that persistent misconception goes to John Briggs's map published in London in 1625), this map is probably the more influential in that it was widely studied and copied throughout Europe. This is the first map of any note to focus on *Nouveau Mexique* and the first map of the area to be produced on such a large scale. New Mexican Indian tribes are identified along the *R del Norte*, or Rio Grande, mistakenly shown flowing southwest rather than southeast. There are new place-names on the west coast including, particularly, the peninsula *Agubela de Cato* jutting to the northwest above *Californie Isle*. Sanson's depiction of the north coast of the island of California with three "fingers" was widely copied by other European cartographers and perpetuated in many later editions of Sanson's own maps.

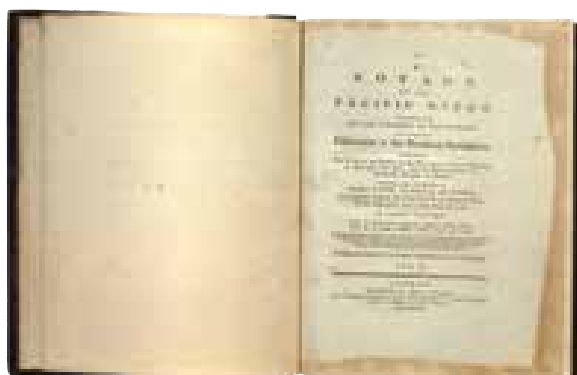


Miguel Venegas

*Mapa de la California su Golfo,
y Provincias frontereras en el
Continente de Nueva España*

Madrid, 1757

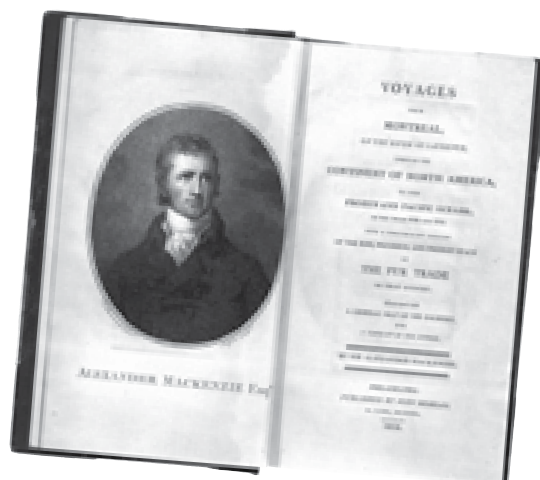
The Spanish authorities, much like the Russians, preferred as a matter of policy to keep records of their explorations, especially maps, secret. Consequently, published Spanish maps from the Age of Exploration are quite rare. This map drawn by Miguel Venegas, a Jesuit missionary active for many years in New Spain, is based on Father Kino's famous map of 1701, which was published first in Paris in 1705. However, unlike Kino, Venegas shows the full length of the peninsula and includes more place-names and has more updated material. This map, a rare first edition, accompanied the first history of California, *Noticias de la California y de su conquista temporal y espiritual...*, published in three volumes, by Miguel Venegas, S.J., in Madrid, in 1757.



This extraordinary collection: *A Voyage of the Pacific Ocean undertaken by the Command of His Majesty for Making Discoveries in the Northern Hemisphere...* by Captain James Cook (vols. 1 & 2) and Captain James King (vol. 3) and Atlas (vol. 4), London, 1784, are from the first edition and form the first official account of Cook's third expedition.

Also on display:

Voyages from Montreal, on the river St. Laurence, through the Continent of North America, to the Frozen and Pacific Oceans... by Sir Alexander Mackenzie, Philadelphia, 1802. Originally published as *Mackenzie's Journal*, the log recounts the trek of the first European to discover and document the overland route to the Pacific.

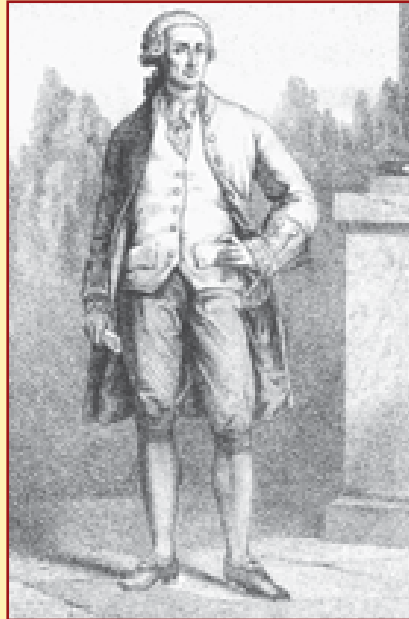


Mark Allen (1966-2012) was an historian, writer and museum professional. Mark worked in various capacities at the San Diego Historical Society, the Old Town State Park and the Maritime Museum of San Diego. During his tenure as editor of *Mains'l Haul* at the Maritime Museum, Mark elevated this peer-reviewed publication to an entirely new level by skillfully balancing lavish illustration with thought provoking articles, shifting the publication's focus to its current form - that of a journal of Pacific maritime history. Mark's talents also found creative expression in exhibit curation and design. His book *Building Kettenburgs: Premier Boats Designed and Built in Southern California*, is widely regarded as the definitive publication on the subject.

and a pair of half-minute hourglasses recorded in the *San Carlos's* 1777 inventory. Vila measured his position from “the meridian passing through Guarachico on the Island of Tenerife” in the Canary Islands, for his contemporaries—partly as a matter of national pride—chose to use – in place of – a variety of different meridians as 0°, Greenwich not yet being the universally accepted prime meridian. These maps convert his estimates to the Greenwich meridian, and make corrections when possible by adjusting his position relative to the actual locations of landmarks he observed, from which he estimated his distance.

The Spanish colonization of California in 1769, so secure a fact in the history books, was actually a gamble which was very nearly lost. Of the ninety soldiers and sailors who came by sea to secure Spain's claim to California, well over a third lay buried beside San Diego Bay by the year's end. Their story has been told before, but it bears retelling, for in their extraordinary struggle against winds, currents, and geographical misinformation, the voyage highlights the ordinary difficulties all Spanish mariners faced in sailing north off Baja California's coast. Thanks to the surviving diary kept by the captain of the *San Carlos*—one of two ships which carried the first settlers north to Alta California—sufficient information exists to permit maps to be made of the journey, enabling us to visualize it as never before.

The 1769 expedition epitomizes Spain's late-eighteenth-century attempt to accomplish ambitious

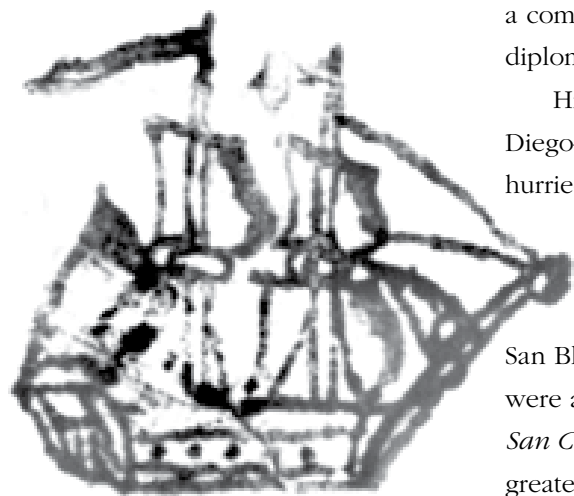


José de Gálvez. Shepherd, seminarian, struggling lawyer and powerful royal administrator, he was the force behind the Spanish occupation of Alta California.

ends with the meager resources available on the frontier. Mexico, known as New Spain since 1521, was no longer new, and the energetic expansion which had characterized Spain in the Americas had largely drained away with the crown's ebbing fortunes. The one exception was Mexico's northwestern frontier, where the old dynamism was rekindled in 1767.

There, not far from the present-day resort of Puerto Vallarta, among the mangroves in a mosquito-ridden inlet whose sweltering, unhealthy climate one of its commanders called “the terror of humanity,” a busy naval base linked New Spain with San Diego and the northwest coast for thirty-five years.¹ The Naval Department of San Blas was the brainchild of a single powerful individual, José de Gálvez, who founded it in 1767 as the base from which to stage the military pacification of Sonora, and from which to launch his plan to colonize Alta California.

The phenomenally ambitious Gálvez had risen from impoverished Andalusian nobility—he had for a time been a shepherd—to become *Visitador General*, the king's special representative in charge of reforming New Spain's policies.² One aspect of his mission was improving frontier defenses, and Gálvez decided to proactively seize Alta California for Spain, based on longstanding fears that a foreign foothold there could cut the Manila galleon trade and provide



This is perhaps the only sketch made of the *San Carlos* while she existed.

Mislabeled *La Goleta Sonora*—a far smaller vessel—it appears on the edge of a 1775 map of the San Francisco Bay region drawn by Father Pedro Font.

a base from which to attack the Mexican interior. What finally spurred Spain to act on fears which had been expressed for over a century was a combination of Gálvez's zeal and reports in the 1760s from Spanish diplomats in St. Petersburg that Russia was making probes eastward.³

His expedition to seize California's ports of Monterey and San Diego—San Francisco still being unknown to Europeans—was hurriedly planned and executed with minimal resources: less

than three hundred men could be spared. "A maritime expedition was resolved upon," recorded an officer present with Gálvez at a May, 1768 council in

San Blas, "and the ships in which it was to be undertaken were assigned, choosing for this purpose the *San Carlos* and the *San Antonio* as vessels of greater size and strength" than the few

other tiny craft available.⁴ Just four months after this decision, the *San Carlos* was underway from San Blas to fulfill her mission.

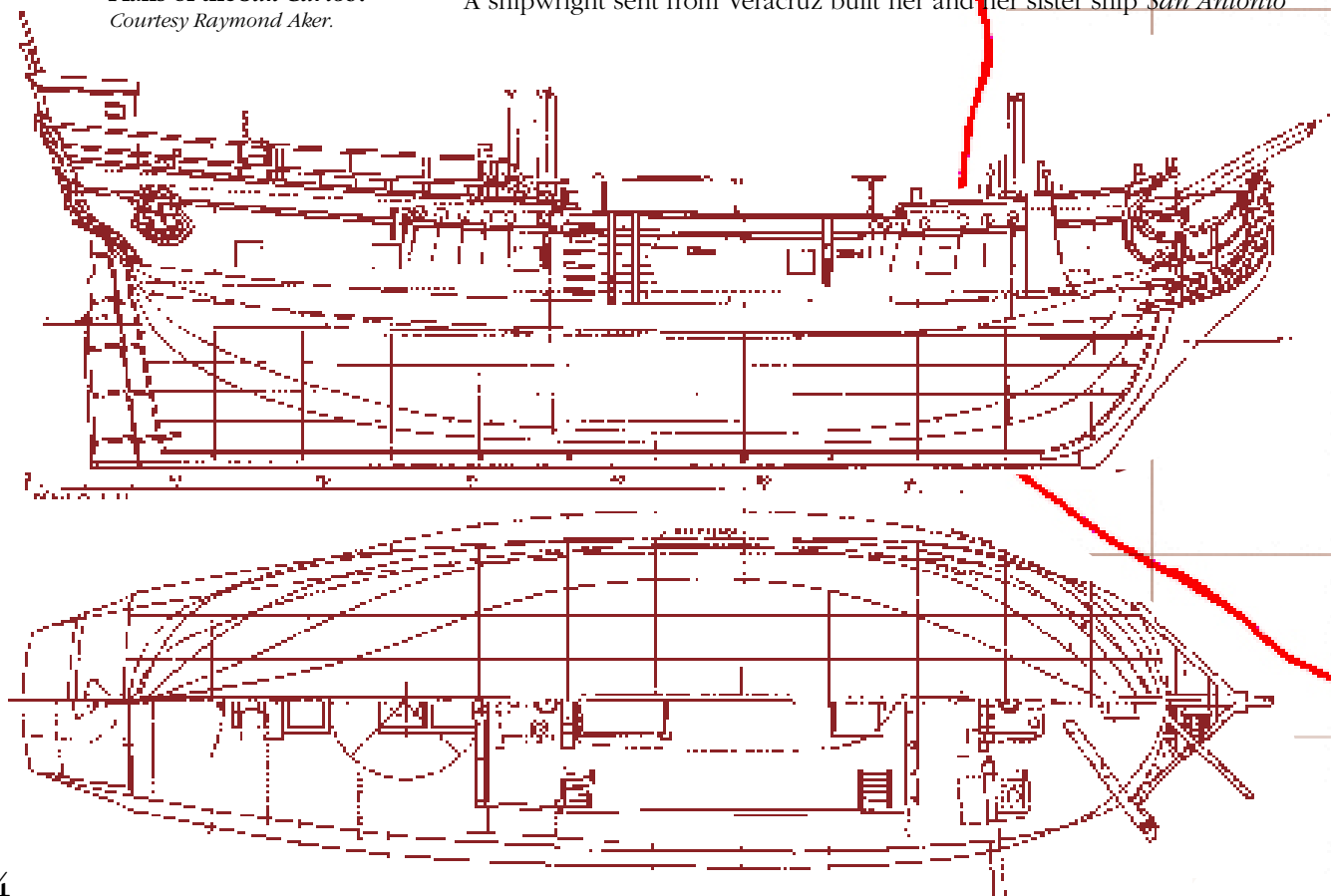
The vessel aboard which so many hopes were riding, also known as the *Toison de Oro*, was sixty-four feet long in the keel with a twenty-three foot beam.⁵ She was one of a pair of *paquebotes*, packets constructed of the region's fine timber in the new shipyard upriver from San Blas and launched in 1767.⁶

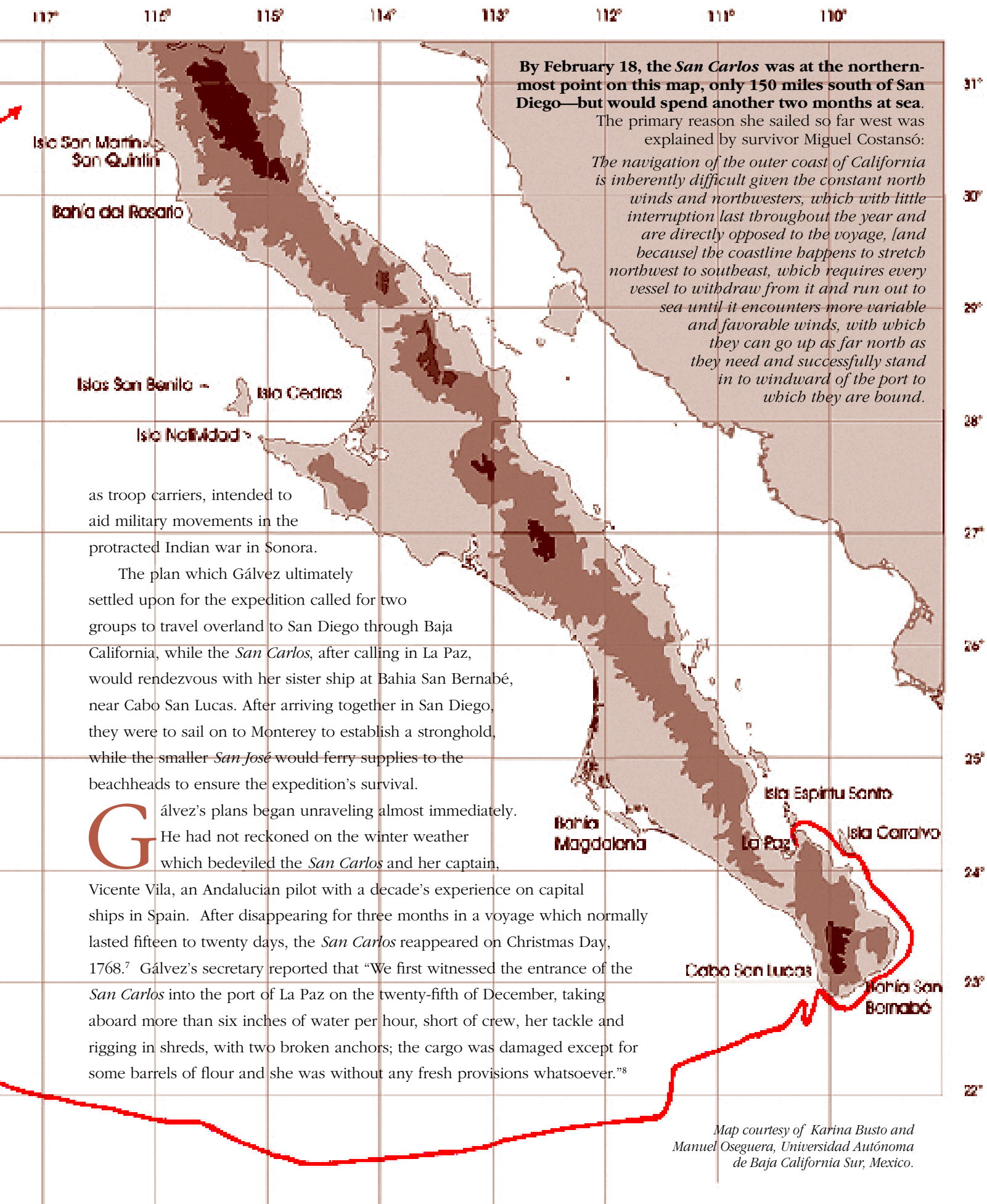
A shipwright sent from Veracruz built her and her sister ship *San Antonio*

Isla Guadalupe

Plans of the *San Carlos*.

Courtesy Raymond Aker.





The military engineer Miguel Costansó, waiting in La Paz to board her for the long journey north, must have been particularly dismayed: the ship had clearly “labored much on the sea, straining with the winds, which had loosened the seams, which spat out oakum, taking in water.” It was decided to make extensive repairs, and fifteen days were spent in careening, “an operation which had its difficulties in a country little less than destitute of whatever was needed to effect it.”⁹ The work undertaken on the beach dwarfed anything ever seen at the little outpost. “They labored at the same time and installed new tackle and rigging on the vessel, and they fabricated ropes and hawsers,” Gálvez’s secretary noted optimistically, “quickly delivering the staples in abundance and an exquisite mess supply for eight months, with dry provisions enough for one year. Six storerooms were constructed on board in which everything was accommodated with proper order,” and a living compartment for the troops and seamen was installed.¹⁰

Along with the supplies, Vila found room aboard for sixty-two people: a multi-ethnic crew of twenty-three sailors, Second Pilot Jorge Estorace, Costansó, Franciscan chaplain Father Pedro Parron, French-born surgeon Pedro Prat, four cooks, two blacksmiths, two boys and Lieutenant Pedro Fages with twenty-five soldiers of the Catalan Volunteer Regiment of light infantry.¹¹ They would journey north in the company of six live cows and a coop of hens reserved “for the sick.”¹²

On Sunday morning, January 9, Father Junípero Serra climbed aboard with Gálvez. In the tight space on deck, the newly appointed Father President of the missions planned for Alta California blessed the ship, her flags, and those aboard her; he himself

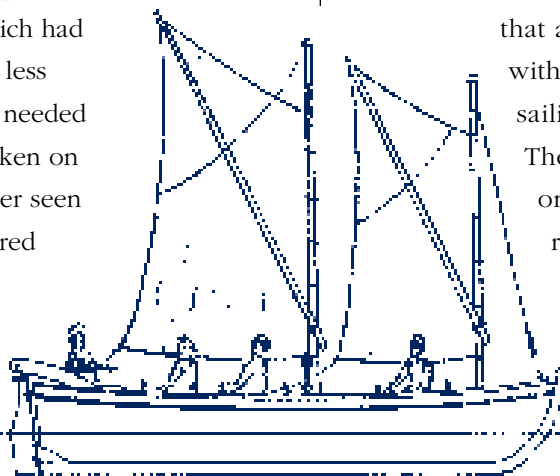
would travel north by land. At midnight, Vila ordered his crew to weigh anchor for the Bay of San Bernabé, and San Diego.

Their first morning at sea dawned with high spirits, as they passed Gálvez on the tiny *Concepción*, greeting him with shouts and a salute from all six cannons. Late that afternoon, still sailing in tandem with *Concepción*, the crew put on a sailing demonstration for his benefit. The strain was beginning to tell on Gálvez, however, who was en route to the Bay of San Bernabé to attempt, unsuccessfully, to repair the *San Antonio* in time to sail north with the *San Carlos* as planned.

Soon, Gálvez was insisting that he had seen Russians in Baja California with his own eyes; unhinged perhaps by the stress of the still-uncertain outcome of his Alta California gamble and by the war in Sonora, within the year he was claiming to receive messages from

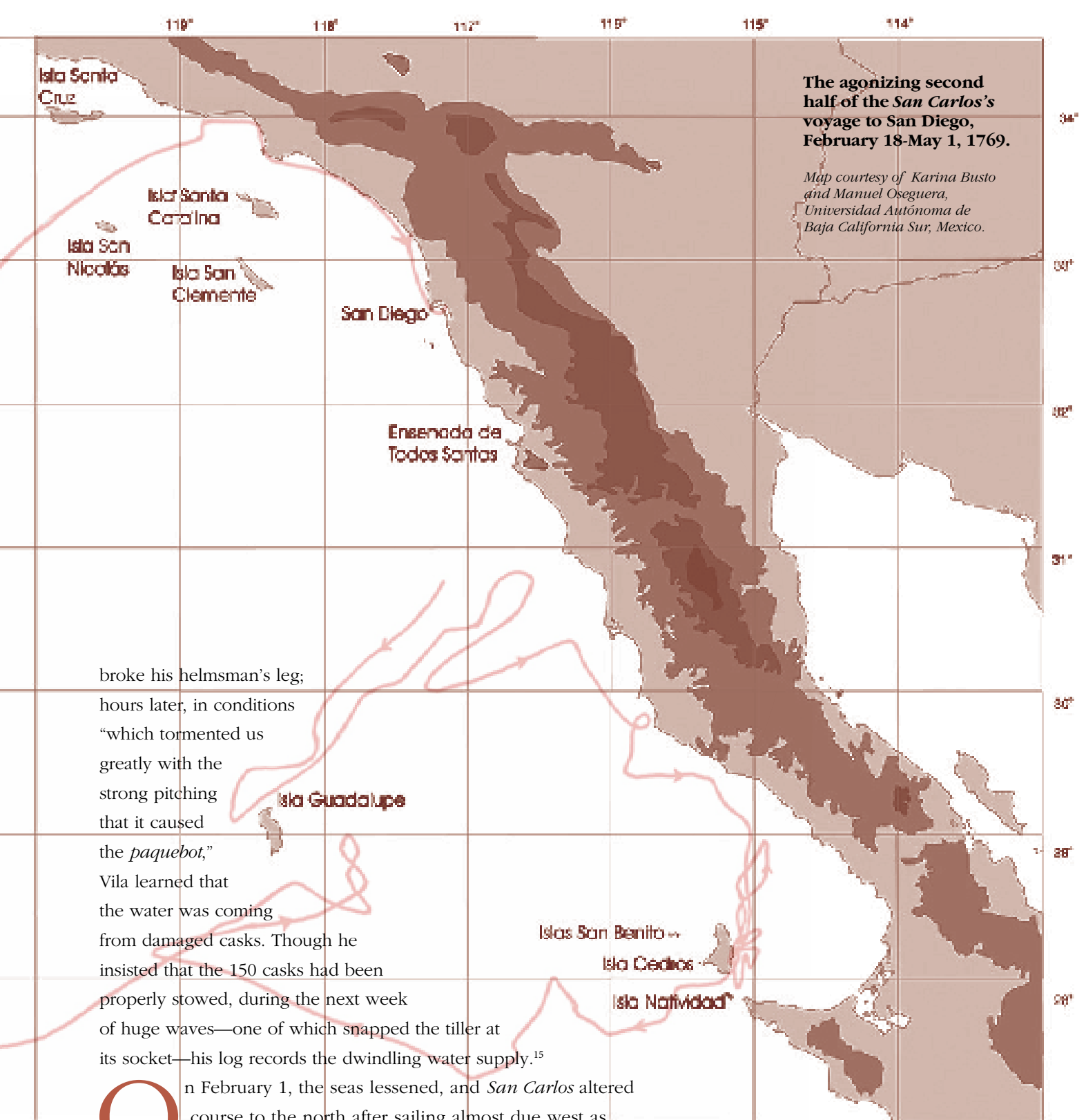
Soldiers and sailors endured seemingly endless trips for water in a launch like this. This conjectural reconstruction of a twenty-one foot craft is based on inventories of the *San Carlos*. The davit in her stern carried a kedge anchor, which helped save the ship from grounding.

Courtesy Raymond Aker.



Saint Francis, and believed himself to be by turns the kings of Prussia and Sweden, and God Himself. Astonishingly, he would recover and rise to still more exalted heights in the King’s service.¹³

Anchoring in the bay of San Bernabé on January 14, Vila paid Gálvez a last call aboard *Concepción*. After spending a day topping off his water casks—crucial for a voyage along a desert coast—he put to sea again. On January 22, he heard news “which caused me some anxiety” from the ship’s caulker, who reported three and one-half inches of water in the pump.¹⁴ Before dawn the next day, the seas had grown so rough that the barely-controllable tiller



On February 1, the seas lessened, and *San Carlos* altered course to the north after sailing almost due west as ordered.¹⁶ After passing waterless Guadalupe Island two weeks later, the crew sighted mainland Baja California on February 18. As they neared it the following day, in fog and extreme cold, Vila saw his first kelp, "a kind of leek or sea onion of considerable size, with stems two fathoms long." That day, *San Carlos* reached a position a mere 125 miles south of San Diego. The water situation, however, was

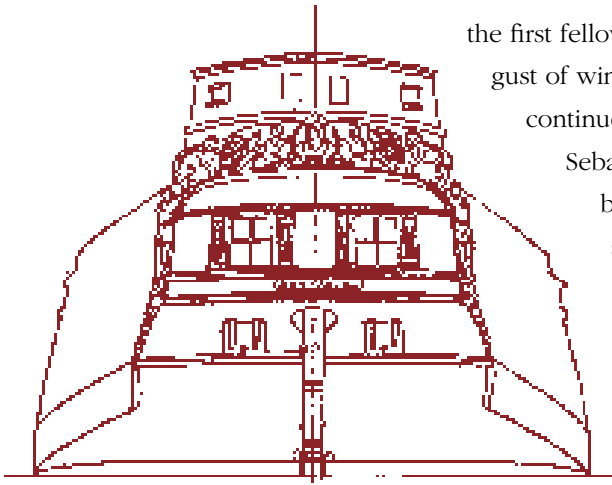
critical; in every four casks, they later reported, not enough remained to fill one. Vila turned south, hoping to replenish at one of the few watering places reported by previous explorers.¹⁷

On March 4, they anchored near shore, where they saw several Indians, the first fellow humans they had encountered for over a month. In a sudden gust of wind, however, the anchors dragged, forcing Vila to cut one and continue south.¹⁸ Five days later at Cedros Island, where he knew that Sebastian Vizcaíno, the last Spanish visitor, had found water 167 years before, Vila lowered the launch and sent Lieutenant Pedro Fages and several armed soldiers ashore. Finding only a trickle of water about half a mile inland, they dammed it and returned to the ship, and in the afternoon, Fages brought the other officers and surgeon Pedro Prat to the site; all decided that the brackish water was drinkable. Their ship, however, was in peril of running aground. As the *San Carlos* dragged her anchor on the sandy bottom and edged toward shore, Vila was forced to kedge—a

laborious maneuver in which the launch hauled one of the ship's anchors a distance to seaward, while sailors on the ship heaved around the capstan to pull her clear of danger. The shallow nine-foot draft, which probably impeded her sailing qualities, no doubt helped save her. While Fages and his soldiers slept on the island, presumably grateful to be ashore, Vila confessed to having “passed an anxious enough and care-filled night, until daybreak.”¹⁹

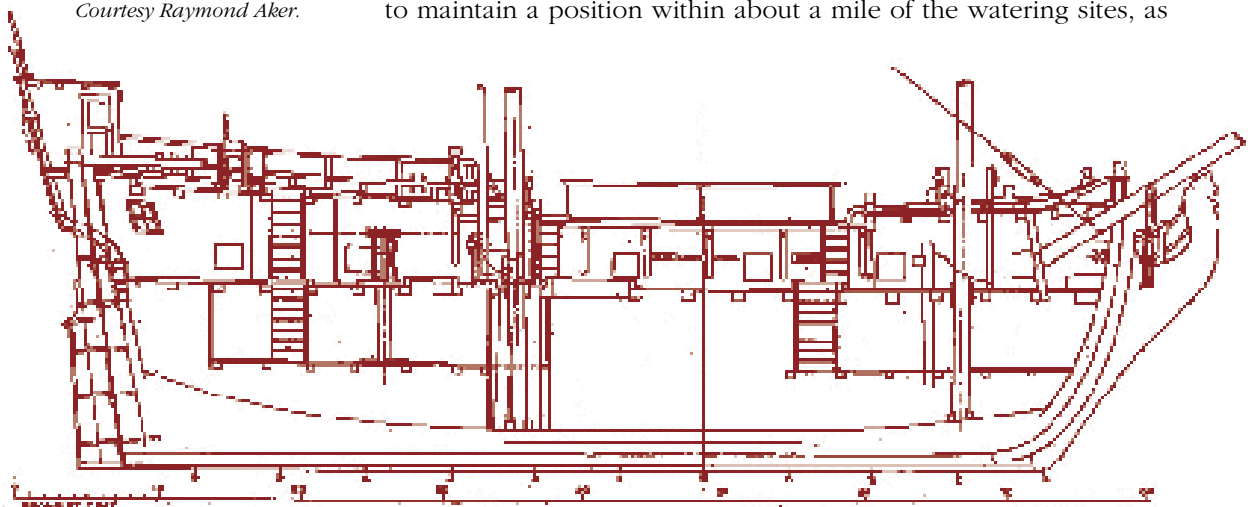
Over the next several days, Fages earned his men's admiration by helping manhandle the casks uphill to the watering place and back. While Miguel Costansó found a better watering place within a few days—greeted by three cheers from the *San Carlos's* deck when he returned triumphantly—the task of watering required a week, during which the launch made an exhausting fifteen round trips to shore and back.

For the sake of the men in the launch, Vila spent the week struggling to maintain a position within about a mile of the watering sites, as



A cutaway of the *San Carlos*.
In 1769, her hold was probably temporarily bridged by decking (not shown) which supported her twenty-five unfortunate soldiers.
Courtesy Raymond Aker.

Cross section of the *San Carlos*.
Courtesy Raymond Aker.



Costansó reported, “with great difficulty and labor, the ship remaining under sail, tacking between the land and the island, without shelter nor an anchorage where they could anchor without risking its loss because of the bad quality of the bottom.”²⁰

The worst was still to come, for as they left Cedros behind and sailed west against contrary winds and currents, captain and crew alike began to acutely feel the effects of scurvy—and to sicken further from the bad water they had so laboriously collected. On April 19, Fernando Alvarez, the coxswain of the launch, died, as did Pilot Manuel Reyes the following Sunday evening. On April 24, however, an island appeared, and at dawn the next day Vila found himself between four islands and the mainland, whose distant snowcapped heights reminded him of mountains near Granada which he had seen from the Mediterranean. If his heart sank, however, on recognizing the Channel Islands from earlier explorers’ descriptions of them, he did not confess it in his diary; they signified that he had missed San Diego entirely. His orders, based on inaccurate accounts which placed San Diego’s latitude between 33° and 34° north, had sent him hundreds of miles astray.²¹

Buffeted by very rough seas, the ship anchored in San Pedro Bay, but the anchor dragged. Instead, Vila wrote, “I made sail to look for the port of San Diego, where we confidently expected to find the relief that we needed—especially the sick—as our water supply was already running short.”²²

At nine on the morning of April 29, in now-smooth seas, the Coronado Islands appeared, “the best and surest marks for making the port of San Diego.”²³ Eight hours later, the *San Carlos* doubled Point Loma, with a sailor in the bow calling out the depths on the leadline, and broke out her colors to hail the *San Antonio*, riding at anchor inside Ballast Point. Vila’s sailors, only two of whom remained healthy after their 110-day voyage, were “unable to let down the launch to obtain water or to do any other work;” half the soldiers were prostrate with scurvy as well.²⁴ With little wind and the tide against her, she anchored outside the bay, but after dark the *San Antonio*’s launch pulled alongside carrying her second-in-command, Pilot Miguel de Pino. Though the *San Antonio* had sailed a month later than the *San Carlos*, Pino reported, and despite having become disoriented among the Channel Islands, she had been waiting in San Diego for eighteen days. Their own situation was desperate: his captain, Juan Pérez, and half the crew were down with scurvy, with only the seven men in the launch fit for work.

A survivor recalls arriving in San Diego in 1769:

We “entered the port of San Diego 110 days after leaving La Paz: but the crew, and the troops aboard—whose fatigue, in so extended and painful a voyage, and in the rawest of winter, could not be less than excessive—arrived in a deplorable state. Scurvy had strongly infected all without exception; upon entering San Diego two men were dead of the sickness, and most of the seamen and half the soldiers found themselves prostrate in their beds; only four sailors remained on foot and rallied, helped by the soldiers, to trim and furl the sails and perform other manual tasks.”

—Military Engineer Miguel Costansó, 1770.

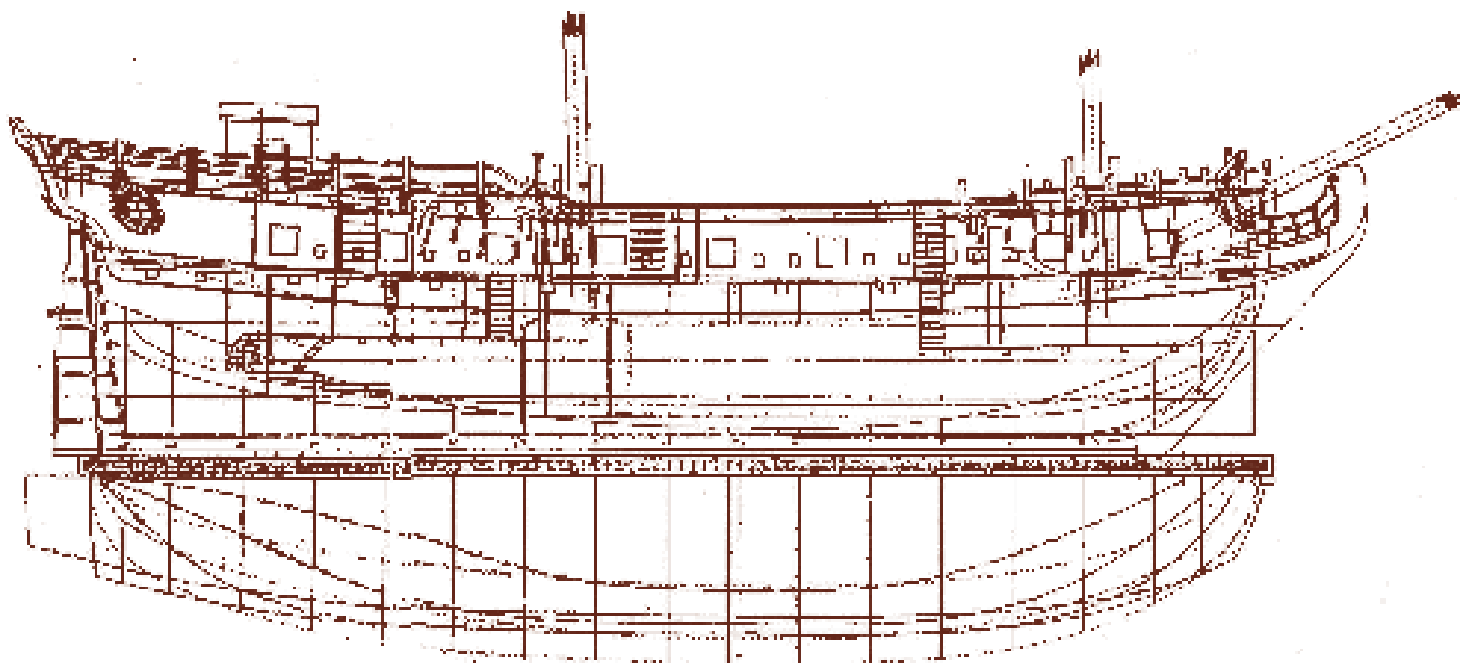
At midnight the wind improved, and before dawn on Sunday, May 1, the *San Carlos* anchored inside the bay at last. After Mass and the firing of cannons on both ships, the *San Antonio*'s boat brought Captain Pérez and departed again with a shore party to seek a watering place. From higher ground, Kumeyaay Indian men warily observed the twenty-one stumbling, sickly strangers. One of Fages's soldiers was sent ahead to them alone, laying his weapons on the ground and making gestures they hoped would communicate peaceful intentions. The Kumeyaay let him approach, and after accepting his gifts, directed the party by signs toward water amid the welcoming willows and cottonwoods by the San Diego River. For months, Alta California's desperately ill occupying force would continue to depend for their survival on the Kumeyaay, accepting whatever fish and game they could obtain in trade.

Aboard *San Carlos*, Pérez told his superior, Vila, just how near the expedition had already come to failure: the *San Carlos* had appeared on the very day Pérez had chosen to abandon the port for Monterey, in the belief that Vila's ship had long since come and gone. In order to set up a tent hospital onshore, under sails brought from his ship, Vila ordered any such voyage temporarily postponed, hoping that the land expedition or the supply ship *San José* would arrive quickly. Failing that, the Andalusian captain contemplated a suicidal mission: "as a last resort I hoped to send off one of the two *paquebotes* with four or six men (though it seemed foolhardy to think of) to San Blas...to inform them of our sad condition and to beg these authorities to send us the necessary supplies without sparing time."²⁵ The eagerly awaited *San José*, however,

A late-eighteenth-century Spanish drawing of a *paquebote* of eighteen guns.

Though much larger than the *San Carlos*, she shows what a Spanish packet was like.

Courtesy Museo Naval, Madrid.



would never come. After being delayed by her own water difficulties, she was lost with all hands somewhere off the Baja California coast.

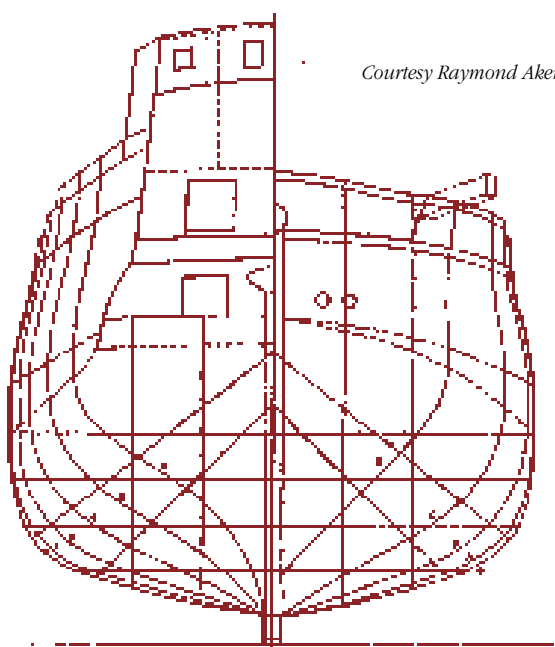
Two weeks after *San Carlos* anchored in San Diego Bay, the first of the two desert-weary parties sent overland by Gálvez hove into view:

From a little height on this plain...we caught sight of the ships' mainmasts, scarcely visible because of our distance from them. I do not know how to tell the happiness and joy we all felt at seeing the hour arrive of our reaching the wished-for harbor of San Diego, or at seeing in it His Majesty's packetboats the *San Carlos* and the *San Antonio*.²⁶

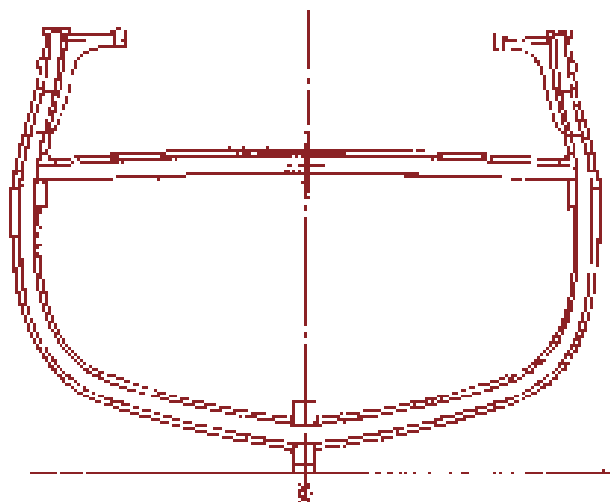
Though the elated writer, Father Juan Crespí, joyously scrawled SAN DIEGO in giant letters in his diary, he was sobered by the scene he encountered, writing one month later that “few of them can keep on their feet. Only by a miracle will most of them be able to escape with their lives.”²⁷ Vila's diary records the accelerating deaths of his men—first one Filipino sailor, then his cabin boy, then another Filipino. “Every day, two or three of them died,” wrote Costansó.

When Father Serra arrived by land in June, he was shocked at the condition of the men he had blessed in January: “the *San Carlos* is without sailors, for all have died of scurvy, save one and a cook.”²⁸ By the expedition's end, death would claim fifty-one of the sea party.

Though for a year they all feared that the abandonment of San Diego was likely, the survivors held on and recovered. In July, Vila ordered the *San Antonio* south to San Blas with a skeleton crew to bring help, postponing her mission to Monterey until their survival was secure. The dearth of sailors trapped Vila and the *San Carlos* in San Diego Bay for one and a half years before he could sail her back to San Blas; days after his arrival there, he too was dead. The *San Carlos* herself would return to California—though never again under such grueling circumstances—and in 1775 became the first ship to enter San Francisco Bay. The legacy which the *San Carlos* left behind in Southern California, however, was equally significant. On the day in 1769 when the Kumeyaay watched Vila's men construct their makeshift hospital to shelter men of European, Mexican, African and Filipino descent, San Diego was born as a multi-ethnic community.



Courtesy Raymond Aker.



Notes

- 1 Francisco Bodega y Quadra, Journal, 1792, MS HM141, Huntington Library, San Marino.
- 2 See Herbert I. Priestly, *José de Gálvez, Visitor-General of New Spain* (Berkeley: University of California Press, 1916).
- 3 See Donald C. Cutter, "Plans for the Occupation of Upper California. A New Look at the 'Dark Age' from 1602-1769," *Journal of San Diego History* 24 no. 1 (Winter 1978): 78-90.
- 4 Miguel Costansó, *Diario Histórico De Los Viages De Mar, Y Tierra Hechos Al Norte De La California De Orden Del Excelentissimo Señor Marques De Croix, Virrey, Gobernador, Y Capitan General De La Nueva España: Y Por Direccion Del Illustrissimo Señor D. Joseph De Galvez, Del Consejo, y Camara de S.M. en el Supremo de Indias, Intendente de Exercito, Visitador General de este Reyno*. (Mexico City: Imprenta del Superior Gobierno, 1770). This and all other quotations from Costansó are author's translations.
- 5 *Toison de Oro* refers to the Order of the Golden Fleece, Spain's highest award for military merit, created after the 1571 Battle of Lepanto. Dimensions were calculated by Raymond Aker based on information contained in inventories of the ship, made in 1769, 1777, and 1778. These and other research enabled Mr. Aker to create the reconstructions of *San Carlos* which accompany this article. From inventories we learn such trivia as that her binnacle lamps were silver, and her cabin held a pair of commodes. The only detail which betrays her Mexican origin is a cable woven of agave fiber. See also Anonymous, "Maritime Detective Work: How *San Carlos* was Given Form and Substance After 200 Years," *Sea Letter* (Summer 1975): n.p.
- 6 The area was rich in timber, prompting even visitors from Spain otherwise unimpressed by frontier conditions to extol "the excellence of San Blas timber for marine construction." Antonio de Pineda, an officer on Malaspina's Expedition, in Michael E. Thurman, *The Naval Department of San Blas* (Glendale: Arthur H. Clark, 1967), 39.
- 7 Ibid., 69.
- 8 Juan Manuel de Viniegra, in Ibid., 69.
- 9 Costansó, 14-15.
- 10 Viniegra, in Thurman, 70.
- 11 The composition of her 1769 crew is suggested by her 1778 complement of 30: a captain, mate, chaplain, second surgeon, bosun, bosun's mate, "practical" pilot, carpenter, caulker, coxswain, bloodletter, steward, cook, seven gunners, eight sailors, a grommet and a page. "Inventario del Paquebot...San Carlos," March 1778, Californias, vol. 8, Archivo General de la Nación (hereafter cited as AGN), Mexico City.
- 12 According to her manifest, the *San Carlos* was also laden with 3,800 gallons of water, 4,676 lbs. of dried beef, 1,783 lbs. of dried fish, 6,678 lbs. of hardtack, 690 lbs. of white bread, 450 lbs. of cheese, 300 lbs. of chili pepper, 125 lbs. of garlic, 17 bushels of salt, 5 jars of brandy and 6 of Baja California wine, sugar, flour, lard, corn, rice, garbanzos, beans, bran, lentils, vinegar, figs, raisins, dates, chocolate, hams, smoked beef tongues, oil and spices. Room had to also be found for agricultural implements, 5 tons of wood, 16 sacks of coal, and 112 pounds of candles. Owen Coy, "The San Carlos, Mayflower of the West," *California Historian* 22 no. 1 (1975): 6. Her 1769 complement is numbered in "Inventario del Paquebot...San Carlos," February 1769 (?), Provincias Internas, AGN.
- 13 Warren L. Cook, *Flood Tide of Empire: Spain and the Pacific Northwest 1543-1819* (New Haven: Yale, 1973), 53.
- 14 Vicente Vila, "Diario de Navegación del Paquebot de S.M. Nombrado El San Carlos Alias El Toyson..." in Robert Selden Rose, Ed., "The Portola Expedition of 1769-1770: Diary of Vicente Vila," *Publications of the Academy of Pacific Coast History* 2, no. 1 (Berkeley: University of California, 1911), 12. This and all other quotations from Vila are author's translations. No comparable document survives which records the course of the *San Antonio*.
- 15 Ibid., 14. The injured seaman was Agustín Medina. The number of casks is in "Inventario del Paquebot...San Carlos," February 1769 (?), Provincias Internas, AGN.
- 16 "Gálvez had given strict orders to Captain Vila as also to the other captain to sail out into the ocean and proceed as far as latitude thirty-four degrees and then to cruise in search of said port..." Fr. Junípero Serra to Fr. Francisco Palóu, 3 July 1769, in Fr. Zephyrin Englehardt, *San Diego Mission* (San Francisco: James H. Barry Company, 1920), 18. See also Costansó, 17.
- 17 Serra to Palóu, 18.
- 18 Near Punta San Antonio.
- 19 Vila, 45.
- 20 Costansó, 17-18.
- 20 Serra to Palóu, 18. San Diego's actual latitude is 32° 42' north.
- 20 Vila, 87.
- 20 Ibid., 89.
- 24 Serra to Palóu, 19.
- 25 Vila, 95.
- 26 Fr. Juan Crespi in Richard F. Pourade, *The Call to California* (San Diego: Copley Books, 1968), 87.
- 27 Fr. Juan Crespi to the Fr. Guardian of the Colegio de San Fernando, 22 June 1769, in Englehardt, 15.
- 28 Serra to Palóu: 18. Vila records that the dead Filipino sailors were Agustín Fernandez de Medina and Matteo Francisco, and the cabin boy was Manuel Sanchez.

Across the Seas of Time

An Artist's Vision

Gordon Miller

Originally from Winnipeg, Canada, **Gordon Miller** began his formal training as an artist in 1950 by enrolling in the Vancouver School of Art. After a long career as an illustrator in television, as well as work in museum and architectural design, Gordon eventually came to combine his love of the sea with his artistic talents. His "true passion" as he describes it – illustrating maritime history – would find expression in the publication of his book *Voyages* in 2011, which is a meticulously researched and lavishly illustrated history of seafaring with particular focus on the Pacific Ocean. The paintings featured in the following pages of *Mains' I Haul* are from a new series of illustrations that will be published in a forthcoming book that will augment and expand on his previously published original artwork.

A colourful, adventurous and enterprising English buccaneer and naval officer, and a skillful scientific observer with a talent for writing, William Dampier crossed the Pacific three times between the years 1685 and 1711. In 1679 he was part of the band that crossed the Isthmus of Panama and took Santa María, where they captured five large ships and three smaller barks. This loose fleet of pirates began a cruise to the south along the coasts of Peru and Chile, sacking and burning cities where they could, and taking ships they happened upon, all the while quarrelling over the spoils and mutinying over leadership. Juan Fernandez was the southernmost point of the voyage.

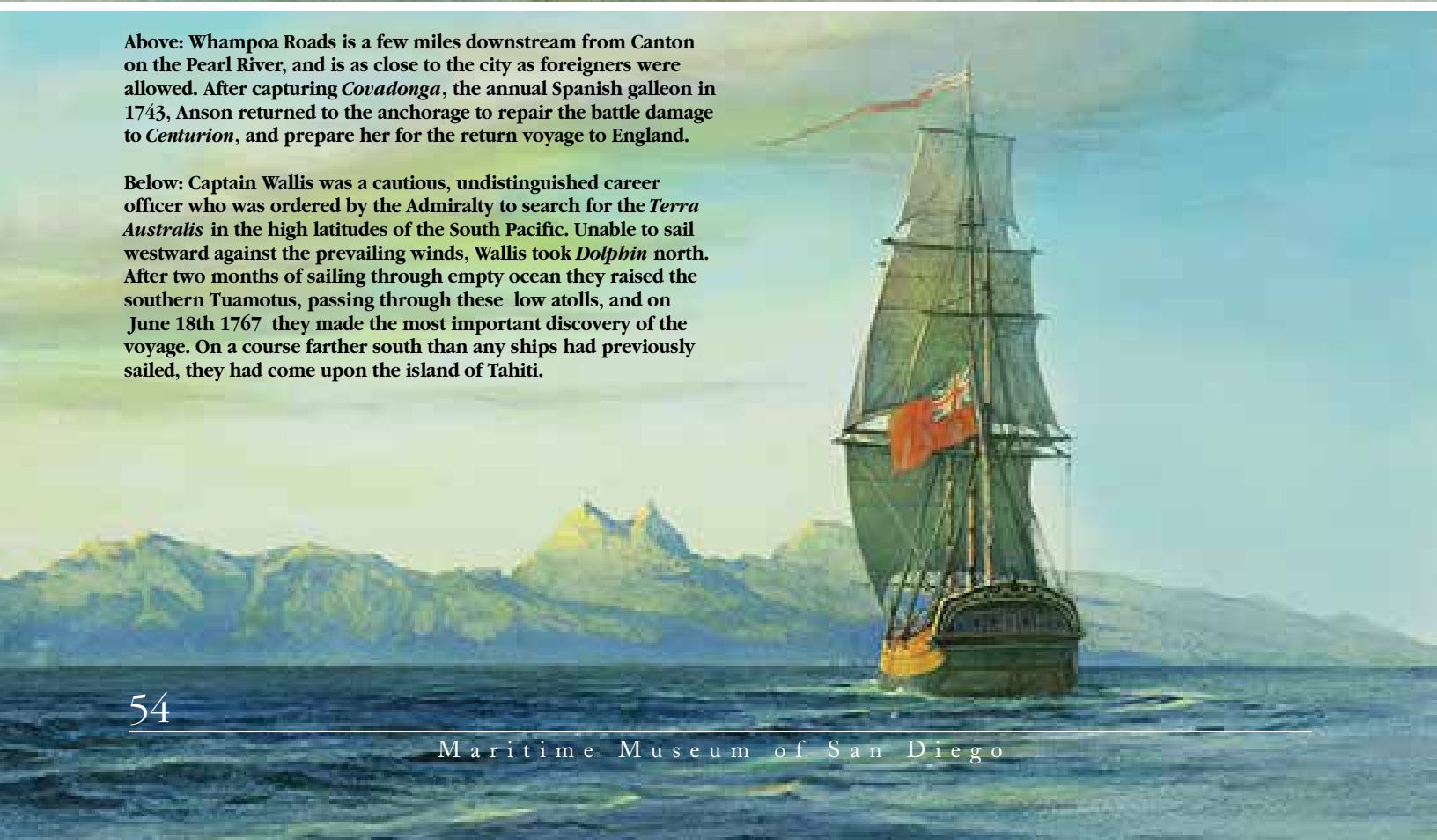
With a trade centre firmly established at Manila, Spanish thoughts turned to the vast unexplored seas to the south. In 1567 Spain launched a voyage to find *Terra Australis*, and two ships were readied, the 250-ton *Los Reyes*, and 107-ton *Todos Santos*. Because they expected to find land in a few weeks of easy sailing, provisions were carried for a voyage of less than two thousand miles. They sailed grandly out of Callao on November 19th, banners flying, guns blazing, trumpets blowing. Twenty-six days later, and over twenty-five hundred miles from Peru, all they had seen was endless, empty ocean.





Above: Whampoa Roads is a few miles downstream from Canton on the Pearl River, and is as close to the city as foreigners were allowed. After capturing *Covadonga*, the annual Spanish galleon in 1743, Anson returned to the anchorage to repair the battle damage to *Centurion*, and prepare her for the return voyage to England.

Below: Captain Wallis was a cautious, undistinguished career officer who was ordered by the Admiralty to search for the *Terra Australis* in the high latitudes of the South Pacific. Unable to sail westward against the prevailing winds, Wallis took *Dolphin* north. After two months of sailing through empty ocean they raised the southern Tuamotus, passing through these low atolls, and on June 18th 1767 they made the most important discovery of the voyage. On a course farther south than any ships had previously sailed, they had come upon the island of Tahiti.



Right: In the last week of January, 1616, *Eendracht* bucked headwinds and currents past Staten Island, feeling the first great swells from the Pacific Ocean. On the 29th the wind backed to northeast, and that evening, in fair conditions, they sailed past the southernmost tip of the Americas.

Middle: When the annual Manila galleons left Acapulco for the Philippines, they dropped down to about 13° north latitude to pick up the northeast trades, and a pleasant downhill passage to Guam, their first port of call.

Bottom: On June 27, 1542, Juan Rodríguez Cabrillo sailed from Puerto de Navidad, near present-day Manzanillo, in the 118-ton *San Salvador*. Accompanied by the smaller *Victoria*, and a small launch, *San Miguel*, they kept in with the coast, searching for signs of natives and safe harbours. On September 28, on the way north, the *San Salvador* and *Victoria* sailed into a “closed and very good port” and Cabrillo stepped ashore on the beach, claimed the land for Spain and named it Bahía de San Miguel. This bay would later become the port of San Diego.





Left: *St. Peter* and *St. Paul* were launched at Okhotsk in 1740, and Bering sailed for Avacha Bay on September 8th. The winter in Avacha Bay was spent building a fort, barracks, huts and a church, and the little settlement was named Petropavlovsk after the two ships. The ice in the harbour finally broke in May and the ships sailed, in a brisk fair wind, for the American coast on June 4th, 1741.



Middle: Probably the largest scientific voyage under sail alone set out under the American flag. It was known officially as the United States Exploring Expedition, or U.S. Ex. Ex., but eventually as the Wilkes Expedition. Six naval vessels were assigned to the expedition, with *Vincennes*, a 780-ton sloop of war, designated as the flagship. Between 1838 to 1842, Charles Wilkes surveyed the islands and coasts of the Pacific from Vancouver Island to Antarctica. In January 1840, while attempting to reach the Antarctic continent, *Vincennes*, with *Peacock* and *Porpoise*, were stopped by pack ice. The 16th was the memorable day. Land was seen from the mastsheads of all three ships, the first sighting of what was later confirmed to be the continent of Antarctica.



Bottom: In the last millennia BCE, Polynesians began to make their first tentative probes into the open Pacific. With no written language, metal tools, or navigational instruments, small groups of adventurous men and women sailed into the unexplored seas to the south, southeast, and north, and by the thirteenth century CE had discovered and settled most of the islands of Oceania from New Zealand in the south to Hawaii in the north, and far to the east, tiny, isolated Easter Island. There they flourished, innocent of a greater world around them, for over a thousand years.

Discovering Francis Drake's California Harbor

Authors: Raymond Aker and Edward Von der Porten

Raymond Aker (1920-2003) was a sailor, draftsman, artist, designer and scholar. He maintained an abiding interest in the voyages of Francis Drake and the *Golden Hind*. Aker studied historical, archaeological and ethnographic sources in search of evidence for the likely location of *Portus Nova Albionis*. He argued convincingly – with the support of many other experts – that Drakes Bay on the coast of Marin County, just north of San Francisco, was the site for the careening of the *Golden Hind* in the summer of 1579.

Edward Von der Porten (1933-2018) was an educator, maritime historian and archaeologist. Like Ray Aker, for many years he was an active member of the Drake Navigators Guild. Education and archaeological fieldwork were among Ed's passions. In close association with Mexican authorities, he helped organize the surveying of a wreck site for the Manila galleon *San Felipe*, and assisted in the excavation and preservation of its recovered cargo of porcelain fragments. An accomplished researcher with wide-ranging interests, and a prolific author, Von der Porten wrote several books, monographs and almost 100 articles on maritime themes such as Drake's voyage, the Manila Galleon and the German Navy in World War II. For many years Ed and the DNG led efforts to have the Drakes Bay National Historic and Archeological District recognized as a National Historic Landmark. This was achieved in 2012.

Editor's note:

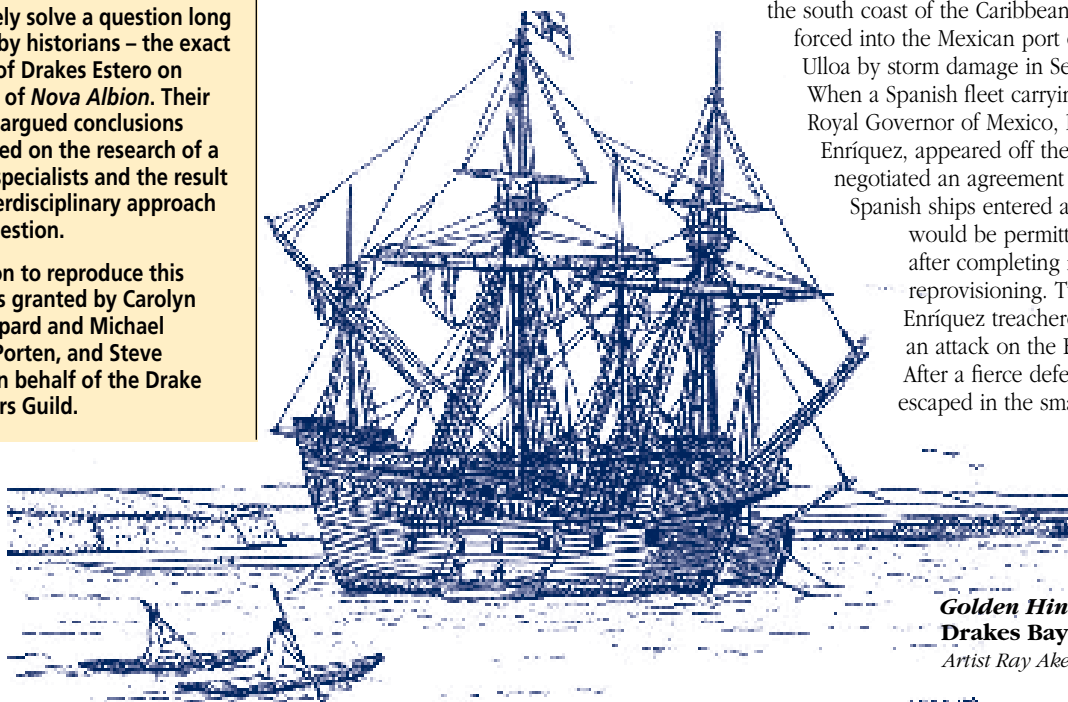
This article is composed of a series of excerpts from Raymond Aker and Edward Von der Porten's *Discovering Francis Drake's California Harbor* (Palo Alto: Drake Navigators Guild, 2000). The original monograph provides an overview of Francis Drake's circumnavigation, placing it within the context of European maritime exploration in the late sixteenth century. The authors describe in detail Drake's 1579 sojourn in California, focusing particularly on the evidence that would definitively solve a question long debated by historians – the exact location of Drakes Estero on the coast of *Nova Albion*. Their carefully argued conclusions were based on the research of a team of specialists and the result of an interdisciplinary approach to the question.

Permission to reproduce this work was granted by Carolyn Aker Shepard and Michael Von der Porten, and Steve Wright on behalf of the Drake Navigators Guild.

Francis Drake lived in a turbulent era. By the middle of the sixteenth century, much of the world's wealth was controlled by two great empires. The Portuguese Empire dominated the coasts of Africa, Brazil, and the sea routes to the riches of Asia. The Spanish Empire monopolized the treasures of the New World and was closely allied to central Europe's premier land power, the Holy Roman Empire. Both Portugal and Spain were prepared to use force to repel outsiders who might attempt to sail their seas or trespass upon their dominions. The England of King Henry VIII, into which Drake was born, and of Henry's daughter Queen Elizabeth, whom Drake served all his adult life, was awakening to the prospects of commerce and empire, and testing the limits of Spanish and Portuguese power. Drake's life was bound up with the intertwined struggles over political authority, religion, colonialism, trade, and economic development which characterized the Elizabethan Age.

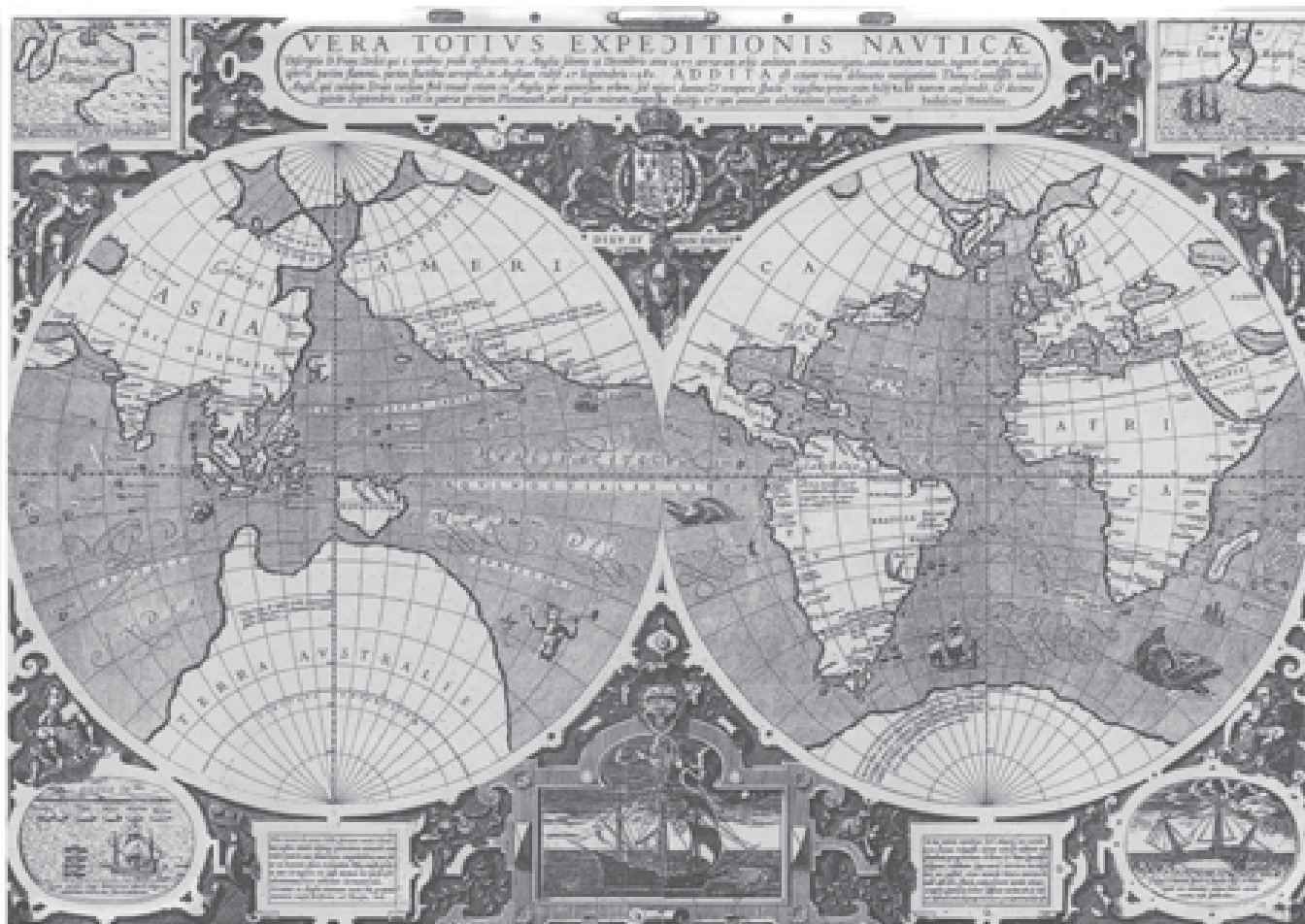
Francis Drake, born about the year 1540, was the oldest of twelve children in a family of moral strength but material poverty. He was sent to sea as a boy and learned seafaring in the coastal trades. In his twenties, he held his first significant command, the *Judith*, a small ship in his cousin John Hawkins's fleet of armed trading ships which attempted to break into the Spanish New World monopoly. After trading successfully at Spanish ports along

the south coast of the Caribbean, the fleet was forced into the Mexican port of San Juan de Ulloa by storm damage in September 1568. When a Spanish fleet carrying the new Royal Governor of Mexico, Don Martín Enríquez, appeared off the port, Hawkins negotiated an agreement by which the Spanish ships entered and the English would be permitted to leave after completing repairs and reprovisioning. Two days later, Enríquez treacherously launched an attack on the English fleet. After a fierce defense, Hawkins escaped in the small ship *Minton*.



Golden Hind at anchor, Drakes Bay, 1569.

Artist Ray Aker



and Drake escaped in the *Judith*. Queen Elizabeth's ship *Jesus of Lubeck*, four other ships, 330 of their 400 men, and a substantial part of the profits were lost. Hawkins and Drake struggled back to England in their damaged ships with the remnants of their starving crews and stories of Spanish perfidy. From the moment of that Spanish attack, Francis Drake saw himself as personally at war with Viceroy Enriquez and King Philip II of Spain.

John Hawkins sought redress by requesting a commission of reprisal from Queen Elizabeth which would have permitted him to attack the annual treasure fleet on its way to Spain with American silver, but the queen could not spare the ships from home waters. The well-established principle of reprisal permitted a person who had been harmed by a foreign country to take compensation by force from resources of that country. Drake then conceived a plan to seize some of Philip II's treasure from a Spanish storehouse on the Caribbean side of Panama before it could be loaded onto the treasure fleet for its voyage to Spain. After several voyages to the Caribbean for reconnaissance and plunder, he outfitted a small military operation in 1572 to seize the treasure. Drake's raid on the treasure house of Nombre de Dios failed when he was wounded by defenders, but his subsequent capture of a mule train carrying Peruvian gold and silver across the Isthmus of Panama was a spectacular success. Drake returned to England wealthy and famous.

Drake's next voyage was even more ambitious: into an exclusive Spanish domain, the Pacific Ocean. Acting in secret as a privateer on behalf of the queen, he planned to seize Philip II's treasure at the source in Peru and in the treasure houses of Panama City with a fleet of five ships, 164 men, and four prefabricated pinnaces for reconnoitering and landing to be

assembled in South America. He could complete the voyage by sailing westward to circumnavigate the world or northward to a not-yet-discovered Northwest Passage around North America.

Drake's voyage began at Plymouth, England, on November 15th, 1577. (All dates are old style: add ten days to match the modern calendar.) His adventures included meetings with Native Americans, near mutiny, passage into the Pacific through the Straits of Magellan, storms, discovery of Cape Horn and the open passage between the Atlantic and Pacific oceans, claims of territory for his country, and the abandonment, separation or loss of four of his ships. When he sailed northward in the Pacific from Cape Horn, he had only the *Golden Hind* and half the men he had counted on for his raids on the west coast of the Americas. The raids began well, with captures of ships and sudden descents on Spanish ports in South America. The high point of the voyage was taking a Spanish treasure ship off the coast of Ecuador.

Drake then considered that his quickest way home might be the much-sought-for Northwest Passage. On the way, he cleaned the *Golden Hind's* bottom off Costa Rica and had the good fortune to capture a small Spanish bark to serve as a pilot boat in Arctic waters. He made his final raid on the Mexican port of Guatulco for water and supplies, then set off into the North Pacific and unknown seas. Far to the north, adverse winds forced him to close with the coast in southern Oregon and then to abandon the search for a passage and sail southward to look for a harbor in which to prepare the *Golden Hind* for a voyage home across the Pacific. On June 17th, 1579, Drake found such a harbor on the coast of California, landed, and repaired his ship. With that accomplished, he crossed the Pacific and added to his exploits by trading and concluding a treaty with

Drake's five-week California sojourn was but a brief respite from his encounters with the Spaniards and the sea, but in time it would come to have considerable significance to his countrymen and to the other peoples from around the world who came to inhabit North America. It was the first English encampment on land that eventually became the United States of America. Here, on the Point Reyes Peninsula, thirty miles north of the entrance to San Francisco Bay, the first meetings of Englishmen with Native Americans occurred. Here the first English claim was made to this new land, which Drake named *Nova Albion*, or New England, and which helped inspire the first English settlements at Roanoke, in what is now North Carolina, in 1585, and Jamestown, Virginia, in 1607, and the establishment of British North America.

the bay and port inside the point, the name bestowed in 1595 by another explorer in Spanish service, Sebastián Rodríguez Cermeño [Sebastião Rodrigues Soromenho], whose ship was wrecked at the bay sixteen years after Drake's visit.

Nearly two hundred years later, in the last half of the eighteenth century, Spanish settlers, soldiers and missionaries moved north from Mexico toward the region of Drake's California visit. The British reacted by becoming more insistent on their claims to Drake's *Nova Albion*. In 1753, Thomas Jefferys, geographer to the Prince of Wales, published a chart of the west coast of America on which he labeled the bay under "*Punta de los Reyes*" as "Port Sir Francis Drake," beneath which he added, "Not St. Francisco," a reference to the 1595 Spanish claim. British Captain James Cook, a friend of Jefferys, had a copy of this chart with him on his first voyage to the Pacific from 1768 to 1771. Cook's third voyage was to include a renewed effort to find the Northwest Passage, to begin in south Oregon where Drake had left off before coming to California, and go on beyond the Arctic Circle and eastward to the Atlantic, if possible. Cook reached the coast of Oregon in 1778, referring to it as "new Albion."

Captain George Vancouver had been a midshipman on Cook's second and third voyages. In 1792, Vancouver sailed down the coast from his own explorations in northwest America. He also was aware of Drake's earlier explorations and alert to landmarks associated with him. He saw and described Drakes Bay, but did not make a close examination of the bay and its associated *esteros*, or estuaries, choosing to take advantage of a favorable wind to go to San Francisco Bay, which had been discovered by Spanish explorers traveling overland from Monterey in 1769 and first entered by sea in 1775. After he conferred with Spanish officials in San Francisco and Monterey, notably the west-coast explorer Juan Francisco de la Bodega y Quadra, Vancouver wrote in his journal, "According to the Spaniards, this is the bay in which Sir Francis Drake anchored." He marked his chart "Pta. de los REYS" and named the bay inside "Bay of Sir F. Drake." His chart shows Drakes Estero prominently with its characteristic forked shape and with its entrance open to the bay. In



1793, a Spanish chart showed Drake's name under Point Reyes for the first time. From that time on, the name Drakes Bay was officially recognized on all governmental charts and maps.

Early in the nineteenth century, Captain James Burney, who had been a midshipman on Cook's last two expeditions to the Pacific along with Vancouver, published his *Chronological History of Discoveries in the South Sea*. In it, he said Drakes Bay would not have provided adequate protection from weather, so Drake must have anchored in San Francisco Bay. Although he had not seen either bay and had no evidence to justify contradicting Vancouver, Burney's opinion set off a long debate.

Spain, Mexico, Russia, Great Britain, and the United States disputed ownership of long stretches of America's West Coast in the first half of the nineteenth century, with the British persistently referring to Drake's visit to bolster their claims. Not until the Oregon Treaty of 1846, which defined the Canadian-American border, did the British government give up Drake's claim. In the same year, the American conquest of California brought American scholars into the discussion about the site of Drake's Port of *Nova Albion*. From Burney's time until late in the nineteenth century, more than two dozen writers stated their opinions about Drake's anchorage. Most of them were about equally divided between Drakes Bay and San Francisco Bay, although a few favored Bodega Bay. No one suggested Bolinas Bay or Bolinas Lagoon, which lie between Drakes Bay and San Francisco Bay. After Burney, few of these opinions were given by seafaring men, and none were supported by extensive research. ...

Drake entered the Pacific through the Straits of Magellan, near the southern tip of South America, with three ships on September 6th, 1578. Caught in great storms, his ships were driven southward. One ship was lost with all hands, another was separated and returned home through the straits. Drake was left with only the flagship, the *Golden Hind*. She had been built at his own expense two or three years before the voyage began as a small warship of 150 tons with twelve guns on the lower deck and six smaller ones on the upper deck. She had a hull length of about eighty feet, breadth of about twenty-three, and draft of thirteen feet when deeply laden. When the storms abated, Drake was so far south that he discovered Cape Horn and open sea beyond, a route between Atlantic and Pacific now called the "Drake Passage." He sailed north to the coast of Chile, where his men assembled a pinnace brought from England. Then the two ships sailed north along the South American coast, raiding Spanish shipping and settlements but sparing Spanish lives. At Callao, the port of Lima, Drake learned that the treasure ship *Nuestra Señora de la Concepción*, popularly called *Cacafuego*, had left for Panama thirteen days earlier. Two weeks later he caught up with her near the equator and captured her by surprise. He transferred her cargo of twenty-six tons of silver bars,

thirteen chests of silver coins, eighty pounds of gold, and jewels to the *Golden Hind* before letting the ship and her crew go free.

The *Cacafuego's* treasure satisfied Drake's mission, without the risk of raiding Panama. The time had come to consider his options for returning home. He could sail across the Pacific and Indian oceans,

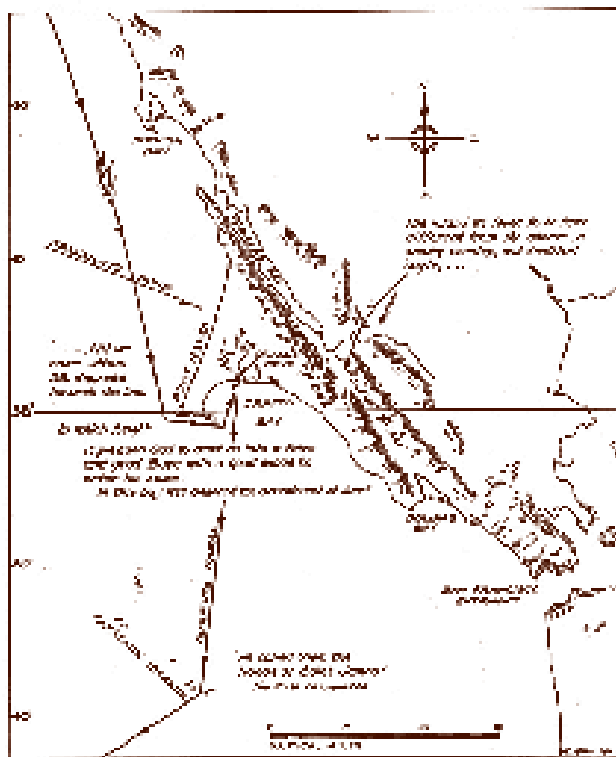
then around Africa's Cape of Good Hope into the Atlantic, or he could try to find the fabled Northwest Passage around North America. If he could pass through the Arctic regions that summer, he could be home within the two years originally planned for the voyage. He chose to try the passage. Sailing northward up the Central American coast past Panama, his raids on ships and towns continued, but his goal had changed. He had to prepare for a voyage through unknown seas and Arctic cold.

At the island of Caño, in a bay on the coast of Costa Rica now called Drakes Bay, he cleaned the *Golden Hind's* bottom and inspected for damage. While there, he captured a fifteen-ton passenger-carrying bark about half the length of the *Golden Hind*, a craft that could sail the open sea with a crew of ten to fifteen men, yet was small enough to be rowed if necessary to pilot the *Golden Hind* into harbors or find leads in the anticipated

ice fields of a Northwest Passage. Among its passengers were two pilots familiar with the Spanish Manila galleon route. Their charts were invaluable for his Pacific navigation. He gave the bark's crew and passengers his pinnace so they could continue their voyage. Farther along the coast, one more captured ship yielded four chests of Chinese porcelains.

Drake's last contact with the Spaniards was a raid on Guatulco, Mexico where he topped off his fresh water and firewood. He also took a supply of colorful women's wool skirts to use as clothing material in northern seas. Then, aware of contrary winds along the coast to the north, he set a course for the *Golden Hind* due west for nearly 1500 miles, then northwest, and finally north-northeast, accompanied by the small bark he had seized off Costa Rica. After he crossed latitude 42 degrees north, he ran into cold, wet and stormy weather. A shift of wind obliged him to seek land, and he made a landfall at the Oregon Dunes just north of Coos Bay. The coast did not trend northeastward, as he had expected, and contrary winds prevented further search northward for a Northwest Passage to the Atlantic, also known as the Strait of Anian. He turned south, rounded Cape Arago and found a momentary but precarious shelter under its lee at South Cove, Oregon.

Unrelenting northwest winds forced him south to search the rocky coast for a safe harbor in which to repair his leaking ship, refresh his crew, and refill his food and water casks. A trans-Pacific voyage became inevitable as hope of finding a passage through or around the North American continent faded. Mile after unrewarding mile, Drake sailed south down one of the world's most dangerous coasts, but no useful harbor was seen until his two ships reached the



latitude of Drakes Bay, where he found a haven on June 17th, 1579. ...

Once clear of Point Reyes, Drake saw that the main run of the coastline was ten miles to the east and that some shelter might be found in the lee of this great projecting point. Accordingly he sailed eastward, his small pilot bark in the lead to sound the way, the *Golden Hind* following. As the ships reached the eastern end of Point Reyes, he saw that the coast fell away to the north for two-and-a-half miles, and white cliffs appeared. Drake suddenly and surprisingly found himself in a large bay whose shore looked much like the shores of southern England. Here was the shelter he had long sought, but, more important, he could see the prospect of a harbor leading off the bay, the waterway now called Drakes Estero. With a turn of the rudder to port, and a good northwest wind abeam filling the sails, the two ships easily sailed to its entrance. Late on that day, June 17th, 1579, they came to anchor inside the port. This arrival perfectly matches the contemporary descriptions: "it pleased God to send us into a faire and good Baye, with a good winde to enter the same," and, "we fell with a convenient and fit harborough." ...

Drake named the land *Nova Albion* – New White Land or New England – after the white cliffs which reminded the homesick Englishmen so much of their homeland, as the accounts relate. ...

A search for water, food, and a place to repair the leaks in his ship led Drake into the estero where all three needs could be satisfied. The difficult repair work required careening: lightening the ship by offloading cannon and cargo, then shifting weights in her hold to heel her down until her keel was exposed, and holding her down with tackles

from the mainmast to a vessel alongside or to the shore. Repairs could then be made on her bottom. This delicate operation required a sheltered harbor out of danger of surf, swell, strong currents, or sudden squall – a shelter which only the estero could provide.

The accounts say that Drake took care to give the native peoples no cause for mistrust or dislike, for his harbor was the "only place" the Englishmen had found that met their needs. His Spanish charts showed no harbors for hundreds of miles southward along the coast, and he was not aware of San Francisco Bay which could have provided many careening sites. ...

For thirty-six days in the summer of 1579, Drake's Cove was the scene of hard work interspersed with elaborate ceremonials and earnest attempts of two diverse peoples to understand each other, encounters recorded in detail by Drake's chaplain Francis Fletcher.

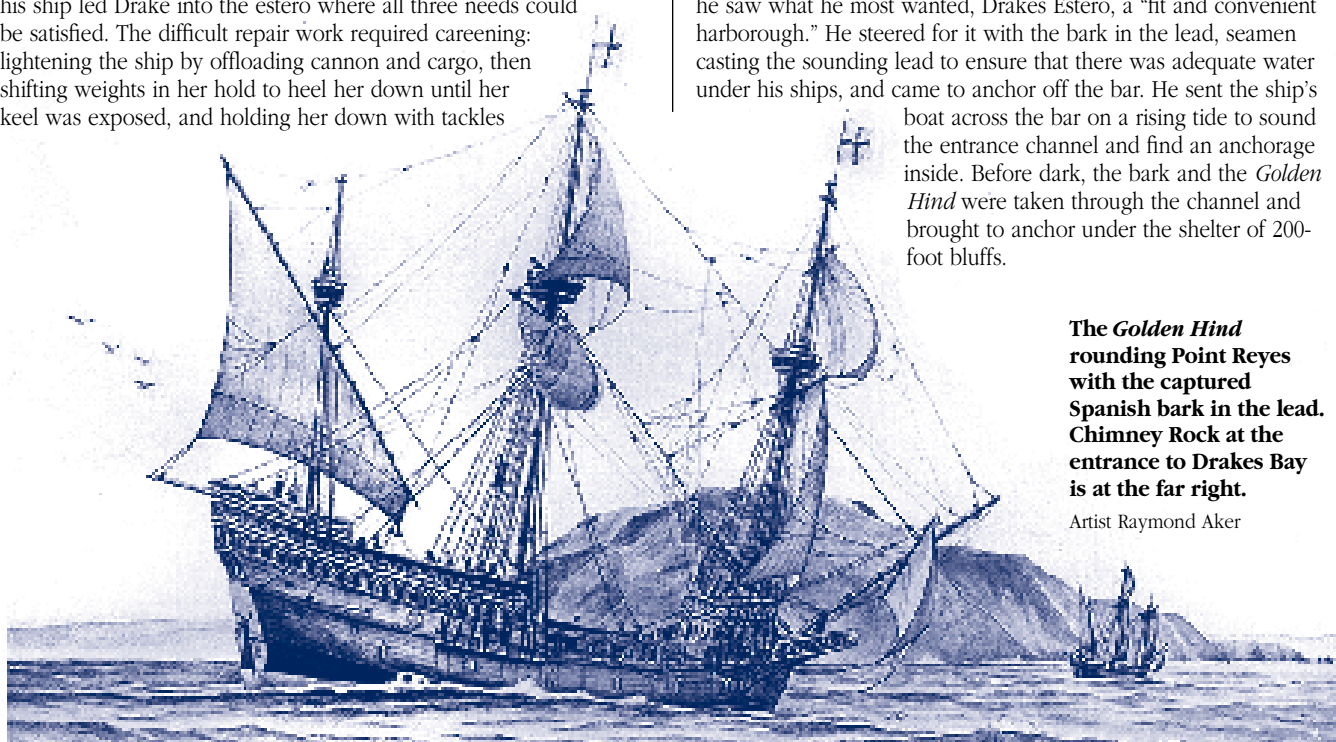
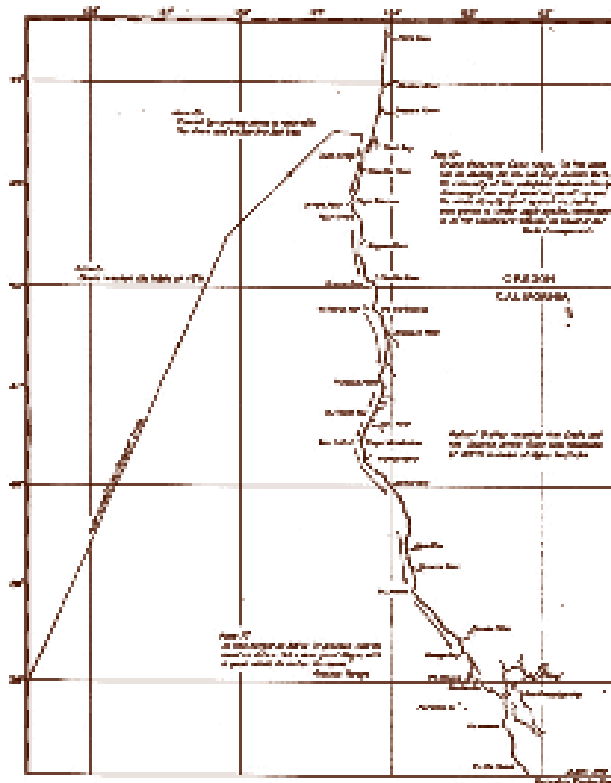
Drake arrived in the land he would name *Nova Albion* on June 17th, which was June 27th by the modern calendar. He had been sailing southward along the dangerous California coast for nearly two weeks when he reached the massive granite headland of Point Reyes. With his small bark in the lead, he rounded the point and followed

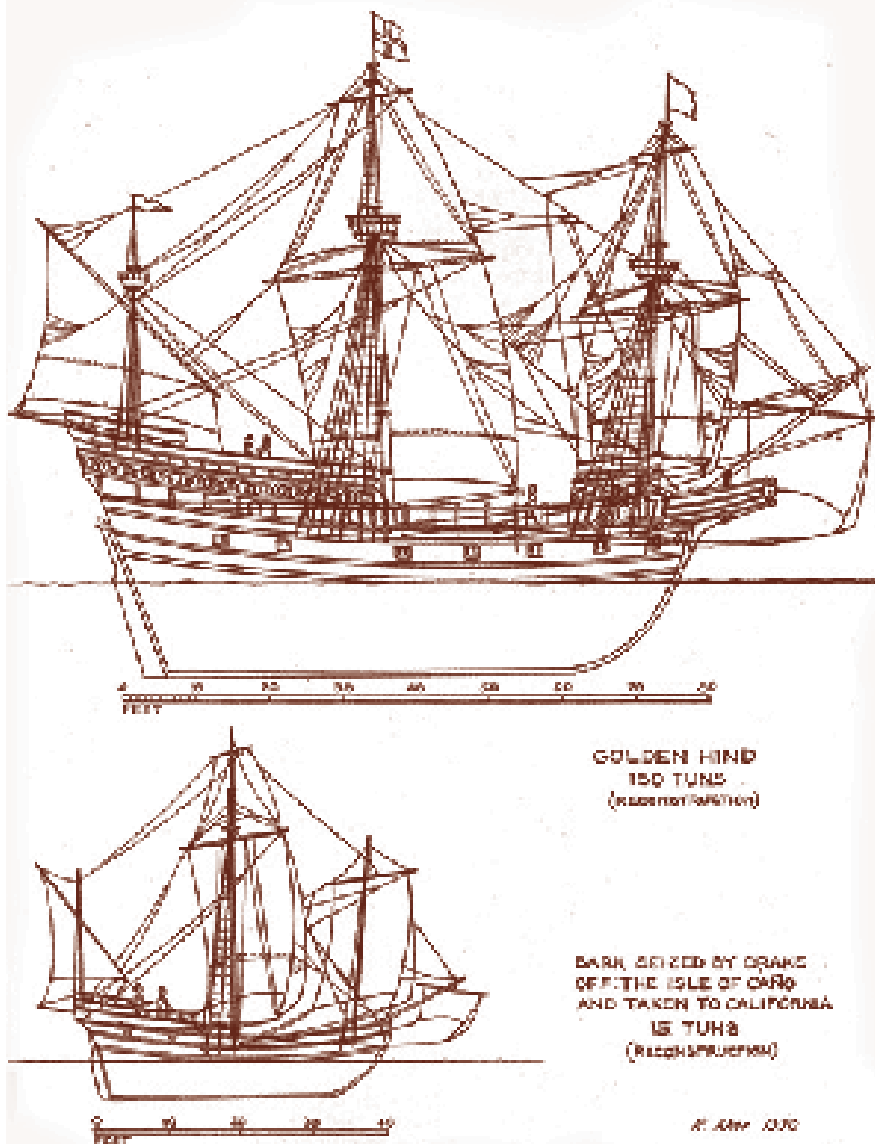
its southern face eastward. Then, as he cleared the eastern tip of the head, the bay with its guardian cliffs opened to the north, and he saw what he most wanted, Drakes Estero, a "fit and convenient harborough." He steered for it with the bark in the lead, seamen casting the sounding lead to ensure that there was adequate water under his ships, and came to anchor off the bar. He sent the ship's

boat across the bar on a rising tide to sound the entrance channel and find an anchorage inside. Before dark, the bark and the *Golden Hind* were taken through the channel and brought to anchor under the shelter of 200-foot bluffs.

The *Golden Hind* rounding Point Reyes with the captured Spanish bark in the lead. Chimney Rock at the entrance to Drakes Bay is at the far right.

Artist Raymond Aker





The next day, the Native Americans, whom we now know as the Coast Miwok People, appeared along the shore and soon sent out one of their number in a reed canoe. He spoke to the Englishmen continuously as he came closer, then stopped at a "reasonable distance" from the ships and delivered a long, solemn oration accompanied by many hand gestures and head and body movements. His task completed, he "with great shew of reverence and submission" paddled back to shore. Soon he returned to repeat the address, and then a third time, bringing with him as presents a neatly rolled black feather headdress, "verie cleane and finely cut," and a small herb-filled basket, both tied to a short stick. These he threw into the *Golden Hind's* boat, but when Drake entered the boat and attempted to present him with gifts in return, he refused to come close enough to receive them, even when they were floated off to him on a board. Eventually, he took one hat which was thrown into the water near him, then returned to shore.

Drake reconnoitered the esteros in the *Golden Hind's* boat under the gaze of the Miwok, who followed every movement. On the third day, he had the ship hauled into the cove under the bluffs on the west side of the mouth of Drakes Estero which he had selected as the careening place. Drake sent his men ashore to set up tents on the beach inside the cove and entrench the camp with walls reinforced with stone from the beach and the base of the nearby cliffs for the safety of his men and the goods landed to lighten the ship for repairs.

The Miwok who were watching from the bluffs above rushed down to the camp area in great numbers, the men armed with bows and arrows, but showing no hostility. Rather, they behaved "as men ravished in their mindes" and desiring to "worship us as Gods," as the Englishmen interpreted the scene. Prudently motioning them to put down their weapons, Drake and his men then allowed the growing crowd of men and women to enter the camp area and endeavored to persuade them that the Englishmen were mortals like themselves by eating and drinking in their presence and giving them clothes and cloth with which to "cover their nakednesse." The Miwok responded by presenting the Englishmen with their most prized ceremonial and personal goods, such as featherwork, net hair coverings, fawnskin quiver for arrows, and the women's cloaks. Eventually they returned "with joy" to their villages, from the nearest of which the perplexed Englishmen soon heard "a kind of most lamentable weeping and crying out, the women especially extending their voices in a most miserable and dolefull manner of shrieking."

Two days later, the Miwok reappeared in much larger numbers. They ranked themselves at the top of the bluff above the fort and their spokesman delivered a long oration, spoken at a rapid pace and punctuated with "strange and violent gestures." As he finished, all his companions bowed reverently and cried "Oh!" in confirmation of his speech. Then the men laid down their bows and came down the slope to present their gifts, mainly featherwork and bags of an herb they called "tobáb." To the astonishment of Drake and

his men, the women then performed a ceremony of sacrifice which Chaplain Fletcher recorded in detail: they "used unnatural violence against themselves, crying and shrieking piteously, tearing their flesh with their nailes from their cheekes in a monstous manner, the blood streaming downe along their brests, besides despoiling the upper parts of their bodies of these single coverings they formerly had, and holding their hands above their heads that they might not rescue their brests from harem, they would with furie cast themselves upon the ground, never respecting whether it were cleane or soft, but dashed themselves in this manner on hard stones, knobby hillocks, stocks of wood, and pricking bushes, or whatever else lay in their way, iterating the same course againe and againe; yea women great with child, some nine and ten times each and others holding out till 15 or 16 times (till their strengths failed them)." Drake, under the impression that he and his men were being treated as gods, fell to prayers with all his men, lifting their eyes and hands to heaven, both to beseech God to enlighten the Miwok and to show them that the Englishmen were not gods, but human beings like themselves who worshipped God. The Miwok followed the prayers, singing of psalms, and Bible readings very attentively, crying "Oh!" at every pause, and afterwards often asking the Englishmen to sing when they visited the camp. What Drake interpreted as sacrifices to the Elizabethans as gods, in reality were mourning ceremonies; and his crewmen never realized that they were being

This reconstruction of the cove shows it as it might have looked at low tide. It is based on archaeological investigation, correlation with the *Portus Novae Albionis* view of the cartographer Hondius, and the hydrography of Drakes Estero. The *Golden Hind* is shown in a basin corresponding to the one that formed at this site in 1947.

Illustration by Raymond Aker

treated as returned ancestral ghosts. As before, Drake lavished gifts upon the Miwok, but this time they were all returned as the visitors left the camp.

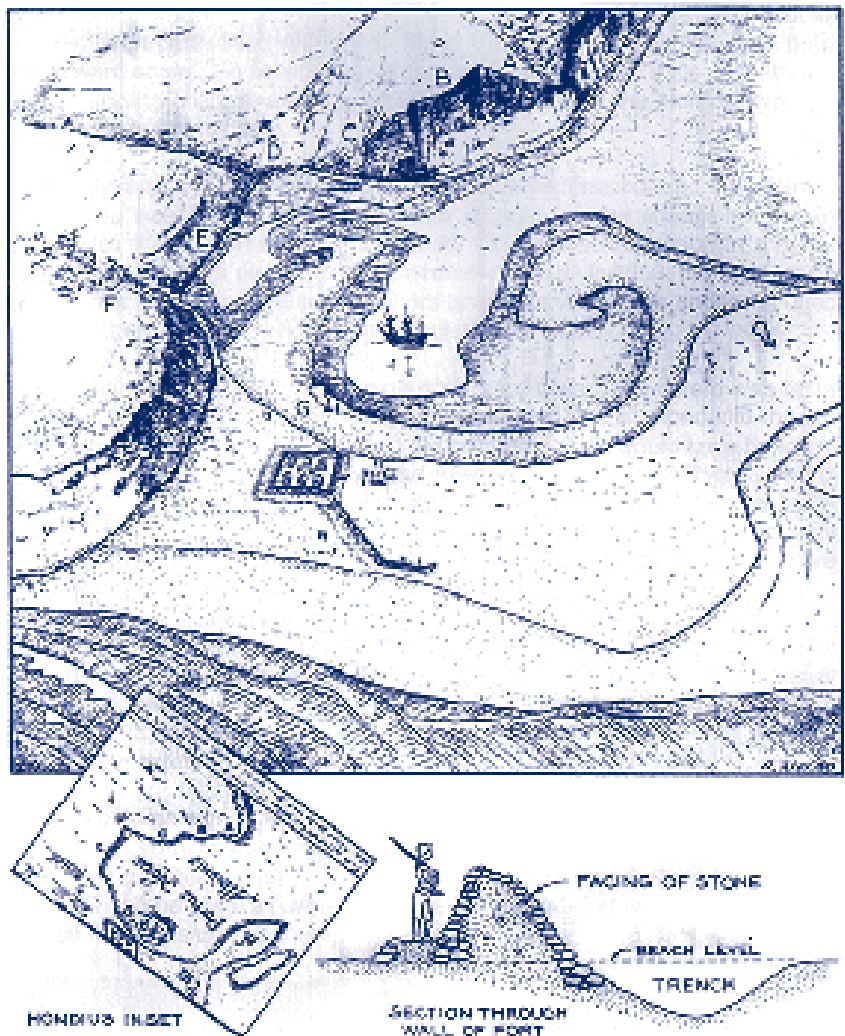
Three days later, the Miwok were back in even greater numbers, led by a man the Englishmen regarded as “the king himself, a man of goodly stature and comely personage.” He was accompanied by a guard of about one hundred “tall and warlike men” and preceded by two “embassadors” who made a proclamation and requested by signs that Drake send a token to show his peaceful welcome of the “*Hióh*,” to which Drake complied. Soon the *Hióh* and all his retinue approached the top of the bluff overlooking the fortification, singing all the way and making a grave and comely appearance. In front was a man carrying a black wood scepter hung with two feather crowns, long chains of burnished clamshell beads, and a bag of *tabáb*. The *Hióh* wore a feathered knitwork headdress and a finely worked fur cloak that reached his waist. The guards also had fur cloaks and headdresses decorated with feathers or fine down. The other Miwok wore less elaborate feathered finery, as befitted their individual status. All had their faces painted with white, black or other colors, and each bore a gift.

The women and children brought up the rear, each woman carrying one or two baskets decorated with acorn-woodpecker feathers, which were woven into the fabric of the baskets and covered their exteriors like fine down, and with abalone-shell pendants and shell beads which hung from the edges. These ceremonial baskets – widely recognized as the world’s finest basketry – were filled with *tobáb*, an edible root called “*petáh*,” broiled fishes, plant down, and other gifts.

As usual, Drake marshaled his men in his fortified area: armed, helmeted and armored, bows strung, guns loaded, and pikes at the ready, prepared for any contingency.

The Miwok became silent, then gave a cry of greeting. Then the scepter bearer, prompted throughout by another man, gave a long oration, which was followed by another common cry of assent. Breaking ranks because of the narrow trail down the steep slope to the cove, the entire assembly except the little children descended to the foot of the bluff and resumed its former order. Led by the scepter bearer, the men began a song and accompanied it with a dance, the women joining in the dance but keeping silent. As they danced, they advanced toward the fortified area. Drake ordered his men to lay down their weapons and welcome the Miwok, and they entered, still singing and dancing. The Englishmen noted that the women had again scratched and bruised themselves in sacrifice before their coming.

Their song completed, the Miwok indicated by signs that they wished Drake to sit down, after which the *Hióh* and others made



speeches to him, followed by another song during which the *Hióh* and many others set a feather crown upon Drake’s head, draped his neck with all their shell necklaces, offered him many other gifts, and proclaimed him *Hióh*. Another song and dance followed the crowning. Drake took the “scepter, crowne, and dignity of the says countrie into his hand,” interpreting their acts as offering him sovereignty, which he took in the name of Queen Elizabeth, “for that he knew not to what good end God had brought this to passe, or what honour and profit it might bring to our countrie in time to come.” In addition, he hoped the act might lead toward converting the Miwok to Christianity, but, in the short term, his most pressing concern was to keep the Miwok’s confidence and good will so he could complete his work on the *Golden Hind*.

With the ceremonies at an end, the two groups mixed together. Miwok searched the faces of the men and, selecting some, generally the younger ones, “they presently enclosing them about offred their sacrifices unto them, crying out with lamentable shreekes and moanes, weeping and scratching and tearing their very flesh off their faces with their nailes; neither were it the women alone which did this, but even old men, roaring and crying out, were as violent as the women were.” Shocked, the Englishmen tried to hold the Miwok’s hands to prevent further self mutilation, and to indicate by signs that they should look toward heaven for God. Taking the men and boys who were the objects of the Miwok’s attention into the tents finally quieted the uproar.

Eventually, as familiarity and confidence grew, some Miwok showed Drake's men old sores, injuries and diseases, which they wished the Englishmen to cure by touching or blowing upon them, a reflection of Miwok curing ceremonies. The seamen responded with what few lotions and "unguents" they possessed, and with their limited skills tried to help their new friends, all the while trying to show them that these treatments were ordinary human aids, and "beseeching God, if it made for his glory, to give cure to their diseases by these meanes."

For the remainder of Drake's stay in *Nova Albion*, the Miwok visited, brought gifts, sought medical help, and sometimes accepted food from the Englishmen. At first the Miwok offered sacrifices every third day, burning ceremonial objects such as featherwork, but the crewmen's persistent disapproval eventually discouraged them, and the sacrifices ceased.

The Englishmen were fascinated with the Miwok. Chaplain Fletcher described their low, round semi-subterranean houses and remarked how warm they were under their conical wood- and earth-covered roofs. He described the women's short rush skirts and deerskin capes; his Puritan outlook showed in his disapproval of the nakedness of the men. To him, they were "a people of a tractable, free, and loving nature, without guile or treachery." The women, he observed, were very obedient, deferential and attentive to their men, who, in turn, were "commonly so strong of body, that that which 2 or 3 of our men could hardly beare, one of them would take upon his backe, and without grudging carrie it easily away, up hill and downe hill an English mile together: they are also exceeding swift in running, and of long continuance, they seldom goe, but for the most part runne." He compared the power of the Miwok's bows with the Englishmen's longbows, understandably favoring his countrymen's but he admired the Miwok's skill with their bows and arrows and their fishing ability. Some of the Englishmen came to know the Miwok well enough to learn some of their words, and even a song, and to remember them years later.

Drake and his men, however, had work to do. The *Golden Hind* had sprung a leak at sea. Her silver and gold, water casks and cannon, food and chests of personal possessions, had to be hoisted out to lighten her. Then ballast was carefully shifted to help the ship to expose its bottom, first to one side, then to the other. A great tackle led from her mainmast to the bark alongside to steady her for the safety of the men and to help ease her over. Crewmen on improvised rafts burned and scraped off seaweed and barnacles, pried off the thin outer sheathing and even the inner planking as needed, inspected frame timbers, and replanked, respiked, caulked, and recoated the planks to prepare the ship's hull for the long trans-Pacific voyage to come. The blacksmith set up his forge and repaired ironwork; the sailmaker stitched new panels into worn sails, and the boatswain overhauled the rigging. The cooper checked the water casks and crewmen towed them to a nearby stream for refilling. Seals, fish

and game were hunted and the meat salted and put into casks. Firewood and riches were gathered.

A lookout and foraging station was apparently established on Point Reyes to warn of Spanish ships and to take advantage of the point's plentiful mussels, seals, sea birds, and eggs. Native-American traditions tell of blinding fires at a grotto at Point Reyes, possibly reflecting the seamen's use of gunpowder thrown into a fire as a signal system.

Finally, the *Golden Hind* was floating on an even keel and once again water casks and firewood were stowed above the silver ingots, cannon swung aboard, the upper masts and yards hoisted into position, and the rigging hove taut. Tools, barrels and sacks of food, tents and the crewmen's chests were brought aboard. With

the ship crammed full of food and water for the long voyage ahead, not everything could be taken aboard, so bulky chests of Chinese porcelains that had been taken from a Spanish ship off Central America were left behind.

There was time to think about the future, of a time when Englishmen might return to *Nova Albion*, so Drake, "with his gentlemen and many of his company, made a journey up into the land," to see what lay beyond the confines of the cold and foggy shore. They traveled eastward on Miwok trails over Inverness Ridge. "The inland we found to be farre different from the shoare, a goodly country, and fruitful soyle, stored with many blessings

fit for the use of man." The chaplain's account described scattered Miwok villages in the Olema Valley, large herds of elk, and multitudes of small animals they called "a strange kinde of Conies": the gophers.

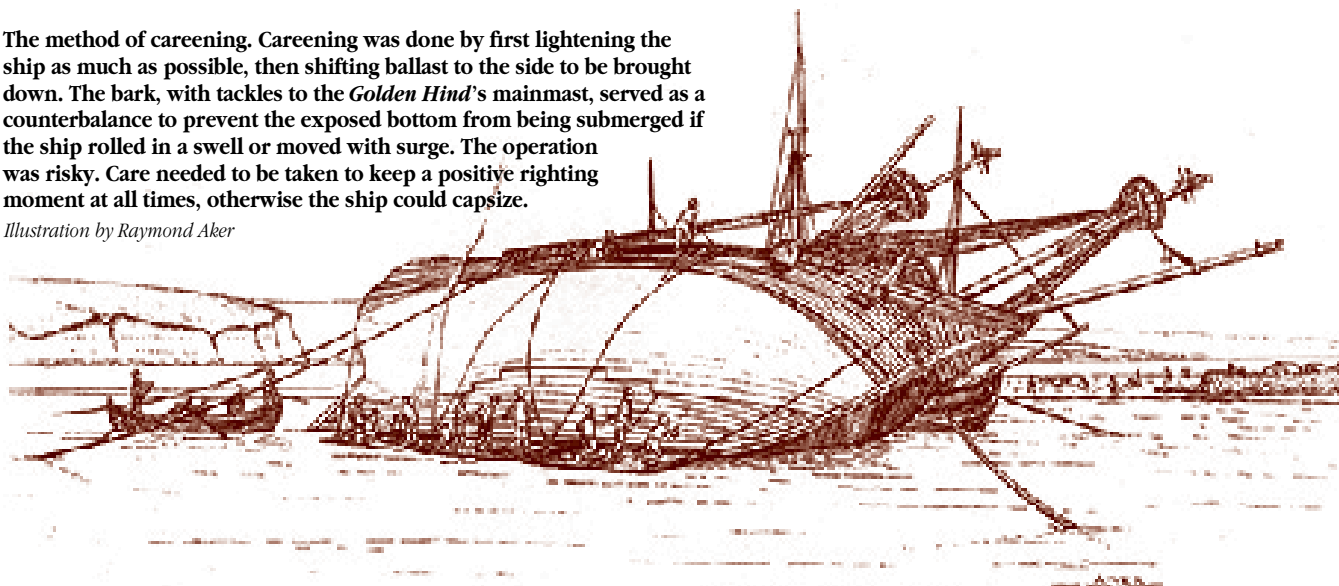
Then, "This country our Generall named *Albion*, and that for two causes; the one in respect of the white bancks and cliffs, which lie toward the sea; the other, that it might have some affinity, even in name also, with our own country, which was sometime so called."

Finally, "our Generall caused to be set up a monument of our being there, as also of her maiesties and successors right and title to that kingdome; namely, a plate of brasse, fast nailed to a great and firme post; whereon is engraven her graces name, and the day and years of our arrival there, and of the free giving up of the province and kingdome, both by the king and people, into her maiesties hands: together with her highness picture and armes, in a piece of sixpence currant English monie, shewing itself by a hole made of purpose through the plate; underneath was likewise engraven the name of our Generall." This was the usual act of possession – the first by an Englishman on land that would eventually become part of the United States. Accompanying this record of laying claim to the country was a statement that no Spaniards had ever set foot this far north. The plate was probably posted on the headland facing the entrance to Drakes Estero where it would be seen by any European who entered the harbor.

There was time to think about the future, of a time when Englishmen might return to Nova Albion, so Drake, "with his gentlemen and many of his company, made a journey up into the land," to see what lay beyond the confines of the cold and foggy shore.

The method of careening. Careening was done by first lightening the ship as much as possible, then shifting ballast to the side to be brought down. The bark, with tackles to the *Golden Hind's* mainmast, served as a counterbalance to prevent the exposed bottom from being submerged if the ship rolled in a swell or moved with surge. The operation was risky. Care needed to be taken to keep a positive righting moment at all times, otherwise the ship could capsize.

Illustration by Raymond Aker

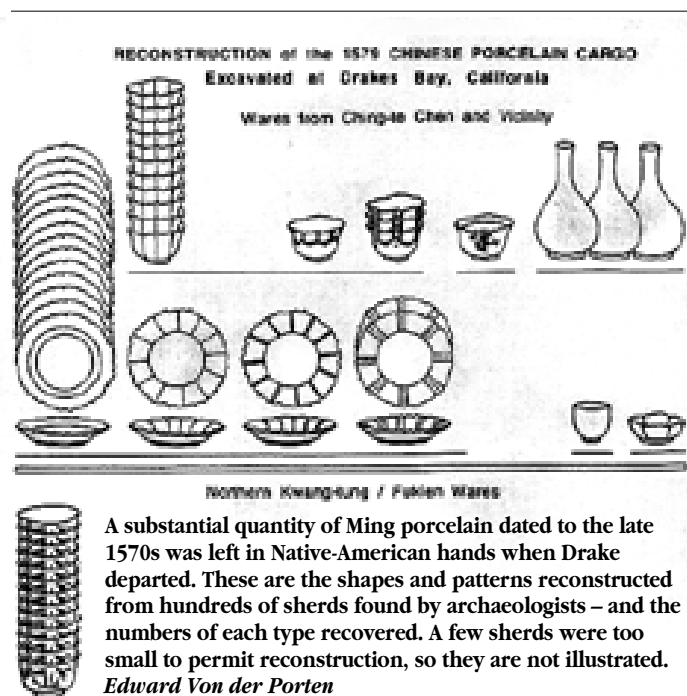
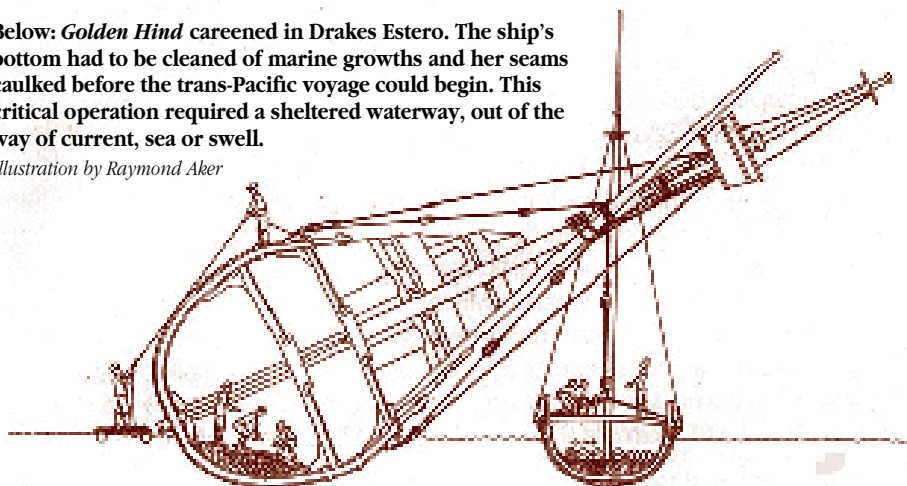


The Miwok became aware of the Englishmen's preparations for leaving and manifested their sorrow at the prospect, appearing to entreat Drake's men not forget them and to promise to return. They even "stole upon us a sacrifice," placing a bead necklace and a feather bundle onto a fire, but recourse to prayers and singing had the desired effect: the Miwok imitated the Englishmen's prayerful gestures and let the fire go out.

The *Golden Hind* sailed on July 23rd (August 2nd in modern terms) on the evening tide. Her crewmen watched the Miwok running to the

Below: *Golden Hind* careened in Drakes Estero. The ship's bottom had to be cleaned of marine growths and her seams caulked before the trans-Pacific voyage could begin. This critical operation required a sheltered waterway, out of the way of current, sea or swell.

Illustration by Raymond Aker



tops of the hills to keep them in sight as long as they could and burning sacrifices in their honor.

Drake sailed to the Farallon Islands, where he noted great quantities of birds and seals, then set the *Golden Hind* on a course toward the fabled Moluccas – the Spice Islands – on the far rim of the Pacific.

Much was left at *Nova Albion*, however. The Spanish bark did not accompany the *Golden Hind*, and crew counts suggest that as many as twenty crewmen stayed on shore, possibly considered too sick of summer shellfish poisoning to survive the coming voyage. One of them, the Portuguese pilot N. de Morena, walked to Mexico to tell his tale four years later. The others faded into the native population, leaving tantalizing traces in Miwok traditions and red-headed and bearded descendants who were reported by eighteenth-century Spaniards. The bark and the post with its brass claim marker disappeared. Some of the porcelains were broken by the Miwok and made into hide scrapers and pendants. In time, they and the broken terra cottas and iron spikes were lost and forgotten underfoot in the Miwok villages. ...

Today, protected as part of the Point Reyes National Seashore, Drake's California haven may be seen by visitors from America and all the world.

The Manila Galleon

An Introduction by William J. McCarthy

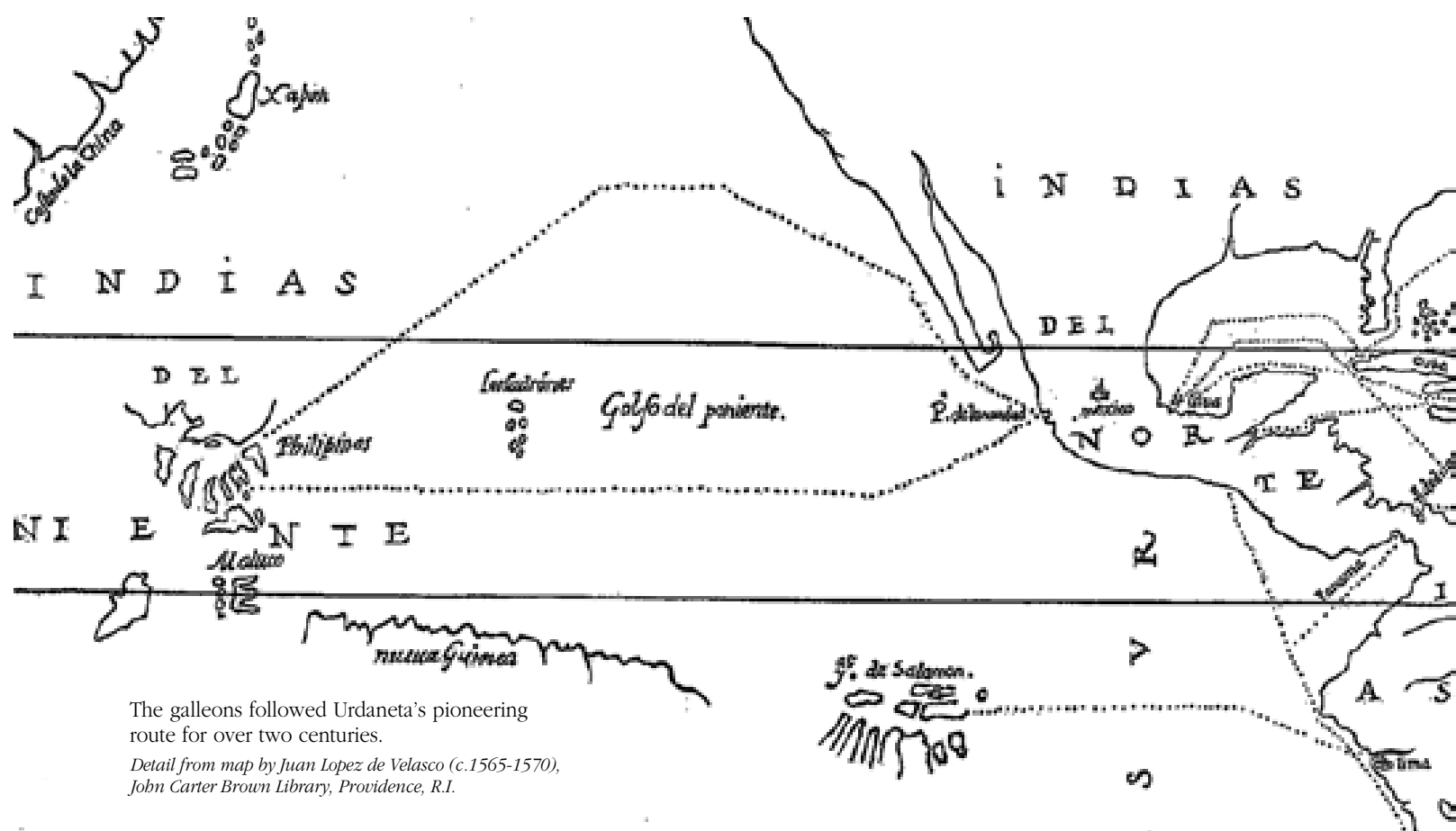
William J. McCarthy (1956-2017) received his doctoral degree in History from Boston University. He was Associate Professor in History at the University of North Carolina, Wilmington. Bill's research focused particularly on the history of the Philippines and the Portuguese overseas empire. The broad sweep of his scholarly interests took Bill to archives in Spain, Portugal, France, India and Macau. At UNC, he was also a devoted, approachable and admired teacher and mentor for some thirty-three years.

When Miguel López de Legazpi dispatched a galleon across the Pacific from Manila to Acapulco in 1571, he began one of the world's most ambitious commercial ventures, and heralded a centuries'-long trade in Asian commodities. Spanish galleons sailed annually, with few exceptions, across the Pacific until 1814, transporting Spanish American silver and Asian luxuries. The voyages created, for the first time, the sense of the Pacific as a unity, as the vast ocean—the world's largest geographical feature—was regularly and methodically traversed. The story of the galleon has intrigued sailors, Filipinos, cultural aficionados and historians, but has rarely formed the nucleus of an important study, such as this edition of *Mains'l Haul*. With the popularizing of the concepts of the global economy and the Pacific Rim, the history of the Manila galleon reminds us that important far-flung commercial efforts are not new to the Pacific.

Model of a Manila ship of about 1575.

Model by Bill Brown based on new plans by Raymond Aker, from the San Diego Maritime Museum exhibit "Treasures of the Manila Galleons;" photo by John Wright





The galleons followed Urdaneta's pioneering route for over two centuries.

Detail from map by Juan López de Velasco (c.1565-1570),
John Carter Brown Library, Providence, R.I.

Though the discovery of America has garnered the lion's share of attention, commerce between Spain and the Far East fulfilled the primary goal of Europe's Age of Expansion. Spanish voyages of exploration had been prompted by the lure of Asian goods, and, with the precious metals they extracted from America, Spain alone among European nation-states had direct access to the means to pay for both ships and Asia's luxuries. The Portuguese had been the first to establish trade with China, but the Spaniards arrived in Asia possessing the preferred means of exchange, silver. The galleon trade realized the dreams of centuries.

From the time of their establishment on the American mainland, the Spaniards wasted no time in pursuing maritime activity in the Pacific. Vasco Núñez de Balboa claimed the entire ocean for the Kingdom of Castile in 1513; Ferdinand Magellan's expedition crossed the Pacific and reached the *Archipiélago de San Lázaro* (Philippines) in 1521; Cortés established a shipyard on Mexico's Pacific coast and dispatched an expedition in 1523. Their interest in America was scant initially; their interest in continuing on to the East was immediate and abiding.

The biggest problem with establishing an outpost in the Far East was the fact that a reliable return route across the Pacific proved elusive. Prevailing winds

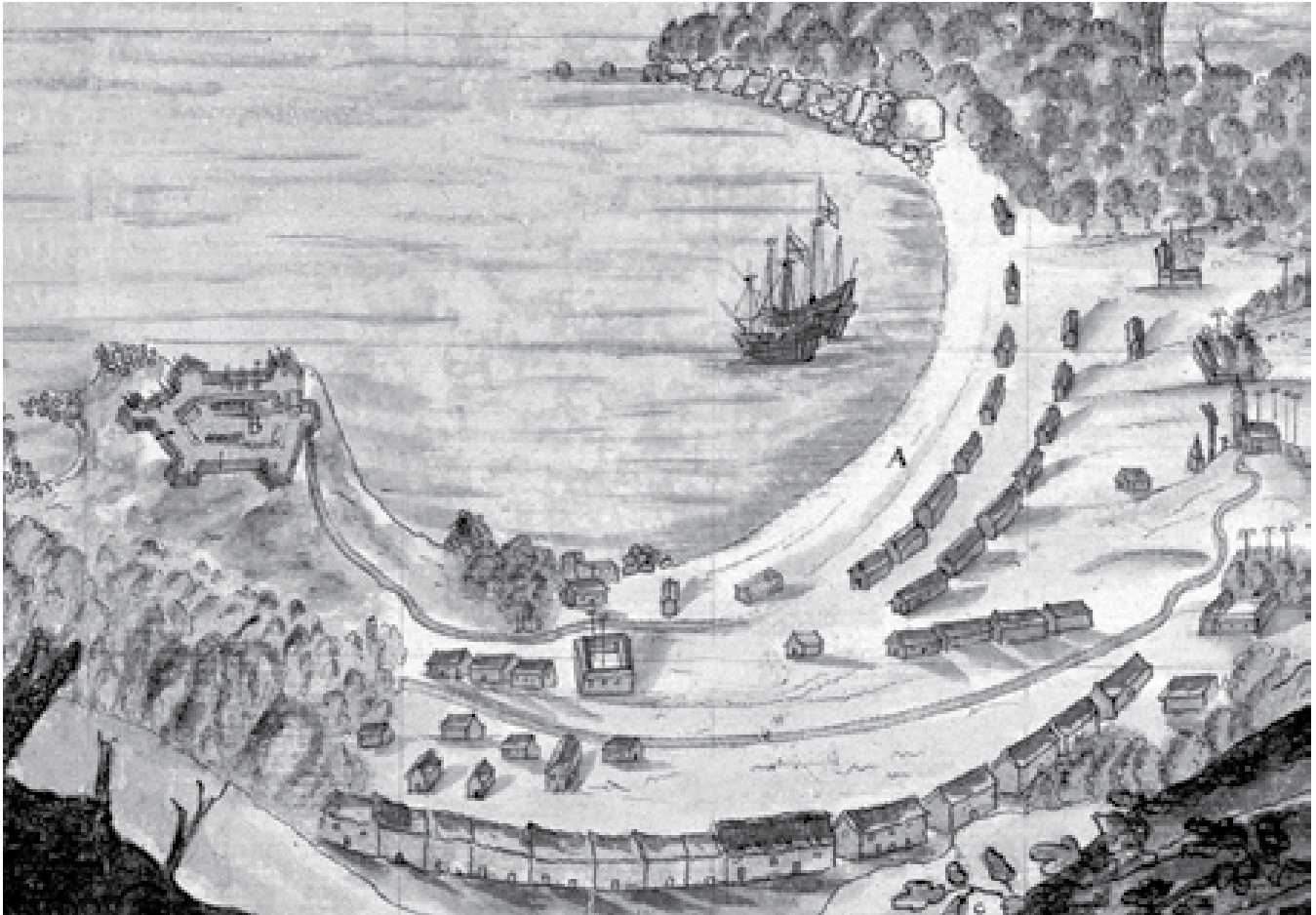
and currents prevented the return of three expeditions in the 1520s and 1540s. Finally, in 1564, López de Legazpi was given the order to found a permanent beachhead in the archipelago, and did so at Cebu. He renamed the Philippines in honor of Prince Philip, and dispatched Basque pilot Andrés de Urdaneta to Mexico

the following year. Urdaneta sailed far into the North Pacific and was able to sail back to America successfully, calling at Acapulco and establishing that port as the terminus of the trade route.¹

With his first colony at Cebu faltering, López de Legazpi captured the trading entrepôt of Manila in 1571 and made it the seat of government and commerce in the region. He first sent local products to America—cinnamon, wax and

other Philippine commodities—but the trans-oceanic trade soon came to rely primarily upon Chinese goods. These were obtained either from the Portuguese, who had been permitted to establish an outpost at Macau, or from the Chinese themselves, who had been visiting the archipelago for centuries, and who lived in and around Manila in significant numbers. Isolationism had been official Chinese policy since the Ming Dynasty's prohibition of foreign trade in the 1430s, but merchants from southern Chinese coastal communities continued to live and trade around the South China Sea and other parts of Southeast Asia.

The biggest problem with establishing an outpost in the Far East was the fact that a reliable return route across the Pacific proved elusive.



The luxurious commodities that loaded down the galleons caused much of the wonder associated with the enterprise. These treasures included fine silks and linens, precious stones and spices, and manufactured items such as jewelry, porcelain and lacquerware. Spanish Philippine *oidor* Antonio Morga breathlessly described a cache of such items in 1609:

Raw silk in bundles...quantities of velvets...woven stuffs and brocades...quantities of gold and silver thread...damasks, satins, taffetas...musk, benzoin and ivory; also pearls and rubies, sapphires and crystal...precious stones of all colors; pepper and other spices; and rarities, which, did I refer to them all, I would never finish...²

Many of these items came from further afield than China. Cottons from Bengal and other distant regions eventually became available to the Spanish merchants; precious stones came from Indochina, pepper from Sumatra, lacquerware from Japan, and rare spices from the Moluccas. Typically the Spaniards acquired them at Manila from regional merchants eager to tap into the supply of Spanish silver. The lure of this silver, and centrality of location, made Manila the leading entrepôt of the East in its day.

Ever ambitious and monopolistic, Spanish officials soon adopted a system of purchasing Chinese trade goods en masse, the *pancada*, whereby they attempted to procure the entire annual shipments of goods, and prevented the worst excesses of price gouging. In an ingenious and progressive bid to support merchants and other resident Spaniards, a system of entitlement emerged whereby each citizen (*vecino*) of the colony was allotted lading space on the galleon, represented by a certain number of vouchers, or *boletas*. As the decades passed, speculators, or the voracious charitable institution the *Casa da Misericordia*, came to control the greater part of the *boletas*. Widows, youthful heirs and unwary common sailors and soldiers parted with their *boletas* for ready cash, but were consequently cut out of the trade's huge profits. Within a few decades, the bulk of the trade came under the control of a small coterie, but collectively or individually, the galleons' cargoes became the sustenance for the colony.

Great wealth was obtained by many of the Manila merchants; beautiful homes were built and lavish lifestyles enjoyed. Fiestas upon the arrival of the galleon from Mexico were mirthful and decadent, and foreign travelers tell of the sloth of the wealthy *Manileños*. Some Spaniards stayed on in the colony, and many became large land-

owners, or *encomenderos*. Others returned to Mexico or Spain with their earnings. Other merchants invested in the trade from New Spain (Mexico), though Manila regulations forbade it.³ Many, however, became victims of the vicissitudes of the far-flung enterprise, losing fortune or life to shipwreck or other hardships of the crossing. The proliferation of beggars, widows and orphans attested to the risks of the trade.

The long voyage across the Pacific inspired awe, and dread. Westbound, the journey was a bearable, even pleasant, three months along the prevailing trades. Galleons departed Acapulco in late winter, arriving at Manila in the spring, usually without incident. “They always run in a straight line in a smooth sea, before the wind,” exaggerated one passenger, “as if they were in a canal.”⁴ The eastbound return was a different matter altogether. The voyage took approximately six months, sometimes longer—an extraordinarily long time to be at sea—and was often beset by storms in the Philippine Sea

and as far north as Japan. Galleon departures were often delayed due to bureaucratic or other reasons, increasing the risks of encountering monsoon rains or typhoons (*baguños*).

The length of the voyage caused much discomfort, illness and loss of life. Storms sent many ships and men to their graves, or forced returns (*arribadas*) to Manila. In the case either of shipwreck or *arribada*, the year’s profits were lost to the colony, for there was typically only one galleon annually. For Manileños, there was no other income until agriculture and ranching took hold in the eighteenth century. Tribute and largesse from the Mexican treasury (the *socorro*) supported the colony, but for most Spanish merchants and settlers, the fabled wealth and glamour often remained elusive.

Over the course of imperial history, the Manila galleon was marginalized. As early as 1591, the trade was restricted to two galleons per year, cargo not to exceed 250,000 pesos’ value at Manila. This was designed to facilitate or obviate inspection, and to keep the alarming amount of silver escaping from the empire somewhat in hand. Merchants in Seville, in particular, lobbied for the curtailment of the trade. This was the great irony of the Manila trade—that Europeans spent centuries struggling to establish direct trade with China, and when

Below: The sweltering port of Acapulco, under the guns of the Fort of San Diego, sprang to life when the galleon arrived.

Facing page: Detail from a 1618 Dutch map of Acapulco, courtesy of the Bibliothèque Nationale de France; this page, Arnoldus Montanus, 1671





The Spanish met Asia's insatiable demand for silver with these coins, creating the first worldwide monetary system. Minted in the Americas from silver mined under grueling conditions, they were accepted everywhere. When small change was scarce, *ocho real* coins ("pieces of eight") could be cut into eight "bits." Because these coins were legal tender in the U.S. into the 1800s, Americans still occasionally refer to a quarter as "two bits."

From "Treasures of the Manila Galleons," courtesy Edward and Saryl Von der Porten

it was finally achieved, the threat of its success caused its sponsors to attempt to limit or squelch it. Thus we find Philippine governors begging repeatedly for a higher trade allowance, begging for more soldiers and settlers, begging for additional financial assistance, begging for permission to trade overtly with Portuguese Macau, even occasionally suggesting abandoning the colony. Manila became a victim of its own potential.

The restrictions helped to foster smuggling of legendary proportions aboard the already richly-laden ships. The legend was enhanced by four British captures of Manila galleons (1587, 1709, 1743 and 1762), from which word spread widely of the unimaginably vast sums of wealth being transported. A rare inspection at Acapulco in 1637 revealed that ten times the permitted amount of cargo was being shipped.⁵

Further, the priorities of Spanish policymaking rarely included the Philippines. From the moment of the colony's founding, the Crown was preoccupied with challenges that precluded rapt attention to Manila. From the Inquisition to the peninsular expulsions to the administration of America to the constant European wars to Habsburg and Bourbon dynastic concerns, attention was constantly directed elsewhere. Even the British occupation of Manila during the 1760s failed to make the colony a priority. This is not to say that its existence and administration were ignored; on the contrary, they received attentive review. Instead, hampered by this multiplicity of concerns, the most far-flung empire yet to appear in the world was unable to expend the initiative or provide sufficient resources to realize its colony's potential.

The viability of the trade, and the splendor of Manila, peaked between approximately 1610 and 1640. During this time, silver was plentiful, suppliers of luxuries active, construction in Manila and in the Cavite shipyards booming, and competitors few. A number of factors diminished the success of the trade and the colony thereafter. Dutch incursions proved damaging, the fall of the Ming in 1644 chaotic, and the opening of Canton to Western merchants in 1685 debilitating. The hostility of Japan to Catholics, too, proved disadvantageous, as did an earthquake that devastated Manila in 1645, and flooding of Mexico City between 1628 and 1633. The incursion of Northern Europeans into the Caribbean created new challenges and expenses during the 1630s, and decreasing silver production after 1620 was detrimental to the imperial economy as a whole.⁶ In Europe, the Thirty Years' War and rebellions in Cataluña and Portugal devoured resources, and the success of Sevillano merchants in restricting the trade all had their effects.

The galleon trade carried on, however, until 1814, continuing to link Madrid and its most distant colony. It still brought silks, porcelain, devotional items, and the tortoise-shell combs and embroidered silk shawls (*mantones de Manila*) that had become characteristic dress for women in Spain and her American colonies. The trade still supplied the enormously successful Philippine missions with wine, wafers and prelates. It survived the challenge of the short-lived Philippine Company of the 1780s, the Bourbon monarchy's attempts at enlightened economic and imperial reorganization, and arguments that the resource-draining colony be abandoned altogether, but ultimately the trade foundered on the rocks of Mexico's War of Independence.

For almost 250 years, the galleons carried their treasures across the vast Pacific. They pioneered trans-Pacific trade, in the longest-enduring and furthest-flung regular maritime trading voyage during the Age of Sail. At its peak, the Manila-Acapulco trade was one of the great commercial and logistical achievements in world history. It was also the theater for a great deal of heroism as well as hardship and oppression, and saw the creation of an extraordinarily ambitious and successful economic system. The rich subject of the galleon trade, as the articles on the following pages attest, is no longer being tarnished by neglect, nor by the subsequent torpor of the economy of the great port on Manila Bay.

Notes

- 1 While his successful passage followed that of mutinous captain Alonso de Arellano by several weeks, Urdaneta is generally accorded the honor of having discovered the key to traversing the Pacific from the West.
- 2 Benzoin is a balsamlike tree resin used in medicines and perfumes. Quoted in William Lytle Schurz, *The Manila Galleon* (New York: Dutton, 1939), 74. Schurz's book remains important; drawing upon decades of his research, it was the first to describe the galleon trade in significant depth and detail. With an eye for effective anecdotes and admirable thoroughness, his work has yet to be surpassed. In previous histories of Spain and its empire, the Manila galleon received scant attention as a curiosity, or a quaint but marginally significant adventure.
- 3 Mexican scholar Carmen Yuste-López and American Louisa Schell Hoberman have emphasized the integral participation of Mexican merchants in the trade. Yuste-López, *El comercio de la Nueva España con Filipinas* (Mexico: Instituto Nacional de Antropología e Historia, 1984); Hoberman, *Mexico's Merchant Elite, 1590-1660: Silver, State and Society* (Durham: Duke University Press, 1991).
- 4 Giovanni Francesco Gemelli Carreri, *A Voyage to the Philippines* [1697] (Manila: Filipiniana Book Guild, 1963), 138. Such contemporary travelers' accounts offer generally grim impressions of the voyages, and may not have been widely read. Antonio Morga's *Sucesos de las Islas Filipinas*, quoted earlier, was written in 1609 but not published until the twentieth century. Dominican Father Francisco Domingo de Navarrete told of being shipwrecked off southern Luzon in 1653. J. S. Cummins, ed., *The Travels and Controversies of Friar Domingo Navarrete, 1618-1686* (Cambridge: Hakluyt Society, 1962).
- 5 William J. McCarthy, "Between Policy and Prerogative: Malfeasance in the Inspection of the Manila Galleons at Acapulco, 1637," *Colonial Latin American Historical Review* 2, no. 2 (spring 1993). The author, and scholars including Katherine Bjork, Antonio Garcia-Abásolo, John Headley and Ostwald Sales-Colín, is among those currently scouring documentary sources for new insights into various aspects of the topic. McCarthy, "A Spectacle of Misfortune: Wreck, Salvage and Loss in the Spanish Pacific," *The Great Circle* 17, no. 2 (1995); "The Yards at Cavite: Shipbuilding in the Early Colonial Philippines," *International Journal of Maritime History* 7, no. 2 (December 1995); Bjork, "The Link that Kept the Philippines Spanish: Mexican Merchant Interests and the Manila Trade, 1571-1815," *Journal of World History* 9, no. 1 (1998); Garcia-Abásolo, "Spanish Settlers in the Philippines (1571-1599)" in Florentino Rodas, ed., *Estudios sobre Filipinas durante el Período Español* (Manila: Instituto Cervantes, 1998); "The Private Environment of the Spaniards in the Philippines," *Philippine Studies* 44, no. 3 (1996); Headley, "Spain's Asian Presence, 1565-1590: Structures and Aspirations," *Hispanic American Historical Review* 75, no. 4, (1995); Sales-Colín, "El movimiento portuario de Acapulco: un intento de aproximación (1626-1654)," *Revista Complutense de Historia de América* 22 (1996).
- 6 In recent decades scholars have increasingly recognized the global importance of the flow of silver. See, for example John TePaske's ground-breaking "New World Silver, Castile, and the Philippines, 1590-1800" in John F. Richards, ed., *Precious Metals in the Medieval and Early Modern Worlds* (Durham: Carolina Academic Press, 1984); Peter Bakewell, *Silver Mining and Society in Colonial Mexico: Zacatecas, 1546-1700* (Cambridge: Cambridge University Press, 1971). Dennis O. Flynn and his collaborators have underscored this significance of the trade to Spanish Imperial history and the global economy. Flynn and Arturo Giraldez, "Silk for Silver: Manila-Macao Trade in the Seventeenth Century," *Philippine Studies* 44, no. 1 (1996); "Born with a 'Silver Spoon': The Origin of World Trade in 1571," *Journal of World History* 6, no. 2 (1995); Flynn, Lionel Frost, A. J. H. Latham, eds., *Pacific Centuries: Pacific and Pacific Rim History since the Sixteenth Century*, (London: Routledge, 1999); Flynn and Arturo Giraldez, eds., *Metals and Mines in an Emerging Global Economy* (Brookfield, Vermont: Variorum, 1997).





Alejandro Malaspina.

Malaspina in the Pacific:

Spanish Scientific Exploration in the Age of Reason

By Enrique Porrúa

The Malaspina Expedition was not only the largest scientific effort ever made by the Spanish monarchy, it was also the most important expression in Spanish history of the attitudes of the eighteenth-century European Enlightenment, which historians have christened the Age of Reason. The fact that the expedition has been almost unknown outside Spain is a result of one of the tragedies of Spanish history: the eclipse of this bright moment by the darkness of political instability at the century's close, and the chaos of war which followed it. During the eighteenth century, however, political reform, social development, economic growth, military reorganization and rationalization through scientific knowledge characterized the national life of Spain and almost every country in Western Europe. As in earlier centuries, Spain played a significant role in European affairs thanks to the profits acquired from the immense empire she controlled in America. While for Spain the seventeenth century was one of depression and decline, the eighteenth century was, above all, one of achievement. Spain in fact experienced unparalleled development, particularly under the twenty-nine year rule of King Carlos III, crowned in 1759.

In earlier times, belligerent enthusiasm for conquest moved Spanish adventurers to win as many territories as possible for the crown. The motives were religious expansion and financial gain: the famous "Gold, God, and Glory."¹ In the late eighteenth century, however, Spanish attitudes toward her dominions were tempered by Enlightenment ideals. The Enlightenment was not the spontaneous appearance of a revolutionary new way of thinking, but was instead the result of the maturation of ideas introduced by the Humanist movement during the fifteenth and sixteenth centuries, combined with the rationalism of the scientific revolution of the seventeenth

century. Like their predecessors, the “enlightened” explorers also looked for economic gain, but did so from a very different perspective. The hunger for conquest, as understood in the conquistador era, was extinguished; instead, the ilustrados (“enlightened ones”) re-explored previously discovered territories and observed them through the eyes of science, seeking greater knowledge and an improved exploitation of their resources. In the phrase of the historian Iris Engstrand, “the hope of the Spaniards, however, unlike the French *Philosophes*, was that the discovery and application of useful knowledge would improve life in a practical way.”² Utilitarian thinking thus guided the many scientists, naturalists, and seamen who believed with blind faith in the potential importance of their discoveries. The idea of integrating these new regions into a coherent scientific and economic system fit more closely with Enlightenment ideals than the idea of merely exercising control over them. Thus, scientific rigor characterized these expeditions, as did the broad objective of regulating the known world by subjecting it to rational analysis.

In general terms, the scientific enterprises launched by the European monarchies were a peaceful arena where the most outstanding scholars from different European scientific institutions participated in common projects with an unprecedented cooperative aim. It is important, however, to note that official interest in science often hid other purposes, such as the gathering of strategic information to further military objectives, or the undertaking of social and economic studies intended to improve productivity and revenue.

In addition to the scientific motivation for these enterprises, the emergence of rival European powers as serious threats to Spanish hegemony in the New World was a factor. England had secured her permanent settlements in North America. While her ships, along with the French and the Dutch, were hunting whales off Cape Horn in seas claimed by Spain, other English subjects occasionally harassed Spanish ports in the colonies, challenging national security. In the name of science, English, Swedish, German, and French scholars, led by experienced seamen, explored the world as far as their ships could take them. These expeditions were, to a great extent, also organized to identify strategic territories beyond Spanish control which could offer advantageous positions to counter Spanish hegemony. For this reason, Spanish scientific expeditions had the additional role of observing the movements of foreign competitors.³

On October 10, 1788, captains Alejandro Malaspina and José Bustamante y Guerra presented their proposal for a political-scientific expedition around the world to the office of Don Antonio Valdés, Minister of Marine. The thirty-four-year-old Malaspina, born in Italy, had entered the Spanish navy in 1774, was commissioned ensign two years later, and by 1789 had ascended to ship captain. Bustamante, five years his junior, had joined the Spanish navy in 1770.⁴ He was commissioned ensign in 1774 and reached the rank of frigate

Enrique Javier Porrúa is an Associate Professor of Spanish Language and Literature and former Foreign Languages Department Chair at the University of North Carolina at Pembroke. He holds a Ph.D. in Spanish Literature from Texas Tech University. Enrique has taught a variety of courses. His research interests include the Spanish maritime frontier, Spanish-American ethnohistory, seventeenth-century Spanish maritime exploration, and the history of Spanish literature.

Mount St. Elias towers over *Descubierta* and *Atrevida* as they venture into Alaskan waters.

Courtesy Museo de America, Madrid.

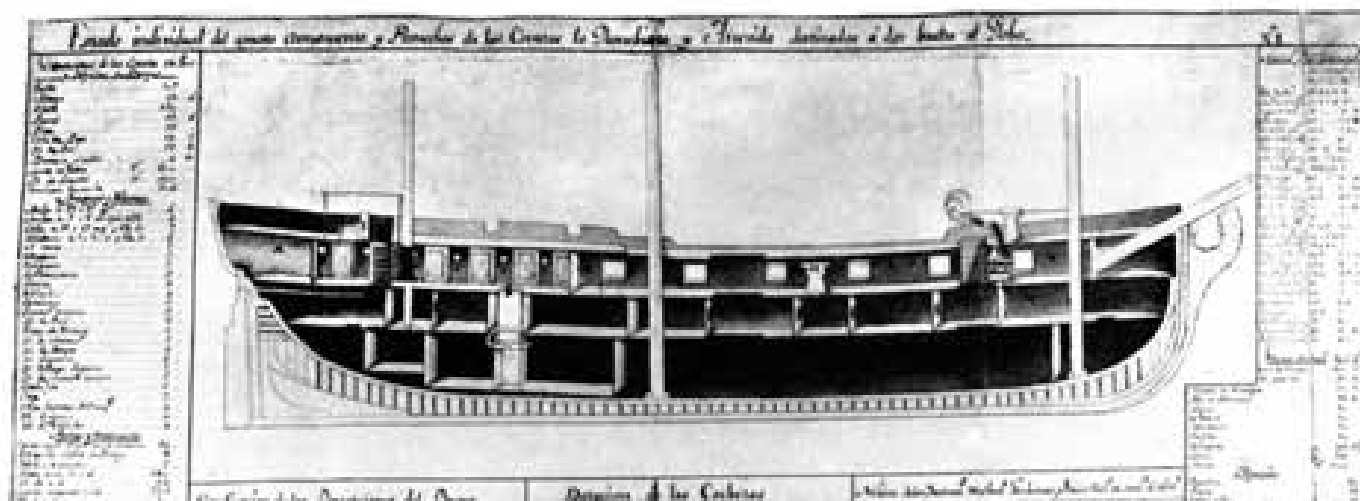
captain a decade later. Their proposal, which was intended to be similar to the expeditions of Captain James Cook and the Frenchman Jean F. G. de La Pérouse, was to sail to the Pacific coast of the Americas and proceed north to 70° latitude, sounding, charting, and observing geological, zoological, botanical, and ethnological phenomena, and definitively determining the existence or non-existence of the Strait of Anián, supposedly linking the Pacific with the Atlantic. Their plan received speedy approval from King Carlos III on October 14; with royal permission to determine the organization and preparation of all aspects of the expedition, the two officers began planning the details of the enterprise.⁵

For the expedition to succeed, the utmost attention to detail was vital. For this reason, Malaspina and Bustamante corresponded with the most important European scientists and scientific institutions of their time. The atmosphere of scientific cooperation in Europe made possible consultations with the Royal Society of London, the Royal Académie of Paris, and scientific societies in Torino, Modena, and Ferrara. Malaspina and Bustamante also sought advice from individual scientists, including Italian naturalists Lazzaro Spallanzani, Paolo Greppi, and Gherardo Rangoni, the English chemist George Pearson, Captain King of Cook's last voyage, Cook's botanist Sir Joseph Banks, geographer Alexander Dalrymple, the French astronomer Joseph LaLande and horologist Ferdinand Berthoud.⁶ Their purpose was to fulfill the scientific aims of the expedition using the most innovative techniques, the most accurate taxonomic procedures, and the newest scientific information available in Europe.

This cutaway view lays bare Malaspina's corvettes *Descubierta* and *Atrevida*.

Constructed especially for the expedition, they included compartments for laboratories and art studios.

Three factors determined the type of ship selected for the expedition: the previous experience of Malaspina with the frigate *Astrea* in the Philippines (1786-1788), the results of other European expeditions, particularly those of the British and French, and the experience of generations of Spanish maritime explorers. All of them suggested the use of small ships. Difficulties with the initial plan





Malaspina's two corvettes encountered heavy weather, as shown at Cape Horn, but proved themselves sturdy.

to transform the bomb vessel *Santa Rosa de Lima* into a corvette led to a decision to build two new corvettes instead, since the expedition, planned to last three and one-half years, would require two specially-equipped ships to complete the long trip successfully. Each of them was designed to carry one hundred men, and included large storerooms intended to hold the species gathered by botanists and naturalists, and each was armed with twenty-two cannons.⁷ They were christened *Atrevida*--"Daring"-- and *Descubierta*--"Discovery"-- or, more properly, "The Discovered," a name in keeping with her mission of re-exploring Spain's existing territories.

Malaspina and Bustamante selected the officers personally. In December, 1788, Lieutenant Antonio de Tova Arredondo, who joined the expedition at Bustamante's request, was entrusted with the selection of the crew, which he was to recruit from the men of the arsenal of El Ferrol. The final complement of each corvette consisted of 102 men. In addition to seamen and troops, there were officer-astronomers, naturalists, physicians, priests, a master chartmaker, and pilots. The expedition's two naturalists, Luis Neé and Tadeo Haenke, were to search

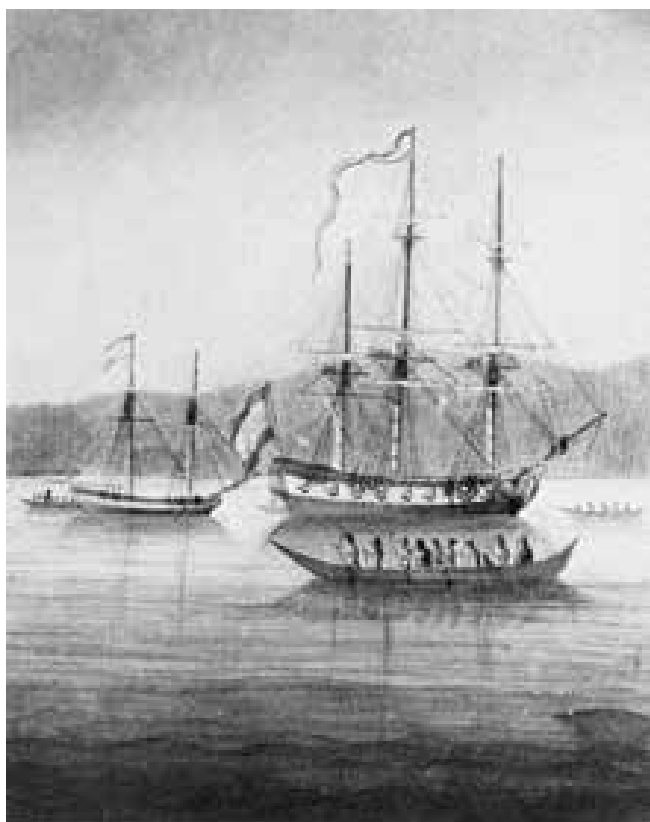
One of the Arnold chronometers carried by Malaspina.



Malaspina dispatched a contingent from his expedition to explore the Inland Passage between present-day Vancouver Island and the mainland.



At Port Mulgrave, in present-day Alaska, Tlingit people trade with Malaspina's men.



for botanical species and other natural resources. The artists Juan del Pozo, José Guiú, Juan Ravenet, Fernando Brambila, José Cardero, and Tomás Suría would draw the items collected along with ethnographic images of the native population, both Indian and Creole, and impressions of the towns they visited.

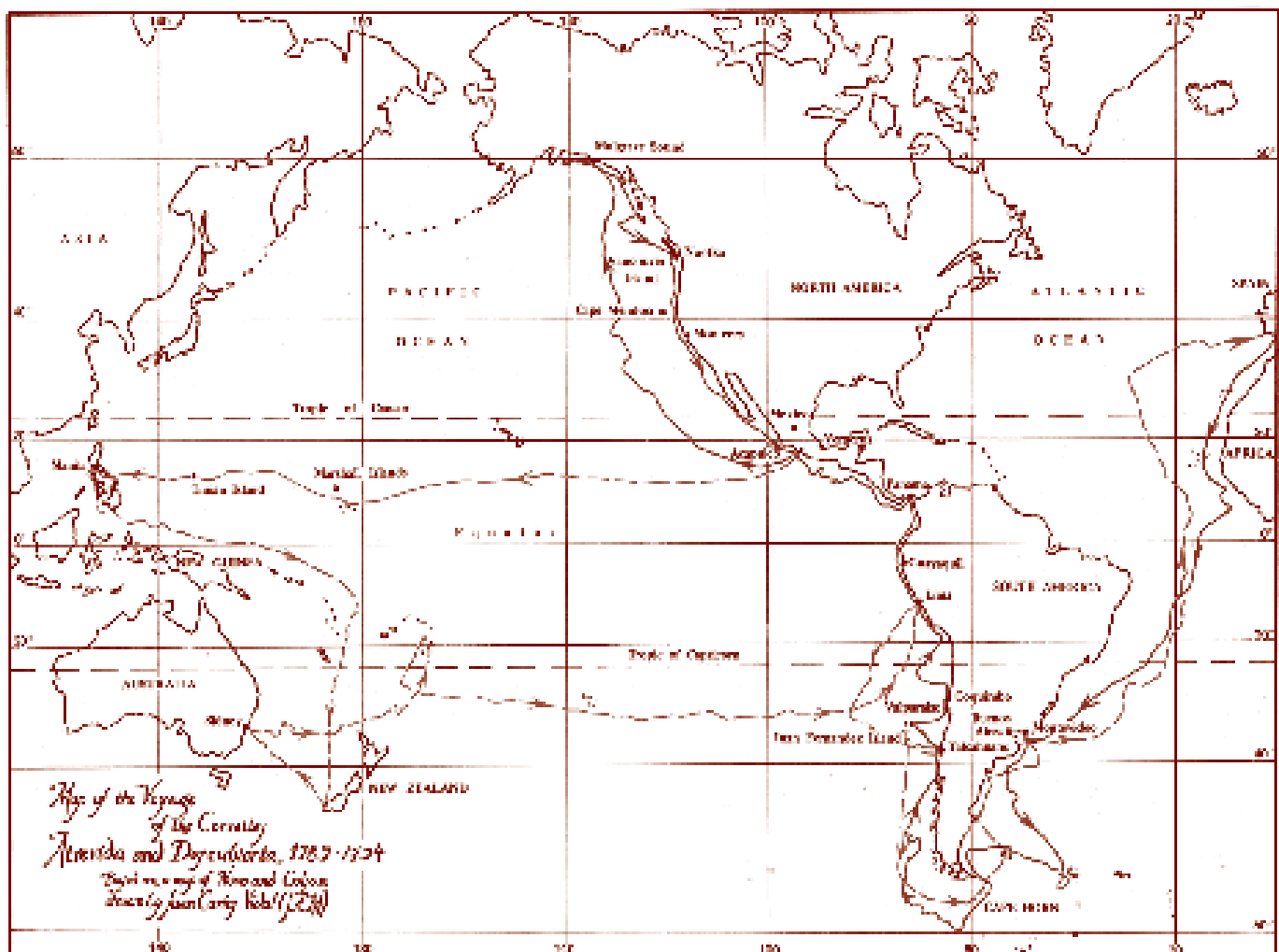
The expedition also carried extraordinary scientific equipment. The importance given to the enterprise is apparent from the fact that of the sixty-eight instruments borrowed by Malaspina from the Royal Observatory of Cádiz to equip the corvettes, sixty-two were acquired in London specifically for use on the expedition. Thirty-two of the sixty-eight were instruments for astronomic and geodesic observation, twelve were clocks (among them four Arnold chronometers), and eight were meteorological instruments.⁸

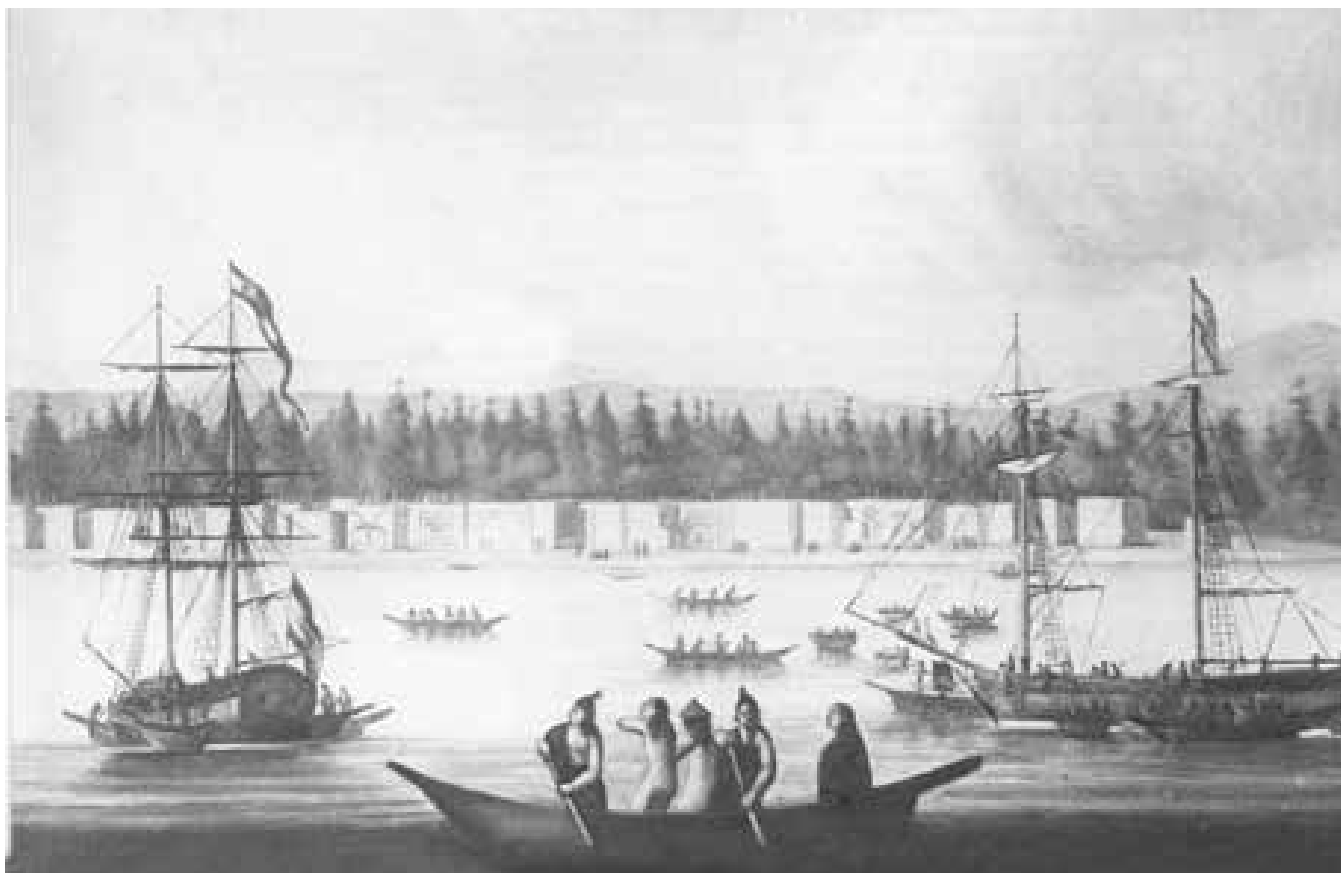
On July 30, 1789, Captains Malaspina and Bustamante gave orders to weigh anchor in Cádiz. For more than sixty-two months, the *Descubierta* and *Atrevida*, commanded by Malaspina and Bustamante, respectively, surveyed the coasts of the Spanish empire in America and the Pacific Ocean. Their first destination was the Atlantic port of Montevideo, where they spent a few days gathering information and accomplishing

scientific tasks. Then they sailed from Montevideo to Puerto Deseado, where they anchored to make some observations that resulted in excellent ethnographic data about the native peoples of Patagonia. From Puerto Deseado they sailed to Puerto Egmont in the Malvinas (Falklands), and thence by way of Cape Horn, which they rounded without incident, to San Carlos in Chile. Here they began their observations again, gathering important information about the area's native population, local economy, and natural resources. For the next nine months the expedition visited the important ports on the Pacific coast of South America, including Talcahuano, Valparaíso, Coquimbo, Arica, Callao, Guayaquil, and Panamá. Everywhere the officers and the naturalists accomplished the tasks for which they were commissioned. On December 16, 1790, the two corvettes weighed anchor and sailed to Acapulco.

From this port the *Atrevida* sailed for the port of San Blas, on the Mexican coast opposite Baja California. After completing the work of re-provisioning with food, water, and wood, and acquiring a ship's boat, they sailed back to Acapulco where the *Descubierta* was waiting. The following segment of the voyage took them directly to the Northwest Coast, where they were commanded to seek the elusive Northwest Passage, this being one of the most important objectives of the expedition. The two corvettes met in Puerto Mulgrave, in Yakutat Bay, from which they proceeded to Nootka, on what is presently known as Vancouver Island. The stay in these ports resulted in some of the most interesting narratives produced by the expedition's officers concerning their experiences with Native Americans. From Nootka they returned south, anchoring in Monterey.

Since their only mission in this California port





Courtesy Museo Naval, Madrid.

was to accurately determine its longitude and latitude, these days were dedicated to rest, and the men spent most of their time hunting, fishing, and taking geographical and ethnographical notes on the surrounding area. The two corvettes were ready for sea again on September 25, 1790. Both returned to Acapulco, but followed different courses. While the *Descubierta* sailed directly to her destination, the *Atrevida* explored the coast from Monterey to Acapulco, visiting San Diego en route and charting Point Loma. From Acapulco, the voyage began a new phase, sailing westward to the Philippines. En route they called at Umatac, Guam, then in the Marianas Islands, and visited in turn Palapag, Sorsogon, Manila, Taipa, Macao, Manila again, Zamboanga, Puerto Jackson (Sydney), and Bahía del Descanso in the Friendly Islands. All these places provided valuable data for the explorers, who accomplished tasks similar to those they had completed on the American coasts.

The expedition's original intent, which was purely scientific, was interrupted by news they received in Callao: Spain was at war with France. Immediately, the scientific expedition was transformed into a military mission and ordered to escort a convoy of merchant ships from South America to Spain, under the potential danger of enemy attacks. After gathering all the ships from the commerce of Lima and Montevideo, the convoy weighed anchor at Montevideo on June 21, 1794. Three months later, on September 21, 1794, the

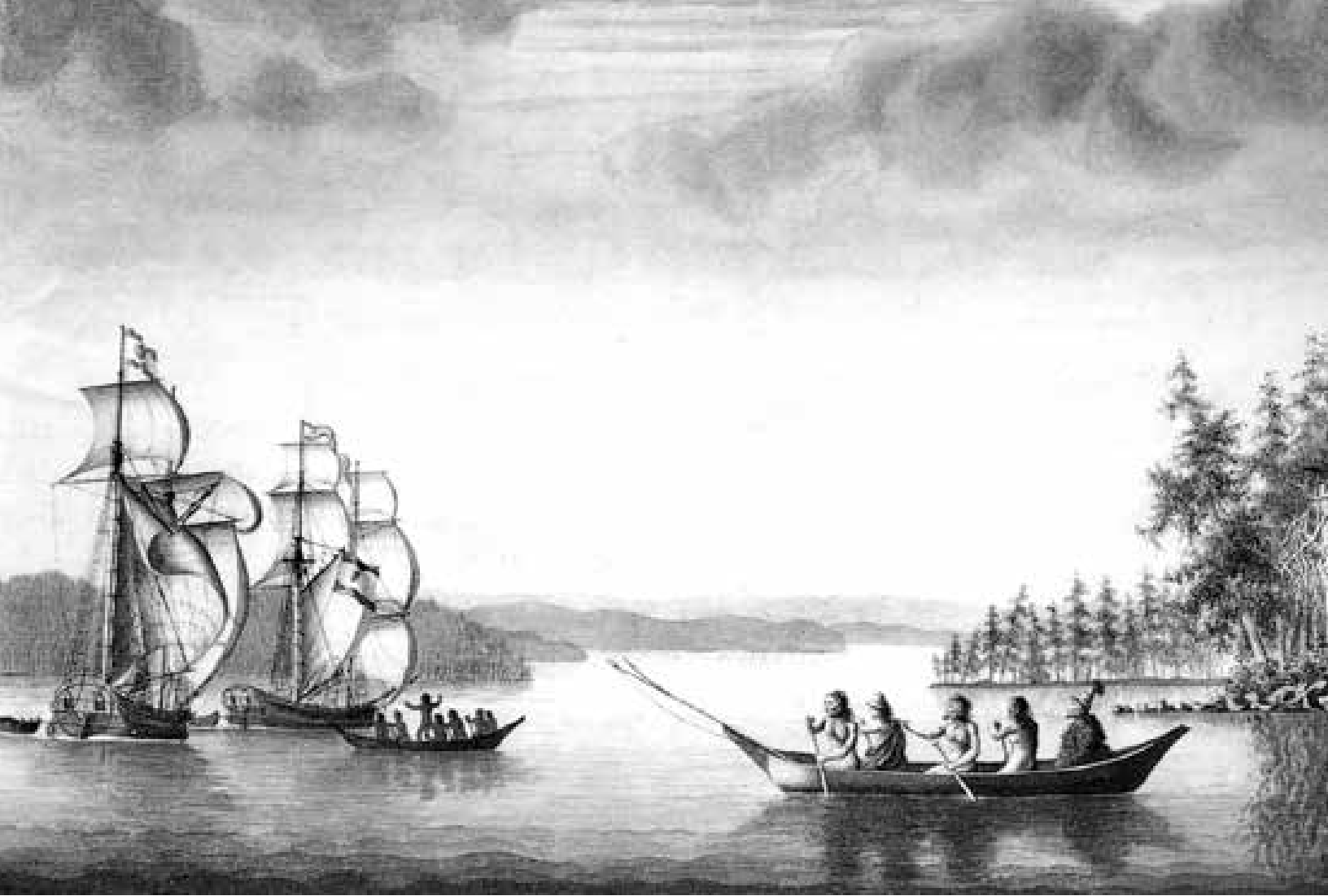
expedition finally and happily reached the port of Cádiz, after five years and two months of hard work in the service of both science and the Spanish crown. Only ten seamen, four on the *Descubierta* and six on the *Atrevida*, were lost to disease or accidents, a virtually unheard-of feat.

The daily activity of Malaspina's expedition is known to us thanks to the considerable number of documents it produced, but circumstances prevented its work from becoming well known in its commander's own lifetime. When the expedition departed Cádiz in September 1789, the implications of the French Revolution were still unclear. Returning there five years later, they found that the Revolution had seriously affected Spain, and the new king, Carlos IV, with his wife, María Luisa, was governing the country through the omnipresent and erratic Minister of State Manuel Godoy. Largely due to Malaspina's difficult political circumstances after the expedition's return, the publication of his report and other documents produced by the officers during the trip was impeded.⁹

At Cádiz, Malaspina ordered his officers to collect all written information about the expedition in order to prepare the official report. In addition to the preparation of the final work, he was concerned with other matters. Probably influenced by the anti-Godoy atmosphere in Madrid, Malaspina was uncomfortable with Godoy and the uneasy peace he had made with revolutionary France.¹⁰ He addressed an unsolicited letter entitled "Reflections About the Peace Between Spain and France" to Godoy, urging that he reconsider his policy. Though the letter was severely criticized at Court, Godoy attempted to reconcile the differences between them by signing Malaspina's promotion to *capitán de navío*.

Malaspina, however, was less interested in promotions than he was in the prosperity of his adopted country.¹¹ The Italian-born officer did not cease his intrigues against Godoy, who he rightly feared was ruining Spain, and formed a conspiracy to overthrow him. This plot, when discovered by Godoy, cost Malaspina dearly. He was arrested and all manuscripts, books, and documents concerning the expedition confiscated and kept "in a safe place" under the custody of the archivist of the Secretary of State and Navy, Florentino Pozo. A few days later, the Count del Pinar took these papers with him to El Escorial. Malaspina was tried, incarcerated for six years and then exiled to Italy for the rest of his life.¹²

Despite these circumstances, Malaspina still had time to deal with the publication of the official report of the expedition. By royal order of July 26, 1795, he received permission to prepare his diary for publication under the supervision of Manuel Gil, who was named censor and general editor of the work. Malaspina, who chose not to edit the report himself because of his inferior Spanish and lack of skill as a writer, nevertheless opposed Gil's ideas on how to compose the treatise, and wanted to keep personal control over its composition.¹³ This conflict delayed publication of the report for the remainder of its author's lifetime.



Courtesy Museo Naval, Madrid.

Due to Malaspina's unfortunate luck the publication of the results of the expedition seemed to become virtually impossible. In 1795, Dionisio Alcalá Galeano, one of the expedition's officers and later commander of the *Sutil* and *Mexicana*, (sent at Malaspina's urging for one final search for the Northwest Passage in 1792), asked Minister of Marine don Pedro Varela not to name him in the royal order issued after Malaspina's arrest, in an unsuccessful attempt to prevent the expedition's documents from being confiscated.

On November 29, 1795, however, the king entrusted José Espinosa y Tello of the Hydrographic Bureau with the publication of Alcalá Galeano's materials regarding the Strait of Juan de Fuca, particularly the maps and the account of the voyage. Thus, the documents of one aspect of the expedition were finally published in abbreviated form by the Imprenta Real in 1802.¹⁴ After difficulties due to the political and strategic importance of its contents, an atlas containing the expedition's maps was also published in 1802 with the title *Atlas Marítimo de América*. Not until the 1980s and early 1990s, however, were the Malaspina Expedition's documents at last published in full, a long-overdue testimony to Spanish exploration in the Age of Reason.¹⁵

Notes

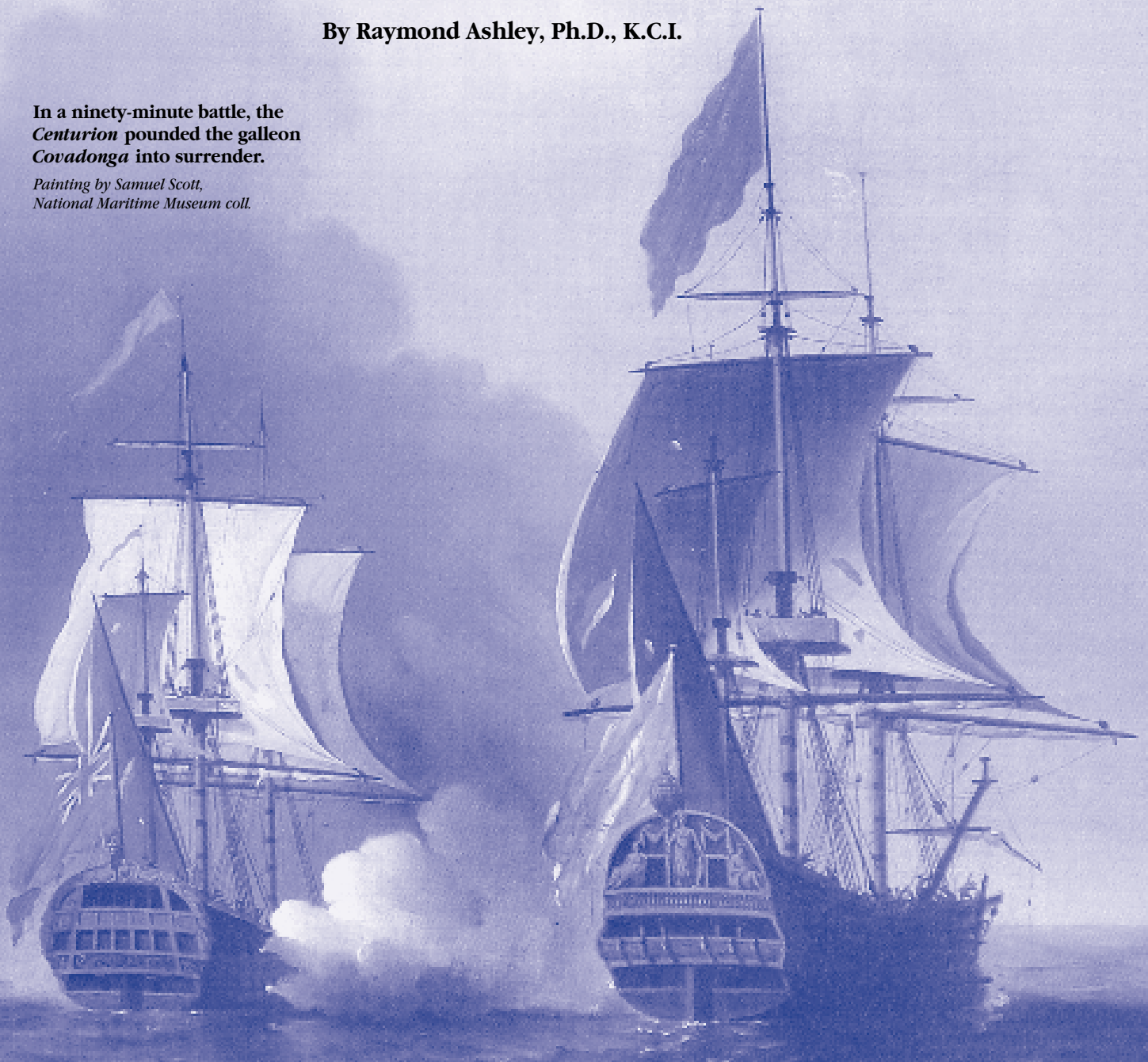
- 1 W. Cook, *Flood Tide of Empire: Spain and the Pacific Northwest, 1543-1819* (New Haven: Yale University Press, 1973).
- 2 Iris Engstrand, *Spanish Scientists in the New World. The Eighteenth Century Expeditions* (Seattle: University of Washington Press, 1981), xi.
- 3 See A. Mones, *La historia natural de la Expedición Malaspina en el contexto científico de la época* (Fauna y flora del Uruguay, Montevideo: Museo de Historia Natural, 1996); S.P. Herda, *Malaspina among the Enlightened Explorers: Nationalistic Naturalism or Intellectual Imperialism?* (Vancouver: Simon Fraser University, 1992); A. Galera Gómez, *La ilustración española y el conocimiento del Nuevo Mundo: las ciencias naturales en la Expedición Malaspina (1789-1794): la labor científica de Antonio Pineda* (Madrid: Consejo Superior de Investigaciones Científicas, 1988); Angeles Calatayud Arinero, *Católogo de las expediciones y viajes científicos españoles a América y Filipinas (siglos XVII y XIX)* (Madrid: CSIC, 1984).
- 4 The reasons for the two young Italians joining the Spanish navy are not entirely clear, although it is known that Malaspina went to Spain under the influence of his uncle, the Duke of Fogliani. Carlo Castelli, *Alessandro Malaspina* (Milano: Edizioni Alpes, 1929), 5-12; Emilio Soler Pascual, *La conspiración Malaspina (1795-1796)* (Alicante: Instituto de Cultura Juan Gil-Albert, Diputación de Alicante, 1990), 19-20.
- 5 María Dolores Higuera, *Católogo crítico de los documentos de la expedición Malaspina (1789-1794) del Museo Naval* (Madrid: Museo Naval, 1985), 19. This is an excellent, exhaustive work. Higuera collects all documents as bibliographic entries in sections organized as economic, political, administrative, natural history, cartographic, etc. Each section is preceded by an explanatory introduction. Two further volumes appeared in 1988 and 1992.[#] This "official" diary was masterfully edited by Mercedes Palau, Blanca Sainz, and Arézazu Zabala.[#]
- 6 Ibid., 21-22.
- 7 Juan Castanedo Galán, "Elección del tipo de barco para la expedición mandada por Malaspina," *Malaspina y Bustamante '94* (Cádiz: Ministerio de Asuntos Exteriores. Universidad de Cantabria, 1992), 26-30.
- 8 Francisco José González, "Instrumentos del Real Observatorio destinados a la Expedición Malaspina," *Malaspina '92* (Madrid: RAH, 1994), 230.
- 9 Eric Beerman, *El diario del proceso y encarcelamiento de Alejandro Malaspina (1794- 1803)* (Madrid: Editorial Naval, 1992).
- 10 Ibid., 38.
- 11 Ibid., 47.
- 12 Higuera, 21; Beerman, 57-88.
- 13 Beerman, 49-55; Soler Pascual, 35.
- 14 *Relación del viaje hecho por las goletas Sutil y Mexicana para reconocer el estrecho de Juan de Fuca* (Madrid: Imprenta Real, 1802). In 1958, José Porrúa Turanzas published a limited facsimile edition in Madrid, and in 1991, Dolores Higuera and María Luisa Martín-Merá of the Museo Naval published a second facsimile edition. As the former edition ran only to 250 copies and the latter only 1,500 and was not for sale, this document is extremely difficult to find.
- 15 Mercedes Palau, Blanca Sainz, and Aránzazu Zabala, eds. *Viaje científico y político a la América Meridional, a las costas del Pacífico y a las Islas Marianas y Filipinas verificado en los años de 1789, 90, 91, 92, 93, y 94 a bordo de las corbetas Descubierta y Atrevida, mandadas por los capitanes de navío D. Alejandro Malaspina y D. José Bustamante y Guerra* (Madrid: Ediciones el Museo Universal, 1984). The largest collection of documents concerning the Malaspina expedition is today held by the Museo Naval, Madrid. Other documents, including personal reports, charts, letters, and maps are held in institutions around the world. Most can be found in Madrid in the Archivo del Real Jardín Botánico, which holds documents concerning botanical studies, pictures, and drawings; the Archivo del Museo de América, which holds an important collection of drawings and ethnographic artifacts; the Archivo del Museo Nacional de Ciencias Naturales, holding documents of Antonio Pineda and other naturalists; the Archivo Histórico Nacional, and finally, the Biblioteca del Palacio Real, which holds collections of documents concerning the Malaspina conspiracy. In addition to those Archives in Madrid, there are collections in the Archivo General de la Marina, El Viso del Marqués; the Archivo General de la Nación, México; the British Library, London; and the Archive of the National Museum, Prague. Other materials of interest are located in numerous private and public archives in Spain, the United States, México, Uruguay, Chile, France, and Italy.

"such a dreadful and fatal passage"
**Anson's Arrival
in the Pacific**

By Raymond Ashley, Ph.D., K.C.I.

In a ninety-minute battle, the
Centurion pounded the galleon
Covadonga into surrender.

*Painting by Samuel Scott,
National Maritime Museum coll.*



Raymond Ashley, Ph.D., K.C.I., has been president and CEO of the Maritime Museum of San Diego since 1995. Dr. Ashley holds a BA in Anthropology from UC San Diego, an MA in Maritime History and Museum Studies from East Carolina University, and a PhD in History from Duke University. During his time at the Maritime Museum, Ray has overseen a significant expansion of its collection of historic and replica vessels. He guided the research, design, construction, and sailing of the galleon *San Salvador* - widely considered one of the most ambitious and successful projects ever brought to fruition at the Maritime Museum of San Diego.

In one sense, modern globe-spanning naval power may well have had its origins in an ill-advised and catastrophically executed attempt to hunt down a Manila galleon. It was this fabulous prize that in 1740 lured two powerful squadrons of European warships far beyond their natural limits with horrific consequences. Ultimately it was there, at the extremities of distance, disease, and despair, that the capture of a galleon helped set in motion a new understanding of what naval power could accomplish and what transformations would be necessary for it to realize its potential.

Until the latter half of the eighteenth century, the maritime nations of Europe very rarely conducted naval operations that took fleets of major warships beyond a six-to-eight-week radius of a base, and for good reason. If ships tarried at sea much longer than this, the sailor's diet of those times virtually insured that scurvy, caused by a number of dietary deficiencies (including vitamin C), would begin to exact a debilitating and accumulating toll on the effectiveness of any crew.¹ In consequence, despite the vast extent of maritime empires, European battlefleets were relatively short-ranged. It was the maritime geography of disease, as much as any other reason, that allowed the Spanish free rein to exploit their monopoly on Pacific trade unmolested by hostile naval force. Though Spanish assets in the Pacific were occasionally attacked by Japanese, Dutch, and English adversaries, these ventures tended to be high-risk entrepreneurial forays rather than naval expeditions, usually funded by investors and carried out by private individuals, bold or desperate, sailing under letters of marque when they sailed under any authority at all.

In the winter of 1739, declaration of the "War of Jenkins' Ear" against Spain provided England an irresistible pretext to commit formal naval forces in a hunt for the fabulous Pacific galleons that voyaged between Manila and Acapulco. English strategists Sir Charles Wager (First Lord of the Admiralty) and Admiral of the Fleet Sir John Norris proposed using two Royal Navy squadrons to deliver unprecedented and simultaneous attacks on the Pacific ports of Spain's American colonies while also displacing the Spanish from Manila itself, and snaring at least one of the galleons in the process. It was a breathtakingly ambitious scheme but also hopelessly unrealistic. To take the Spanish eastern stronghold of Manila, the two visionaries believed that a mere three hundred soldiers would suffice.²



***Covadonga* carried 1,313,843 pieces of eight like this one, plus 35,682 ounces of other silver.**

From "Treasures of the Manila Galleons," courtesy of Ed and Saryl Von der Porten; photo by John Wright

Wager and Norris nonetheless recognized two technical requirements for their project. First, the Navy would have to provide sufficient force to accomplish its aims, not the least difficult of which was the capture of a Manila galleon. Though not warships proper, by the mid-eighteenth century the galleons were large, well armed, well manned, and massively constructed with thick frames and hardwood planking said to be impervious to round shot. In 1704, when William Dampier and William Funnell attacked a Manila ship off Colima, the galleon drove them off without sustaining any damage, as shot was unable to penetrate her sides.³ In 1708, a few days after Woodes Rogers took the *Desengaño* off the coast of Mexico, his two small sloops of war attacked the far larger and richer galleon *Begoña*. The ships fought at close quarters for more than six hours, during which time the English put "not less than 500 shot into her hull," but "we could perceive that few of our Shot entered her Sides to any purpose."⁴ There was a material reason for this: "these large Ships are built at Manila with excellent Timber, that will not splinter, they have very thick sides, much stronger than we build in Europe."⁵ In 1721, John Clipperton fled from the prospect of engaging the *Santo Cristo* off Cabo San Lucas, according to George Shelvocke, "dreading the engagement with a ship that was always known to defend itself with some obstinacy," after sailing halfway around the world and enduring unspeakable tribulations in order to place his ship in just such a position.⁶ Clearly, it would take powerful warships to capture a big galleon. The second problem was both logistical and navigational—the safe delivery of this force, intact and effective, to the right place at the right time for the heavy metal to make itself felt.

As preparations to implement the scheme advanced, it grew more unrealistic still as plans also went forward to send a major force to the Caribbean and the entire Pacific project was reduced to a single squadron.⁷ The force assembled for the task would have seemed modest for European operations or the West Indies, but it was far more powerful than anything

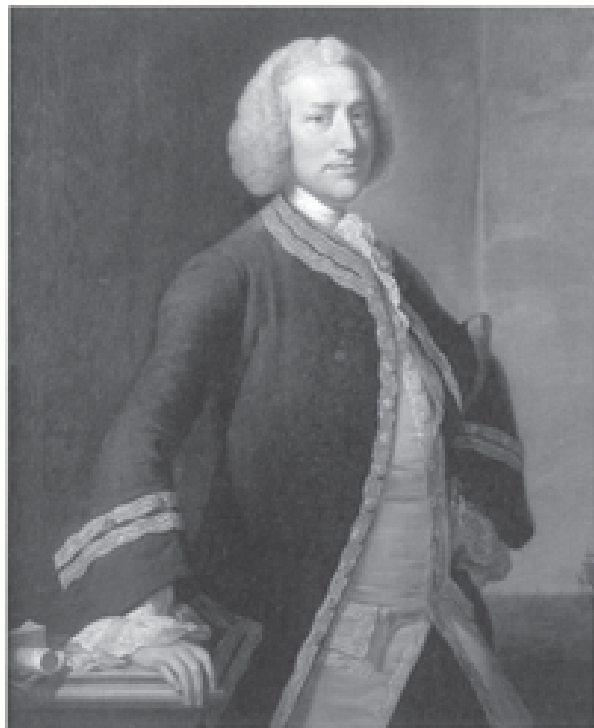
the British had ever sent to the Pacific, or would send for more than a century.⁸

Command of the expedition was given to Captain George Anson, a protégé of Norris with a solid reputation for good seamanship and independent capability, qualities which would be sorely tested.

The objectives of the expedition, though nominally a secret, were widely known throughout England with the result that Anson had trouble filling his crews, despite the obvious opportunities for sudden wealth in prize money. The reason was clear: extremely long voyages in naval vessels were regarded as a death sentence. In the end, about half the men who sailed with Anson were “pressed” involuntarily into service from waterfront establishments and passing merchantmen. Filling the requirement for troops proved even more of a problem, once an appreciation of the odds caused those in high places to reconsider committing a valuable front line regiment to the project. Instead, Anson was provided a scratch marine regiment filled by impressed pensioners from Chelsea Hospital. These new marines were all over sixty years of age, and many were over seventy; some had lost one or more limbs, and many had to be transported to the waiting ships by stretcher and hoisted on board by tackles. Only about half the men of the new regiment were active and ambulatory, and these deserted immediately. To make up for the loss of the invalids, Anson was sent 210 orphaned boys as “marine recruits.” These had no training or experience with firearms, and as it turned out, few of them would live long enough to acquire much.⁹

Unfortunately, Anson’s mission was just as well known in Spain, so that a squadron under the command of Admiral Don José Pizarro (a descendent of the conquistador of Peru) was prepared to put to sea on first news of Anson’s departure. Of the two, Pizarro’s squadron was the larger and more powerful. Pizarro’s orders encouraged him to beat the English into the Pacific, repair his ships, replenish his stores, restore the health of his crew at a Spanish port, and then ambush Anson as he struggled up the Chilean coast with his ships ruined and his men dying. The Spanish preparations

for the expedition were just as transparent as those of the English, so that both adversaries knew what they faced. Well matched for an Atlantic line-of-battle duel, both squadrons were poorly prepared to face the far more formidable Pacific enemies of distance, disease, and weather.



George Anson.

Painting by Sir Joshua Reynolds, National Maritime Museum Coll.

Thus it was that in September of 1740, the two doomed squadrons began their race southwards, heading toward a narrow and tempestuous patch of water at the bottom of the world. Until the moment that disaster overtook them, it appears that they were never far apart. In fact, were it not for the thick and murky weather that prevailed as they groped their way slowly down the coast of Patagonia, they may have been in sight on several occasions and the affair might have ended differently. The *Pearle*, for instance, became separated from the rest of her squadron for several days. When she sighted a group of warships and made sail to join them, they turned out to be Pizarro’s squadron flying false colors. *Pearle* barely managed to escape.

By the time the two squadrons reached the South Atlantic, large numbers of men began to sicken and die, chiefly from scurvy. In December, Anson and Pizarro (who was in the lead) pulled into separate ports on the South American coast for reprovisioning, recovery, and repairs.¹⁰ When Pizarro received word of Anson’s arrival by secret dispatch, however, he rushed to sea before completing his own reprovisioning, a move that would have fatal consequences.¹¹ Anson stopped once again at Bahia St. Julian, but upon receiving word that Pizarro was nearby, cancelled the striking of cannon down below in preparation for Cape Horn and ordered them back in their carriages on the gun decks. Then he too put to sea with minimum delay, expecting a battle. Thus it was that both squadrons approached the Horn with cannon up and ready, a condition which affected stability and safety in strong winds and heavy seas.

Racing to battle in the Pacific, both Anson and Pizarro decided to attempt the passage of Cape Horn by way of the Strait of Le Maire, despite contemporary belief that the strait was dangerous. Pizarro was about 150 miles ahead of Anson when he reached the strait, but his provisions and

water were very low, his men were dying from scurvy with increasing frequency, and starvation was rampant; rats were reportedly selling for four dollars apiece.¹² He was struggling westward past Cape Horn itself, when during nighttime hours the Admiral lost contact with three of his ships. The Spanish squadron was thus fragmented with its manpower waning, when on March 8 Cape Horn lived up to its reputation. "There came on a most furious storm from the N.W. which, in spite of all their efforts, drove the whole squadron to the eastward."¹³ From that moment, Pizarro's squadron ceased to exist as a military force; of his five ships, one foundered with all hands, another was dismasted and run ashore after a mutiny, and two others limped into Buenos Aires in ruin. Only the fifty-gun *Esparanza* made it to the Pacific, though hardly serviceable as a man-of-war. From her original complement of four hundred and fifty men, only fifty-eight remained alive by the time the ship raised the coast of Chile.¹⁴ Of the nearly three thousand men who set out with Pizarro, slightly over one hundred returned to Spain.¹⁵

As they made their own passage of the Strait of Le Maire, the English were blissfully unaware of what awaited them. The strait itself posed no problem navigationally, but the appearance of the place seems to have provoked a chilling sense of foreboding: "consisting of high craggy hills, towering above each other, mostly covered with snow, with deep horrid valleys, some few scattering trees, no plains, nor one cheerful green thro' all the dismal scene."¹⁶ *Centurion* was the first ship through. After completing the passage, Anson waited for the other ships to catch up. One by one they gathered, and for a short while enjoyed the comfort of one another's close company on the threshold of an enemy ocean. Some allowed themselves to think that "the Storms here were not so boisterous nor so long [in] Continuance as had been commonly reported."¹⁷ The ships then hauled their wind and stood away in the direction of Pizarro's

scattered squadron, at that moment driving toward them before the fury of a shrieking gale.

In all the accounts from the English survivors, what followed next seemed an endless nightmare. According to schoolmaster Pascoe Thomas,

from this time until May 25, we had nothing but the most terrible and dreadful storms, that I believe that it is possible for the Mind of man to conceive... The Sea went Mountains high continually, our Ship was nothing to them... [she] rolled almost Gunnel-to, the Sails were almost always splitting and blowing from the Yards; the Yards themselves frequently breaking; the Shrouds and other Rigging cracking and flying in Pieces continually; and what added to our Misery amidst those amazing and terrifying Scenes, we made very little Way to the Westward and Northward, wither we were now bound.¹⁸

Anson's ships were driven to the east and then for two weeks fought their way back against the wind and greybeard seas larger than any of them had ever seen.

Just after the middle of March, the English squadron weathered Cape Horn.¹⁹ It proved a sorely needed boost to the spirit when the ships were finally able to wear and head north, for the deterioration of the ships was but a pale reflection of the horror beginning to take place inside. Up to this point, scurvy had not been epidemic. Now, according to Thomas in the *Centurion*, "the People began to be universally afflicted with that most terrible, obstinate, and at Sea incurable Disease, the Scurvy, which quickly made a most dreadful Havock among us."²⁰ As bad as things seemed in Thomas' ship, they were worse elsewhere. The *Severn* was losing men at a prodigious rate.²¹ In the *Gloucester*, the storms and the sickness were creating panic and undermining authority, "the captain of the *Gloucester* was taken violently ill, and read the articles of war to the Ship's Company: The Sickness increasing vastly among them."²²

It was about this time that Pascoe Thomas began to note scurvy's effects on his own body. His first inkling of the



disease came with a pain in the joint of a toe. Since he had injured the toe only a short time before, he at first attributed the pain to the injury: “but in a little time a large black spot appearing on the part affected, with very intense pains at the bone, gave me to understand my case.”²³ Over the course of several days,

Several hard nodes now began to rise in my legs, thighs, and arms, and not only many more black spots appeared in the skin, but those spread till almost my legs and thighs were as black as a Negro; and this accompanied with such excessive pains in the joints of the knees, ankles, and toes, as I thought, before I experienced them, than human nature could never have supported. It next advanced to the mouth; all my teeth were presently loose, and my gums, overcharged with extravagated blood, fell down almost quite over my teeth...²⁴

From April 3 until April 10, another storm raged with rain, snow, sleet, hail, lightning, and “a hollow sea.” Bit by bit, Anson’s ships were breaking up. All the while the *Gloucester* reported “the sickness still increasing among her men.”²⁵ By April 10, the *Severn* and *Pearle* were lagging further and further behind the other ships and could not be induced to keep up. The next morning they were gone.²⁶ *Centurion*, *Gloucester*, *Wager*, *Tryall* and *Anne* pressed on northward, hopeful that every day would bring them nearer to warm latitudes, calm seas, the salvation of the land, and the treasure of the Acapulco galleon.

On April 15, the remains of the squadron narrowly averted running aground on Isla Noire, which they had reckoned as being far to the east.²⁷ With a rocky shore stretching ahead and under their lee, they were forced to turn south again. By April 21, they were back down to S 60°28’, their furthest penetration into Antarctic seas, and believed themselves to be far enough west to wear about and try once again. Finally, they turned north, minus the *Wager*, which had disappeared.²⁸ After keeping more or less together for seven months, on April 23 Anson’s ships lost sight of one another in a day of rain, squalls, hail and snow.

Prior to leaving St. Julian, Anson had set two rendezvous points for the squadron should the ships become separated. The first was the island of Socorro (now Isla Guambelin) located close off the coast of Chile, where each was to cruise for ten days awaiting other ships and then proceed to Juan Fernández Island, the famous onetime refuge of Alexander Selkirk, Defoe’s model for Robinson Crusoe.

On May 8, *Centurion* raised the latitude of Socorro and ran down the line to that island. From the sea, however, the place looked like just another dangerous lee shore without any evidence of safe harbor or useful vegetation. With the westerly seas and winds now besetting them and a crew virtually incapacitated, they dared not surrender any sea room to get a closer look. Anson tarried in the vicinity for three days and when none of the other ships appeared, made for the latitude of Juan Fernández.

Centurion continued to deteriorate. The leaks were gaining and the water in the hold rose above the casks of fresh water. On deck and aloft, working the heavy gear was becoming almost impossible, “being able to muster about 27 men, our people being dispirited and fatigued beyond what can be imagined.”²⁹ Early the first evening of yet another storm, a crescendo of boiling sound suddenly rose out of the darkness to windward, “with so

much Noise and Fury as if it would have carried all before it.”³⁰ In Chaplain Richard Walter’s words: “A mountainous overgrown sea took us upon our starboard quarter, and gave us so prodigious a shock that several of our shrouds broke with a jerk, by which our masts were greatly endangered. Indeed it was a most tremendous blow, and we were thrown into the utmost consternation from the apprehension of instantly foundering”³¹ This was the second time *Centurion* had been knocked on her beam ends, but this greater wave caused far more damage; when she righted, she retained a mysterious list to port.³² The wind then began to lessen, leaving the ship rolling “gunwale to” in a sea that threatened to send her weakly supported masts over the side.



At the tip of South America, the adversaries threaded the Strait of Le Maire, at right, between Tierra del Fuego and Staten Land. This map shows the 1616 track of the strait's discoverers, Willem Schouten and Jacob Le Maire.

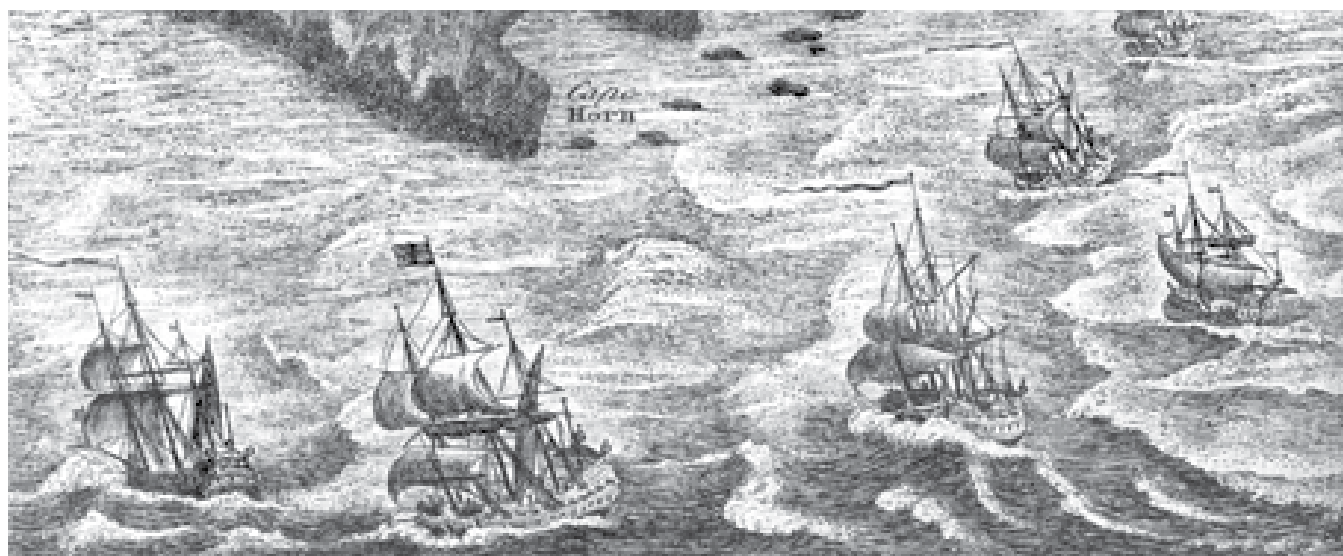
Anson now was faced with a significant decision. The refuge of Juan Fernández still lay more than two hundred leagues to the northwest—considerably more if one counted the normal cushion of sea room allowed for “intentional error” and its consumption in running down a latitude. The proper extent of that “intentional error” cushion, and therefore the time to devote to creating it, was now a crucial issue because the charted longitude of the small island was so undependable, not to mention that *Centurion* had no means to establish her own longitude. Currents had stymied the reckoning before and could do so again. The ingrained tradition of generations of seafaring dictated a conservative strategy with a large margin for error that rendered other variables, like disease, subservient to navigation. The reasons for this were understood by all: scurvy usually struck individuals among a crew to different degrees with gradual effect, but navigational errors could destroy the entire ship in an instant. But now a terrifying epidemic of scurvy worse than anyone had imagined truly threatened the entire ship, rendering traditional considerations questionable. According to Chaplain Walter, “our deplorable situation then allowing no room for deliberation, we stood for the island of Juan Fernández; and to save time, which was now extremely precious (our men dying four, five, and six a day), and likewise to avoid being engaged again with a lee shore, we resolved, if possible, to hit the island upon a meridian.”³³

The *Centurion*, in other words, would target-shoot the island directly from the reckoning with no margin of intentional error at all. In this decision, Anson made technical navigation subservient to health, reversing a traditional priority. It proved to be a bad decision, taken in a moment of desperation by a fading crew in their last extremity. But the establishment of health as a primary factor, possibly *the* primary factor, in the direction of naval

operations would one day characterize sweeping change in policy and radical alteration in the nature of sea power, beginning with a number of reforms that Anson himself implemented in later years.

Placing all their hopes in the master's reckoning and their best information about the position of Juan Fernández, the *Centurion*'s people shifted stores and ballast to correct her list to port and made good as much of the damage as possible. When the wind shifted to the south, *Centurion* bore up directly for the charted position of Juan Fernández, an island fifteen miles by six miles in extent. The island had a reputation as an idyllic, protected, and unoccupied spot, and well situated as a base for English ships cruising against the Spanish coast for prizes, a purpose it had served for most of Anson's predecessors. It was high, craggy, and home to innumerable birds, which made it a good navigational target. Though more Englishmen knew the name of Juan Fernández than any other island in the Pacific, no one seems to have known where it really was.³⁴ Most navigators followed the continent's coast until they reached the right latitude, tacked, and then stood close to the prevailing northwesterly wind as they ran down the parallel for 330 miles. The alternative would have been to stand far out to the west and then come at it the other way with a fair wind. His sources differed on its longitude, but Anson's strongest information placed the island at 84°08' W (though it is actually in 78°55' W) and his own reckoning placed the *Centurion* 1°18' farther west still, though in fact both he and the island were to the east of their assumed meridians.³⁵ Compounding the charted error, when *Centurion* reached the latitude at which Juan Fernández was supposed to appear, she steered to a position at least sixty-five miles to the east of the island.

Five years earlier, *Centurion* had voyaged from Portsmouth to Lisbon with the horologist John Harrison to



Anson's ships struggle around Cape Horn.

From An Authentic and Genuine Journal of Commodore Anson's Expedition, 1744

test his marvelous chronometer H1 (the “sea clock”). It is tempting to speculate that things might have turned out differently had *Centurion* somehow managed to take one of Harrison’s chronometers with her on this voyage, but had this happened, it almost certainly would not have made much difference. At that stage of its development, the chronometer was simply one component within a larger system yet to be assembled. A chronometer on its own could not “find” the longitude, only keep it, as Isaac Newton observed, and there were no means yet to rate the quality of its keeping through astronomy at sea.³⁶ Of even greater importance, the presumed position of the island itself was in error. Ironically, it is possible that a functioning, accurate chronometer might have delivered *Centurion* to the same empty patch of water.

On May 29, Philip Saumarez logged: “had all our faculties awake to look out for the island, our people being grown to the last degree infirm and sick and few of them being able to do their duty and falling down hourly.”³⁷ Richard Walter concurred: “we began to fear we had gone too far to the westward.” Anson was not convinced, for he thought he had seen something hard and sharp on the far horizon to the west in the first light of morning on May 28. His officers disagreed, believing that Anson’s sighting was only a cloud. There was a council and the consensus was to “stand to the eastward, in the parallel of the island, as it was certain by this course we should either fall in with the island, if we were already to the westward of it, or should at least make the Mainland of Chili, from which we might make a new departure.”³⁸ On May 30, they saw the white-capped peaks of the Andes in the far distance, and between the continent and themselves only open sea.

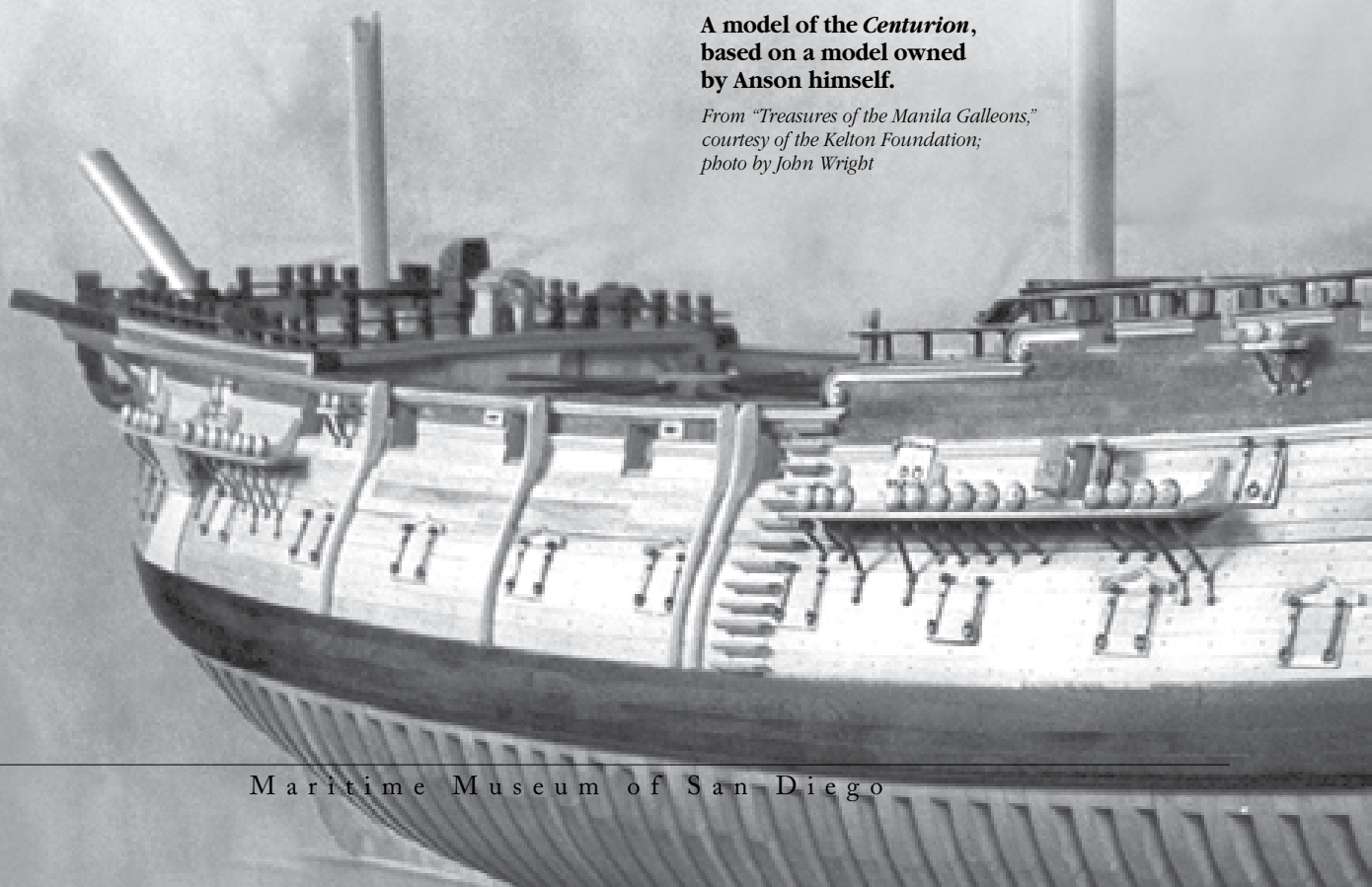
To reach her destination *Centurion* now had to beat to windward, requiring “nine days to regain the westing which, when we stood to the eastward, we ran down in two.”³⁹ According to Walter, debilitating dejection now took hold of the entire ship’s company, the mortality rate increased dramatically once again, and to prove that matters could always get worse, the water ran out. On June 10, they finally came to anchor at Juan Fernandez, “with a crazy ship, a great scarcity of fresh water, and a crew so universally diseased that there was not above ten fore-mast men in a watch capable of doing duty, and even some of these lame, and unable to go aloft.”⁴⁰ By Thomas’ account, they had come “from St. Katherines in the Brazils, to this place, 148 days, on such a dreadful and fatal passage, as I believe very few persons ever experienced.” They had survived, though barely.

The subsequent events of Anson’s voyage are well known. The *Tryall* arrived a few days later “in a most miserable and shatter’d Condition; having buried half her Crew since she left England.”⁴¹ Suffering in the *Gloucester* was even more extravagant. She drifted into the anchorage weeks later a virtual ghost ship, with 314 out of her original complement of 396 dead.⁴² Her final days were also marked by a horrifying battle between her dying crew and thousands of starving rats that swarmed onto her decks when the water in the hold rose above the provisions.⁴³

Yet, once the survivors restored themselves to health and made repairs to the ships, Anson retained sufficient force to harass the Spanish ports of the Americas for months and bring coastwise trade to a standstill. *Centurion* and *Gloucester* then attempted to cross the Pacific, which cost

**A model of the *Centurion*,
based on a model owned
by Anson himself.**

*From “Treasures of the Manila Galleons,”
courtesy of the Kelton Foundation;
photo by John Wright*

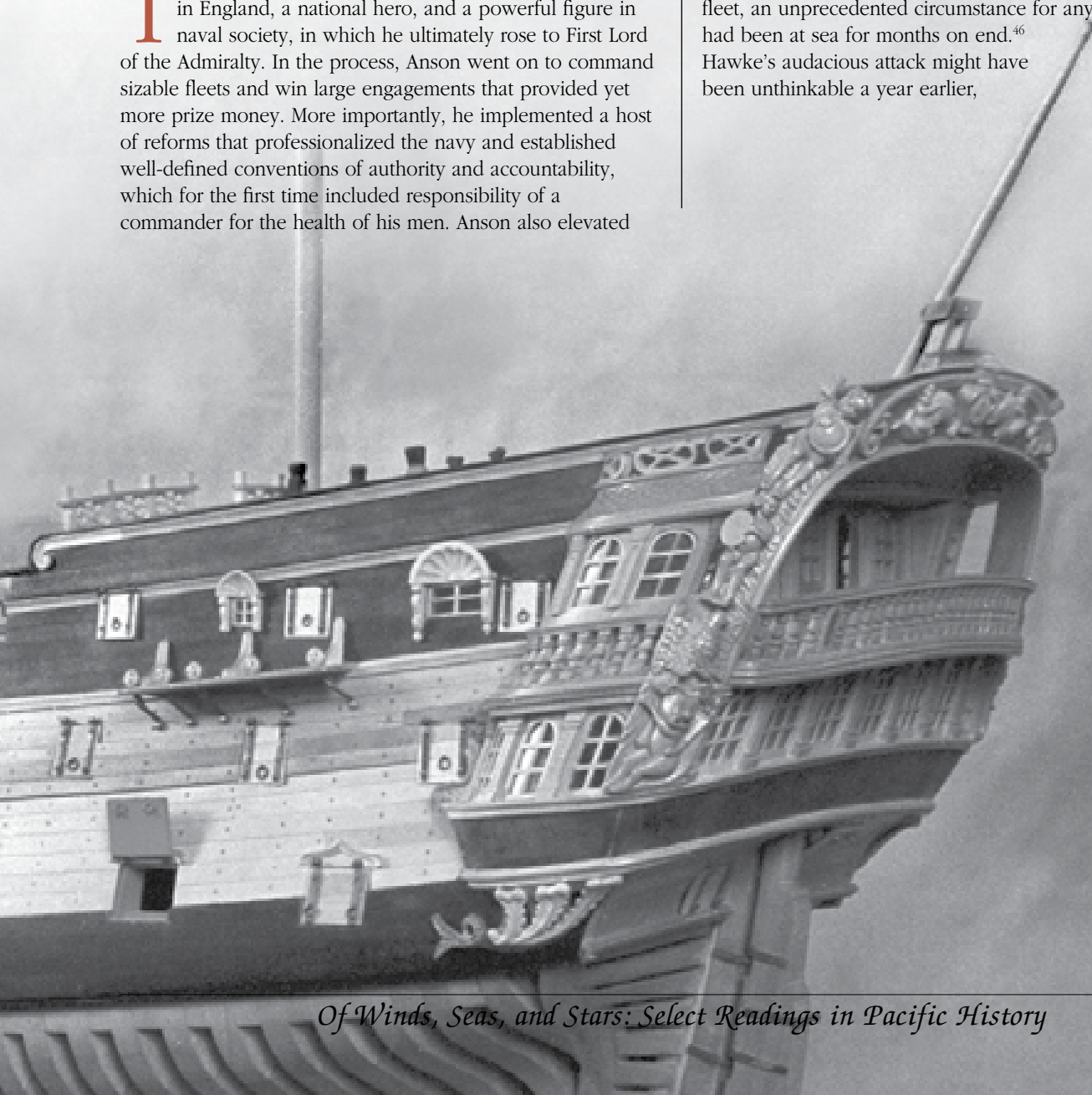


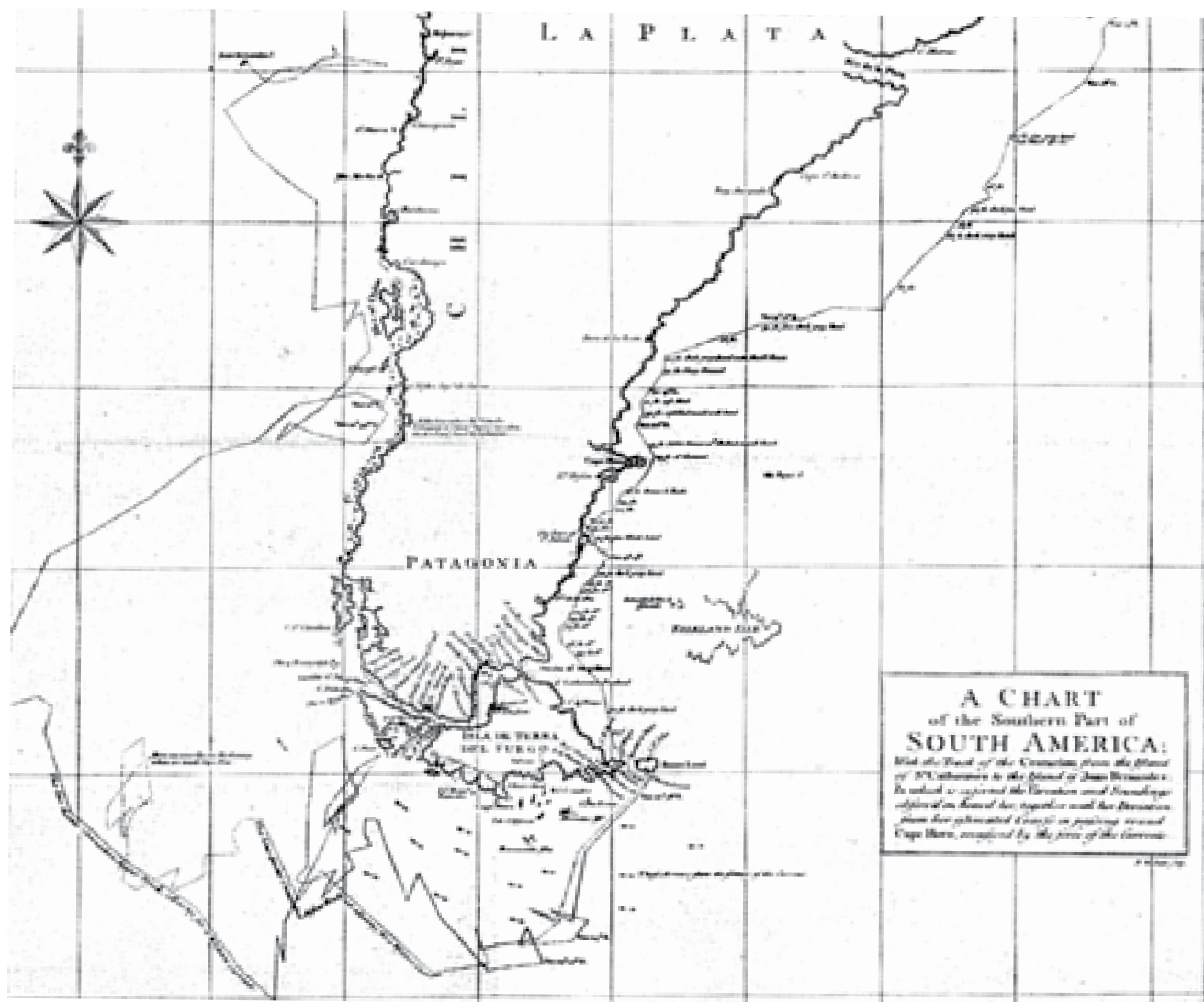
Anson the *Gloucester* and one hundred more men. Finally, with a crew composed almost entirely of officers and children (the categories in the ship least affected by scurvy), *Centurion* ambushed the Acapulco galleon *Nuestra Señora de Covadonga* north of Cape Espirito Santo in the Philippines on June 20, 1742. This proved to be the only instance in the history of the Pacific galleons that one of them faced an Atlantic World ship-of-the-line. As Wager and Norris had hoped would happen, *Centurion*'s twenty-four-pound shot burst through the *Covadonga*'s topsides, "and killed great numbers: the Spaniards having near 600 Men, standing very thick on the Deck, scarce a Shot missed them."⁴⁴ Such work made for a short battle, and it produced the richest haul of treasure ever returned home by an English man-of-war. It required thirty-two wagons to carry the hoard from Portsmouth to London in a triumphant procession escorted by the 145 "*Centurion* Men" who survived out of the more than two thousand who sailed from England.

The prize money made Anson one of the richest men in England, a national hero, and a powerful figure in naval society, in which he ultimately rose to First Lord of the Admiralty. In the process, Anson went on to command sizable fleets and win large engagements that provided yet more prize money. More importantly, he implemented a host of reforms that professionalized the navy and established well-defined conventions of authority and accountability, which for the first time included responsibility of a commander for the health of his men. Anson also elevated

the physician James Lind, who had conducted the first clinical experiment in medical history in an effort to test cures for scurvy, to physician of Haslar naval hospital. At Haslar, then the largest hospital in the world, Lind implemented a systematic program of clinical research into various branches of military and public health, dedicating his most important treatise to Anson.⁴⁵

During the intensive naval phase of the Seven Years War, Anson also implemented the first systematic program for underway replenishment of warships at sea in an effort to provide a continuous supply of the fresh produce necessary to control scurvy. It was a fleet that Anson trained and provisioned which fought the battle of Quiberon on November 20, 1759. Perhaps the most dramatic battle of the age of sail, the English Channel fleet commanded by Admiral Edward Hawke chased a French invasion fleet into an open and rock-bound roadstead during a rising gale and falling darkness and annihilated it. At the beginning of the battle, Hawke had only twenty men listed sick out of his entire fleet, an unprecedented circumstance for any such force that had been at sea for months on end.⁴⁶ Hawke's audacious attack might have been unthinkable a year earlier,





This chart of Anson's miserable voyage around the Horn ends at Juan Fernández Island, at top left. On the facing page is John Harrison's chronometer, H1.

before Anson implemented underway replenishment. Then, after learning that 2,500 sick men had been landed from a ten-week cruise of the Channel Fleet, Hawke had remarked, "I do not wonder at the men being sickly after so long a cruise. Six weeks is long enough in all conscience. Any time after that must be very hurtful to the men, and occasions their falling down very fast."⁴⁷

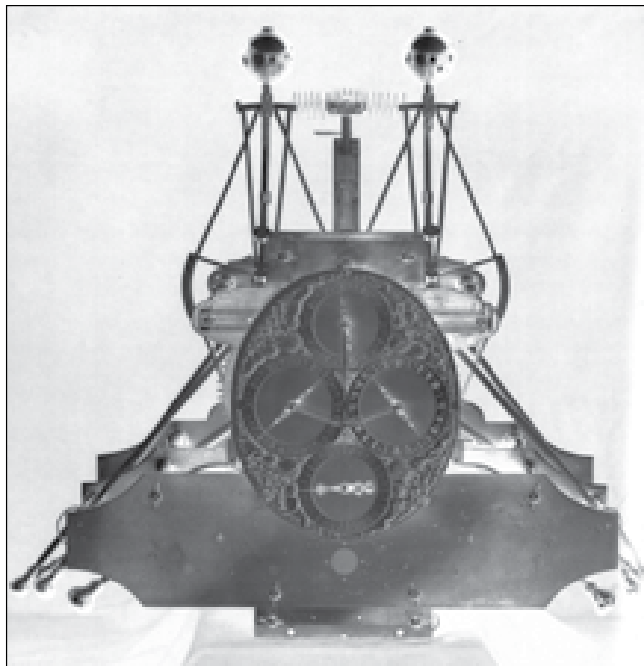
In the end, the conquest of scurvy begun by Anson and completed by the explorer James Cook and naval physician Gilbert Blane contributed to a seminal transformation of naval power and even set the stage for the advent of public health administration itself. The contemporary naval surgeon Robert Finlayson observed at the conclusion of the Napoleonic wars that "it is the opinion of some of the most experienced officers that the blockading system of warfare which annihilated the naval powers of France could never have been carried on unless sea-scurvy had been subdued."⁴⁸ Moreover, the victory was administrative. In the words of

Admiral Horatio Nelson, "when the thinking mind reflects on the ravages committed in our fleets by disease in times past and contrasts it with the present, we must be strongly impressed with sentiments of admiration and astonishment, and almost induced to say that mournful waste of the human species was more chargeable to mismanagement than anything unavoidable in nature or a sea life."⁴⁹

It is tempting to speculate if, in the autumn of his career, Anson's determined quest for naval supremacy drew its inspiration from his dogged hunt for the Manila galleon. Certainly his reforms helped to create the first truly professional navy of global reach. Given consequences so profound, it is impossible not to wonder if his reforming zeal also helped to quell nightmares drawn from the heart of darkness in *Centurion's* track: a place on the chart without a name or longitude where once "we resolved, if possible, to hit the island upon a meridian" and made navigation subservient to scurvy.

Notes

- 1 While today we think of scurvy as a deficiency of vitamin C (ascorbic acid), in Anson's day it also consisted of other deficiencies, such as thiamin, niacin, and riboflavin.
- 2 Leo Heaps, *Log of the Centurion, Based on the Original Papers of Captain Phillip Saumarez on Board H.M.S. Centurion, Lord Anson's Flagship during his Circumnavigation 1740-1744* (New York: Macmillan Publishing Co., 1973), 23.
- 3 William Funnell, *A Voyage Round the World* (London: W. Botham, 1707), 84.
- 4 Woodes Rogers, *A Cruising Voyage Round the World* (London: A. Bell and B. Linton, 1712), 147.
- 5 Ibid. See also Edward Cooke, *A Voyage to the South Sea and Round the World* (London: B. Lintot and R. Gosling, 1712), 336.
- 6 George Shelvocke, *A Voyage round the World* (London: J. Senex, 1726), 327.
- 7 The Caribbean force consisted of nine ships under Admiral Edward Vernon, which sailed from Portsmouth July 24, 1739, to join forces already on station. Operations in the West Indies continued to absorb resources thereafter.
- 8 The squadron also sailed with two supply ships under hire, the "pinks" *Anne* and *Industry*. This force was arguably more powerful than the "Nassau Fleet" sent by Prince Maurits of Nassau under the command of Admiral Jacques l'Hermite around Cape Horn to raid Spanish possessions in 1623. The Dutch fleet consisted of eleven ships fitted with a total of 294 guns and 1630 men. Kris Lane, *Pillaging the Empire: Piracy in the Americas 1500-1750* (London: M. E. Sharpe, 1998), 84.
- 9 Peter Shankland, *Byron of the Wager* (New York: Coward, McCann & Geoghegan, 1975), 19. Also Walter and Robins, and letter Anson to Andrew Stone (Adm. 1/4109, Doc. 42) in Glyndwr Williams, ed. *Documents Relating to Anson's Voyage Round the World 1740-1744* (Greenwich: Navy Records Society, 1967), 50.
- 10 Anson's ships called at Saint Catherine's anchorage (today Florianópolis), while Pizarro did the same thing six hundred miles further south at the entrance to the Rio de la Plata.
- 11 Heaps, 57; Richard Walter, *Lord Anson's Voyage Round the World 1740, 1, 2, 3, 4* (London: John and Paul Knapton, 1748), 26. Anson left no published narrative of his remarkable voyage. Richard Walter's account is the "authorized version" that carried Anson's endorsement, and probably is closest to Anson's interpretation. There remains some question of how much Anson contributed and how much of the account is Walter's own, or indeed, if the entire story was ghostwritten by the scholar Benjamin Robbins. Robbins, an experimental scientist who contributed greatly to the progress of gunnery, did not go on the voyage, but acted as a paid consultant to finish the published account.
- 12 Walter, 27.
- 13 Ibid., 26-27.
- 14 Peter Shankland, *Byron of the Wager* (New York: Coward, McCann & Geoghegan, 1975), 221, 223, 265-266.
- 15 Christopher Lloyd, *Pacific Horizons* (New York: AMS Press, 1946), 113.
- 16 Pascoe Thomas, *A True and Impartial Journal of a Voyage to the South-Seas and Round the Globe In His Majesty's Ship the Centurion, Under the Command of Commodore George Anson* (London: S. Birt, 1745), 19.
- 17 Ibid., 20-21.
- 18 Ibid.
- 19 They turned north at S 58°59', where their reckoning placed their longitude at about 77° W, and thus well to west of Cape Horn. Their actual longitude at that point was probably due south of Cape Horn in about 69° W, though charts of the day placed Cape Horn at about 74° W.
- 20 Thomas, 22.
- 21 The *Severn* was the first ship of the squadron to lose men to scurvy at a rate of more than one per day, thus acquiring an early reputation among the fleet as the most diseased of the lot. Popular belief held that this was due to her being relatively new, as old ships were thought generally healthier than new ones. Arthur C. Murray, *An Episode in the Spanish War 1739-1744* (London: Seeley, Service & Co., 1952), 64.
- 22 John Phillips, *An authentic journal of the late expedition under the command of Commodore Anson. Containing a regular and exact account of the whole proceedings and several transactions thereof: particularly at Madeira, St. Catharine's ... their cruising on the coast of Acapulco, Chequatan Bay, Tenian, one of the Ladrone Islands, and Macao; the taking of the rich Spanish Galleon ... their going to Canton in China, etc. To which is added, a narrative of the extraordinary hardships suffered by the adventurers in this voyage* (London: J. Robinson, 1744), 41. "John Phillips" is probably a pseudonym – no such person is listed in the ship's rolls. This and the "Anonymous account," both of 1744, were probably published as such because they spoke of events in the *Wager*, then under consideration during the courts marshal of John Bulkeley and others, and because the officially authorized version had yet to appear.
- 23 Williams, *Documents*, 86.
- 24 Ibid.
- 25 Ibid., 42.
- 26 *Severn* and *Pearle*, having sustained heavy damage and loss to disease, gave up the expedition and returned to England by way of Rio de Janeiro and Bermuda. They encountered the shattered remnants of Pizarro's squadron along the way home, but none of the crews had sufficient energy to give battle.



- 27 Charts of that day located Isla Noire (then known as Cape Noire) in 78°46' W (it is actually about 73°30' W), while the reckoning of various navigators in the squadron put their position 9°30' further west, or more.
- 28 *Wager* ended up wrecking in the Bay of Penas, whereupon followed one of history's most celebrated accounts of mutiny, murder, and an epic small boat voyage, each of which equaled the drama and ordeal of similar events years later aboard *Bounty*.
- 29 Heaps, 94.
- 30 Thomas, 28.
- 31 Walter, 72.
- 32 The list was initially believed to result from the shifting of objects in her hold, but inspection revealed nothing moved. Thomas, 28.
- 33 Ibid., 73.
- 34 All the primary sources agree closely on latitude (and are within 15' of the actual position), which is to be expected, but estimates for longitude vary widely. Curiously, Glyn Williams has the latitude more than a full degree in error in his modern authoritative narrative



Above: This 1746 British half crown was minted from the *Covadonga's* treasure. Beneath George II is the word *LIMA*, signifying that the coin was struck from Peruvian silver.

From "Treasures of the Manila Galleons," courtesy Charles R. Luce; photo by John Wright

Right: *Centurion* was actually slightly larger than the galleon, but British images always depict her as the underdog. Her adversary's lower deck guns, which this painting shows in action, were not in fact mounted.

1756 painting by John Clevely, National Trust coll.

of the voyage, *The Prize of all the Oceans* (New York: Viking, 2000). During the voyage *Centurion* captured a Spanish gazetteer compiled by a Manuel Monz. Prieto, Professor of Arts in Peru. Prieto gives the longitude of Juan Fernandez as 70°01' W from the meridian of London. Thomas, Appendix, 29. Juan Fernandez is known today as Isla Robinson Crusoe.

- 35 This is by Saumarez's estimate. Thomas actually placed the island at 87°37' W, which is more than 2' further west *still* from the location they assumed for the island.
- 36 By that time Harrison's experiments with his second chronometer had determined that his "balanced beam" principal was vulnerable to subtle aberrations caused by agitation for which, as yet, he had no solution. Had Anson been in possession of a working chronometer, the last opportunity for an astronomical cross-check to rate its going would have been an observation of a lunar eclipse months before on 21 December, when Thomas derived the longitude of St. Catherine's anchorage.
- 37 Heaps, 98.
- 38 Walter, 73.
- 39 Ibid., 74.
- 40 Ibid.
- 41 *Tryal* lost 34 of her 67 men before she reached Juan Fernandez. Williams, *The Prize of all the Oceans*, 56.
- 42 Walter, 151.
- 43 Ibid., 49-50.
- 44 Phillips, 176.



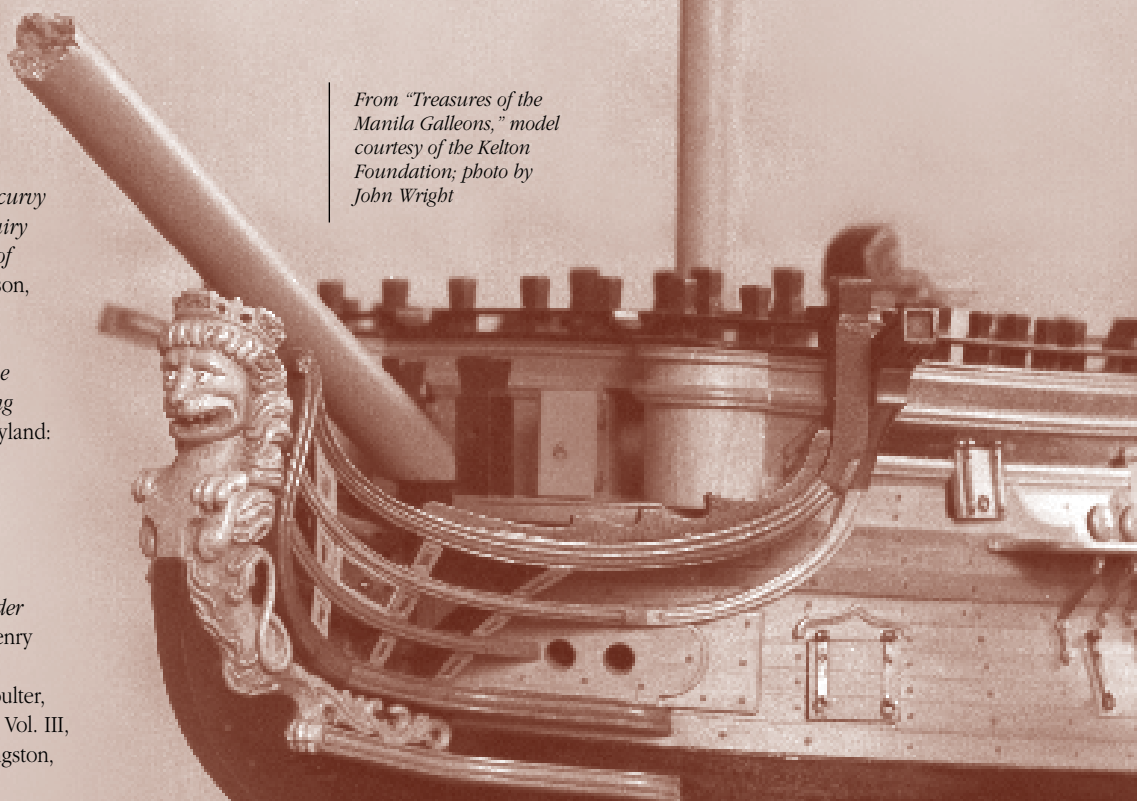


Above: Cannon at the ready, a silver-laden galleon approaches the Straits of San Bernardino, in a detail from a Spanish map of the Philippines drawn the year after Covadonga's capture.

Courtesy U.C. Berkeley Libraries

- 45 See James Lind, *A Treatise on the Scurvy in Three Parts: Containing An Inquiry into the Nature, Causes, and Cure of the Disease* (London: Crowder, Wilson, Nicholls, Cadell, Becket, Pearch, and Woodfall, 1772).
- 46 Brian Tunstall, *Naval Warfare in the Age of Sail: The Evolution of Fighting Tactics 1650-1815* (Annapolis, Maryland: Naval Institute Press, 1990), 116.
- 47 Christopher Lloyd, "Hearts of Oak: The Battle of Quiberon Bay, 20 November 1759" *History Today* (November 1959): 744-751.
- 48 Louis H. Roddis, *James Lind, Founder of Modern Medicine* (New York: Henry Shuman Inc. 1950), 51.
- 49 Christopher Lloyd and Jacl. L. S. Coulter, *Medicine and the Navy 1200-1900*, Vol. III, 1714-1815 (Edinburgh: E. & S. Livingston, Ltd., 1961), 150.

From "Treasures of the Manila Galleons," model courtesy of the Kelton Foundation; photo by John Wright



Alta California and Spanish Naval Strategy in the Pacific:



An Overview from the 16th Century to the early 19th Century

By Jack S. Williams, Ph.D.



Jack Williams holds a doctoral degree in anthropology from the University of Arizona. He has written numerous books and articles focusing on his particular research interests: the societies and cultures of Native Americans and colonizers in the American Southwest and California. He has worked extensively as an archaeologist and historian on projects in the United States, Mexico, South America, and Europe. In San Diego he was closely involved with the excavations of the Spanish presidio and Fort

The story of Spain in the Pacific is one of the most remarkable chapters in the history of European expansion. Between the middle of the sixteenth century and the early nineteenth century, Iberian mariners defined and partially charted a body of water that was so vast and complex that it is even now hard to imagine. More remarkably, Spaniards conceived of themselves not only as explorers but as conquerors. In Madrid, imperial administrators envisioned the vast Pacific Ocean on the other side of the globe as a watery highway that connected the staging areas of the New World to the far-flung military bases that were then the most distant outposts of their empire. The dream of a Spanish-dominated Pacific was never fully realized; however, the level of success the Iberians did achieve is nothing less than astonishing.

The remote region of California had a varying degree of importance in Spain's naval strategy. Like so much of the territory that surrounded the Pacific Ocean, it was not seen as having any inherent economic value. The region's Indian people did not have the treasures that inspired the conquistadores who laid waste to the ancient civilizations of Mexico and Peru. From the sixteenth century onward, the Spaniards realized California's ports could provide naval bases for a European rival. If they fell into enemy hands, these outposts would become ideal launching points for attacks on the rich Spanish possessions that lay to the south. California's coastal waters were also a perfect place to ambush the treasure ships – the Manila galleons – that made an annual journey from the Philippines to Acapulco. Throughout the long

period that stretched from the sixteenth through the early nineteenth century, Spanish approaches to the colonization of California were tied directly to a perceived need to occupy its strategic ports. This objective, rather than any relentless zeal for extending Christianity, or lust for the acquisition of riches or land, remained the central concern that underlay Spain's commitment of men and other resources to California.

The Development of the "Spanish Lake" 1530-1600

For hundreds of years, political and geographic barriers had set sharp limits on European activity. The Christian world was surrounded in both the east and south by Muslim peoples who controlled the lines of communication and trade with more distant civilizations. To the west of Europe lay an Atlantic Ocean that had become, for all intents and purposes, an equally effective barrier. All this changed radically during the fifteenth and sixteenth centuries. A series of dramatic advances in military technology provided a means to shatter the old barriers. The Europeans combined innovative methods in shipbuilding and artillery manufacture to produce a new kind of mobile gun platform. Although they appear to modern eyes as primitive war machines, the new vessels propelled Europeans into waters they had scarcely known.¹

Another important factor in advancing the Europeans' determination to push East and West in such a short period of time was perhaps the fact that they had faced so many centuries of external threats from Africa and Asia, which made them particularly inclined to seize an opportunity that could give them an advantage. It certainly was not the case that Christian Europe's triumph was inevitable. During the same period that Europeans pushed into the Pacific, Muslim raiders devastated the coastal areas of

Left: Flemish engraver and publisher Theodor De Bry (1528-1598) illustrated many texts based on 16th-century European voyages. A detail drawn from a larger engraving shows the iconic depiction of a Spanish galleon in that period.

The men who manned the galleons in the age of conquest used a mixture of antiquated and contemporary weaponry and equipment.

Drawing by Jack Williams



the European continent. These operations pushed as far north as Iceland, carrying away whole villages of people from the shores of Ireland, Wales, England, Spain, France, and Italy. These men, women, and children, became slaves who were auctioned off in the markets of North Africa and the Near East.² Meanwhile, an even greater threat was observed in the armies and navies of the Ottoman Turks. The sultans' expeditions pushed deep into the heart of Eastern Europe. Vast Ottoman naval squadrons menaced the Mediterranean, and at times, threatened to obliterate what remained of their Christian opponents.³ Meanwhile, to the north, the Muslim descendants of the Mongols continued to raid and destroy the outposts of the Russian Empire. The Tartars blocked any Eastern European movement toward the Far East.

To the astonishment of the Muslim world, the leaders of the maritime technological revolution in the Iberian Peninsula would soon outflank it. By 1600, Portuguese expeditions set up outposts that stretched from India to Malaysia. Spain, which followed the lead provided by the Portuguese, acquired incredible wealth in the Americas before turning its attention to an even more ambitious goal of invading Asia from the west. By 1650, European fleets had cut off the lucrative Muslim trade in the Indian Ocean, and effectively established strategic barriers that would largely define what were still the geographic limits of the Islamic world.

The mile posts that marked the Spanish advance in the Far East are well known. In the wake of Colón's (Columbus') voyages of discovery, Vasco Nuñez de Balboa reached the shores of the mysterious western ocean that Magellan would later name the "Pacific." Fewer than six years later, in 1519, Hernán Cortés began the conquest of the Aztec empire. While Spanish vessels battered down the walls of the splendid city of Tenochtitlán, the Portuguese mariner (sailing under the Spanish flag), Fernando Magellan (Fernão de Magalhães), had reached the Philippines.

After Magellan was killed there, Juan Sebastián de Elcano captained the *Victoria's* return voyage to Spain. Spain's long quest to reach Asia from the west had finally been achieved.

The fall of the Aztecs was followed in less than a decade by the conquest of Peru. By 1535, Spain had created a vital maritime link that stretched along the northwestern coast of South America from Panama to Callao. This naval link would remain the primary avenue used to reach much of Spanish South America through the later eighteenth century.⁴

Spanish interest in the Pacific would also be influenced by diplomacy at home. In 1529, the Iberian rulers agreed to the Treaty of Zaragoza, which left much of the Pacific Ocean inside what had been defined as the area rightfully belonging to Spain.⁵ By contrast, the route that stretched around Africa to India lay inside Portuguese territory. If Spain



was to gain wealth from Asia, it would have to flow through the same western route as the one that had been proposed by Colón.

By the time that Juan Rodríguez Cabrillo set sail in 1542, the world had dramatically changed from the time of Columbus. The Iberians' nascent empires now straddled the globe. This development was of far greater strategic significance than any of the previous events in Europe's struggles against eastern rivals. Westerners had discovered a world that lay beyond the complexity of the Atlantic. It was made up of civilizations they had never known, of cultures barely understood. The basic impulse of the Europeans was not to develop peaceful relations with these distant civilizations. Instead, they quickly expressed their intent on conquest. Despite the obvious logistical problems, they began to conceive of grandiose strategies – of conquering the great powers of the Far East, China and Japan. Nothing seemed impossible.⁶

This 1589 map by Abrahamus Ortelius projected the European vision of the Pacific. Most significant is Magellan's *Victoria*, dominating the earliest printed map of the Pacific as she sails under the Spanish flag toward the Far East guided by an angel and with her guns blazing.

The British Library, C.23.e.12(6).

Imperial ambitions brought Miguel López de Legazpi in 1567 to the strategic islands that lay to the north of Malaysia and the south of Japan. Elcano had brought back word that the islands stood at the threshold of the Far East. The 1565-1572 conquest of the Philippines was launched from the Americas.⁷ This expansionism brought the Spaniards into direct conflict with the eastern frontiers of their ancient Muslim foes.⁸ It also opened a door to the Spice Islands, China and Japan. The Portuguese had already penetrated into these lands and knew of the riches to be had, and they had begun their own ambitious program of conquest. As early as 1543, their Iberian rival had established contact with

the most remote nation – Japan's Empire of the Sun. Portuguese Jesuits soon developed an important role in trade and diplomatic relations between the Chinese and the Japanese. The new naval base at Manila gave Spain an opportunity to disrupt Portugal's growing influence in the region.⁹

With the establishment of the new colony, Spain began to realize its ambition to acquire the spices, silks, porcelains, and other exotic products of Asia. However, there was no easy way to get this treasure back to Europe. In order to go west from the Philippines, Spanish ships would have to pass through Portuguese waters. The only safe route would be to return to Europe by way of the Americas. Any journey of this type was complicated by the fact that the land mass of the New World did not have an easy passageway to facilitate movement

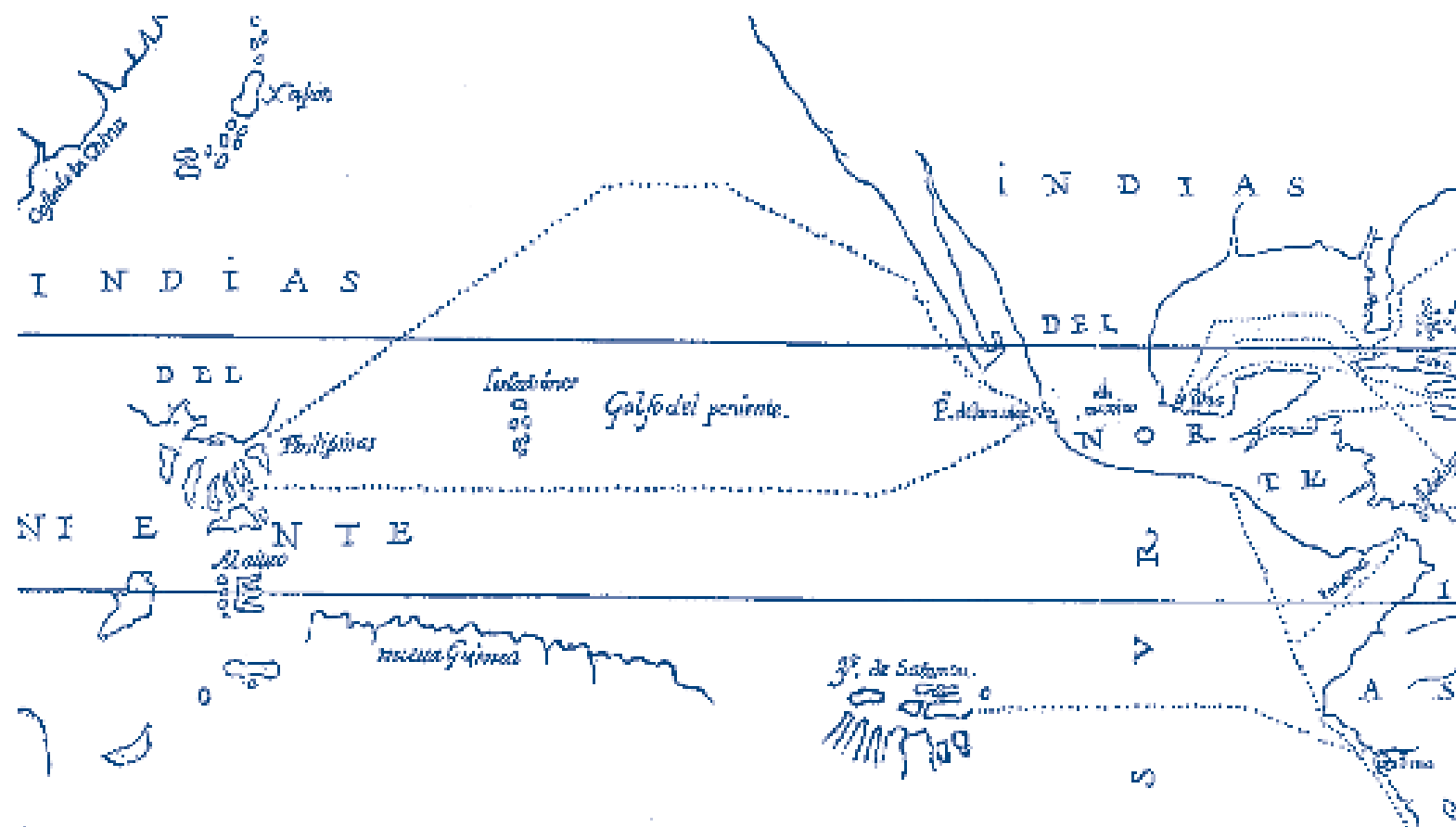
The Manila galleons followed Urdaneta's (1565) pioneering route for over two centuries.

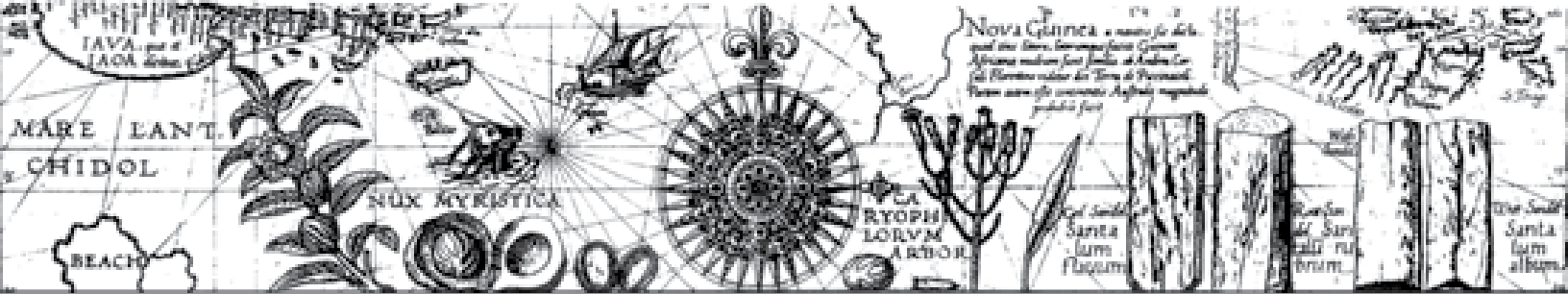
Detail from the map by Juan Lopez de Velasco (c. 1565-1570), John Carter Brown Library, Providence, R.I.

from the Pacific to the Atlantic. Nevertheless, Spain did control the territory that would be required to transport the materials via a short land route. The decision to move forward on this project created the trade route involving the “Nao de China” (known in the English-speaking world as the Manila galleon.) These vessels would continue their voyages through the early nineteenth century.¹⁰

The currents that flowed around the Pacific Ocean would largely determine the pathway of the galleons. Like an immense carousel, a vessel departing Mexico could sail to the southwest, passing into the South Pacific before arriving at Manila. Departing the Philippines, the current would carry ships to the northwest, skirting Japan and sailing far north, before turning once again to the south. The ships generally sighted land along the California coastline, somewhere between San Francisco and Santa Barbara. Sailing southward they could easily find their way to their home port of Acapulco, Mexico.¹¹

Juan Rodríguez Cabrillo had reported the existence





of a number of ports along the coast of California that might be used by trading vessels. After 1565, Spain's naval strategists would often return to proposals to colonize the region primarily as a means of securing safe havens for these merchant ships. The need for such bases was made all the more visible by the piratical voyage of Francis Drake, a man the Iberians wwfeardfully called *El Draque* (the Dragon). He followed in the wake of the Magellan/Elcano voyage, securing a claim to the circumnavigation of the globe. Drake actually set up a winter's camp on the northern California Coast, and laid claim to the surrounding territory.¹² After 1577, the administrators in Madrid had to accept the reality that the Pacific was by no means as secure as they had hoped.

By the third quarter of the sixteenth century, it appeared that Spain and Portugal were headed for some kind of military exchange.¹³ Through dynastic inter-marriage, however, Felipe (Philip) II, the Hapsburg King of Spain, inherited the throne of the second Iberian crown in 1580. While limits were set as to how far he could consolidate the two imperial entities, Felipe nonetheless coordinated their forces and used them effectively in what became a series of wars with the Dutch and British. These conflicts were primarily fought in Europe, but eventually spilled over into the waters of the Europeans' most remote colonies in the Far East.¹⁴

The high-water mark of early Spanish ambition for California was clearly achieved during the voyages of Sebastián Vizcaíno (1596-1603).¹⁵ The capture of the Manila galleon, *Santa Ana*, in 1587 by the English pirate, Thomas Cavendish, had reinforced the need for timely action in regards to maritime security along the

California coast.¹⁶ In 1602-1603, Vizcaíno pushed to the north to find ports that could be used by the Manila galleons on their homeward trips. When he returned to Mexico, his efforts at court produced a detailed plan for the occupation of the region. Monterey and San Diego were named as locations that would serve well as colonies. Nevertheless, the Crown was persuaded to divert the funds that were initially set aside for the project in favor of a fruitless search for treasure islands in the South Pacific.¹⁷ It would be more than one hundred and fifty years before Vizcaíno's colonization proposals would be acted upon.¹⁸

At the end of the sixteenth century, the Spanish Hapsburg Empire seemed to be on the verge of a period of unprecedented political prominence. No scheme of conquest seemed too unreasonable.

California and Spanish Naval Decline 1600-1700

At the end of the sixteenth century, the Spanish Hapsburg Empire seemed to be on the verge of a period of unprecedented political prominence. No scheme of conquest seemed too unreasonable. During the century that followed, this optimism would vanish. Spain experienced a slow decline as a naval power.¹⁹ By 1700, it was unclear if Spain would be able to defend any of her overseas possessions.

From the beginning, Spanish ambitions in the western Pacific were never as easy to achieve as they had been in the Americas. Native Muslim people of the Philippines offered stiff resistance. Iberian ships also found themselves under siege by Japanese and Chinese pirates.²⁰ Even greater conflicts were created by Spain's Protestant enemies, especially the Dutch.²¹ This emerging nation's maritime capitalists had more limited objectives than the Hapsburgs in Asia. The newcomers were largely focused on profitable trade rather than the



occupation of the region.²² The limited nature of Dutch ambitions would prove more palatable among many of the peoples of the Far East.

The changing circumstances of the seventeenth century would emerge gradually. By 1609, the Dutch, who were once an integral part of the Hapsburg Empire, had become a rival maritime power.²³ Sailing from ports along the coasts of Africa, they struck out at the Portuguese outposts. Over time, nearly all of the Iberian settlements were captured. The loss of these possessions was undoubtedly linked to the disinterest of the Spanish monarchs who ruled Portugal. They focused to a considerable extent on the successful preservation of their increasingly valuable American possessions. When Portugal became an independent monarchy again in 1640, they inherited an empire that would largely be confined to the Atlantic coast of South America.²⁴

The remote waters off California witnessed the changing strategic situation. An unstipulated number of Dutch,²⁵ French, and British vessels appeared to threaten Spain's hold on Northern New Spain. Their crews were made up of privateers and pirates whose primary ambition was the capture of the Manila galleon. It is unclear how many of these freebooters were present, and it is also unclear how far to the north they sailed. Some stayed in the south for extended periods. Their blonde-haired Native American descendants would be recognized among the Indian people who met Spanish missionaries during the eighteenth century.²⁶

Left: Detail from an engraving by Theodor de Bry of a late 16th-century Spanish galleon in Venezuelan waters. By the end of the 17th century the Spanish navy had lost much of the ability that had heralded the advances of the early colonial era. Most of the King's fleet was made up of purchased foreign ships. Spain had fallen behind other European nations in regard to military technology.

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Throughout the seventeenth century, Alta (Upper) California remained a place frequently visited by Europeans, but no colonies were established until the Jesuits founded Misión de Nuestra Señora de Loreto Conchó in 1697.²⁷ The Manila galleons stopped there to take on water and supplies, and they sometimes foundered on the shoreline.²⁸ After 1600, Spain had focused a tremendous amount of its Asian strategy on Japan. The coastal tribes witnessed the spectacle of the passage of a Japanese-built galleon sailing southward to Acapulco in 1613. Its commander, Sebastián Vizcaíno, was bringing an embassy of the Shogun's diplomats to the court of the Viceroy in Mexico City.²⁹ By 1630, Portuguese and Spanish missionaries had made significant progress in introducing Christianity to the southern end of Japan and in cementing a political alliance with the Shoguns. The Hapsburg's ultimate goal was a joint operation that would have seen the conquest (and conversion) of China. For a while, it seemed that this opportunity might take place. Between 1592 and 1598, the Shogun Toyotomi Hideyoshi had invaded Korea. Despite

Above: As international conflicts of the seventeenth century continued, Spain was increasingly threatened by the Dutch in the Far East. Illustrated is the Spanish ship, *San Diego*, sunk by a smaller Dutch vessel, the *Mauritas*.

Engraving by Theodor de Bry for de Noort, Olivier, *Description du pénible voyage fait autour l'univers du globe terrestre par Sr. Oliver du Nort d'Utrecht, general de quatre navires*, 1602.



This watercolor by Gordon Miller depicts Cermeño's Manila galleon, *San Agustín* in 1595, as she foundered along the northern California coastline.

considerable initial progress, this venture ended in failure. The Iberians remained hopeful that a second effort might soon be possible. Their dreams of such an operation ended in 1635, when Japan evicted the Iberians in favor of a more modest relationship with the Dutch. Japan then entered into a period where nearly all western ideas (including Christianity) and technology were rejected. The nation would not return to policies of territorial expansion until the middle of the nineteenth century. In fewer than fifty years, Christianity was outlawed and the small number of surviving converts were driven underground.³⁰

The decline of Spanish naval power in the Pacific can also be linked to other changes.³¹ The Iberians failed to keep up with the technological advances taking place in European warfare. The Spanish armies of arquebusers, men armed with pikes and primitive matchlock firearms, and pike men guarding the arquebusers while they reloaded had once seemed invincible, but were defeated again and again in their

confrontations with the French. Before 1700, the bayonet and the flintlock musket had rendered the traditional Spanish weapons obsolete. The navy also suffered a sharp decline. Fewer and fewer ships were built in Spain. The shrinking squadrons depended increasingly on foreign-built vessels. As the century came to an end, the royal navy shrunk in size to fewer than twenty-five warships. The regular army could not muster more than 20,000 men. Spain had become a pale ghost of what it once had been.³²

All the new challenges and losses forced Spain onto the defensive. Strategically, the goal was no longer expansion, but consolidation of what had already been claimed. The Philippines became Spain's strongest defensive point in Asia. For the time being, these islands provided a significant if not impenetrable strategic barrier for any European power that might launch an attack on New Spain by crossing the northern Pacific.³³ The successful development of the Philippines reduced the need for a defense effort in California. Within the context of Spain's imperial decline, it is not too surprising that the region would largely be ignored. There were simply too many other more pressing demands.

The first permanent European colony was finally created in Baja California at Loreto, in 1697. It came into existence under a peculiar political arrangement in which the Jesuit missionaries who led the effort were given extensive autonomy in exchange for providing a safe haven and supplies for the Manila galleons.³⁴ The Crown's willingness to give up power in the province was based on the reality that Spain lacked the military resources to properly protect what remained a remote region.

The Renewed Abilities of the Bourbon Dynasty 1700-1765

In 1700, the death of Carlos II brought a period of civil war to Spain that ended with the ascension of Felipe V (Phillip V), and the creation of a French Bourbon dynasty.³⁵ This event had a frightening significance for many rivals of Spain and France as the potential combination of these two empires created a unity of unmatched resources. As part of the treaty that ended the struggle for succession, the Bourbon monarchs of the two nations agreed not to create any over-arching security pacts. In fact, however, the two men secretly conspired to provide mutual aid in the event of any future conflicts.

Felipe V, and his son, Fernando VI (Ferdinand VI), brought French-style reforms that

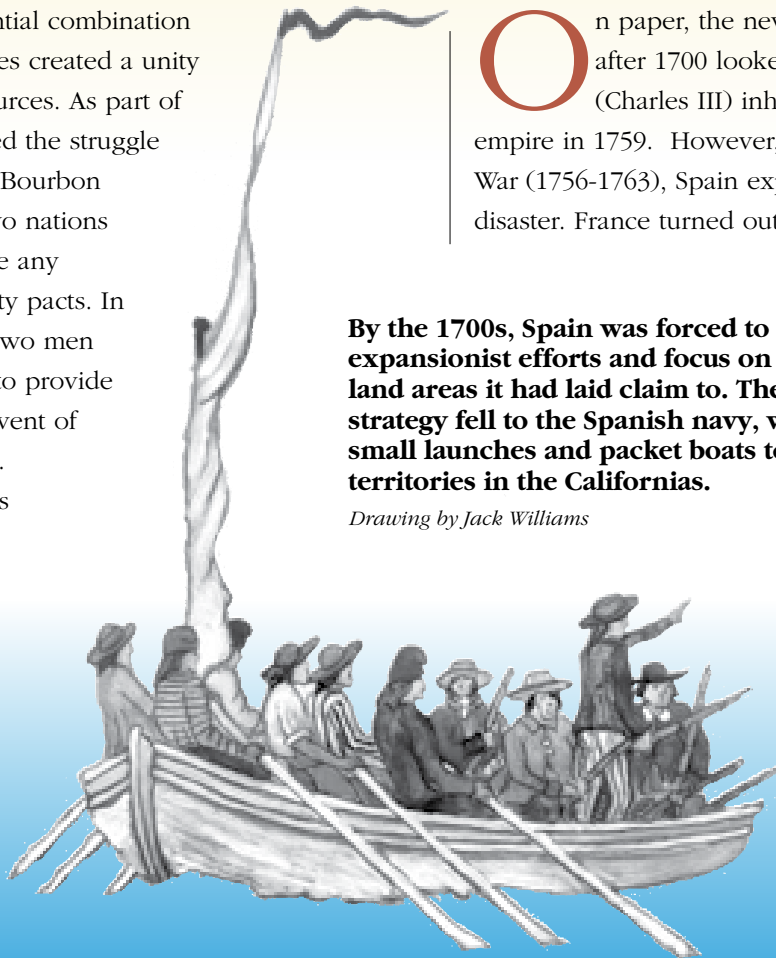
affected nearly every aspect of Spain's governmental policies. Modernization of the army became a top priority of the monarchy. Meanwhile, France agreed to provide additional naval protection for Spain's overseas empire.³⁶ In the colonies, much of the reform effort focused on creating large forces made up of militia. By the time of Fernando's death in 1759, considerable progress had been made in creating the new forces.³⁷

The reforms had little direct effect on the situation in California. In the far south, the Jesuit mission frontier had made some territorial gains, but proved to be an ineffective deterrent to the old foes. In 1710 and 1721, British privateers set up temporary residence at Cabo San Lucas.³⁸ Some consideration was given in regard to Upper California. In 1719, a new plan had been drafted to develop the strategic port at San Diego. But nothing came of this effort.³⁹ Between 1700 and 1720, British and French ships commanded much of the trade along the entire Pacific coast. It would take several decades before the Spanish fleet would recover from the disastrous period at the end of the seventeenth century.

On paper, the new military resources created after 1700 looked impressive. Carlos III (Charles III) inherited an apparently revived empire in 1759. However, during the Seven Year's War (1756-1763), Spain experienced nothing short of a disaster. France turned out to be a poor partner, losing

By the 1700s, Spain was forced to consolidate its expansionist efforts and focus on protecting the ports and land areas it had laid claim to. The enormous defensive strategy fell to the Spanish navy, which depended on small launches and packet boats to patrol and defend its territories in the Californias.

Drawing by Jack Williams



the war and nearly all of her American possessions. The strategic Spanish cities of Manila and Havana both fell to the British invaders. The militia armies backed up by the French fleets had simply failed.

The Final Move Toward Creating a Spanish Colony in California

The magnificent *Santisima Trinidad* was the largest war vessel (220.5 feet) built in the 18th century. Her commissioning in 1769 was emblematic of Spain's dramatic naval revival.

Museo Naval, Madrid, Spain

In the wake of this catastrophe, Carlos III launched a series of dramatic reforms. He focused on the full modernization of the army. The expanded militia forces were to be expanded and supplemented by better-trained regulars. Henceforth, the navy would also be modernized and enlarged to protect Spanish interests around the globe. It was a return to the kind of aggressive offensive policies that had been the norm in the sixteenth century.

The spectacular naval build-up was most dramatically seen in the immense shipyard in Havana.⁴⁰ More modern Spanish ships, modeled



closely on those from Britain, were built there. Undoubtedly the most impressive of these warships was the *Santisima Trinidad*, the largest vessel of its kind built in the colonial period. By 1769, Spain had revived as a major European naval power. New fortifications and facilities were also added throughout the Caribbean, in the Philippines, and along the coasts of South America.⁴¹

These new projects were badly needed. In the Pacific, the strategic situation had badly deteriorated. The Dutch were no longer the major threat.⁴² They had largely been replaced by the British, who now took a direct hand in Asian affairs from their bases in India. In 1788, the English Crown embarked on a large-scale Pacific colonization program in Australia. An equally dangerous threat had been created by the Russians, who had pushed the borders of their empire to the Pacific. In so doing, they had effectively out-flanked the Philippines. A new Pacific route now lay open to the Americas. By 1784, the Czar's vessels had begun to occupy Alaska. It was the beginning of a dangerous era, where the wealthy lands of New Spain and Peru provided tempting targets.⁴³

Now, more than at any time in the past, Upper California was a strategic asset that needed to be addressed. If Spain could only secure the region, they could effectively block Russian and British approaches to New Spain from the north. As long as the key ports remained in Iberian hands, an enemy fleet could only move southward by risking an interruption of its lines of supply and communication. No competent European commander would have risked this danger.

Inspector General José de Gálvez was dispatched to America in 1761 with orders to improve the defenses of New Spain. His biggest problem

was his lack of financial resources to solve all of the kingdom's predicaments. He considered the California dilemma with a clear understanding of what needed to be done. However, all the military resources that he could amass did not represent a force sufficient to create or sustain regular outposts in the remote

region. Instead, he was forced to find some other kind of solution. Ultimately, he developed a plan where Spain would create frontier-style presidios at the key ports of Monterey and San Diego. These semi-self-sufficient military colonies had provided useful service along the northern Indian frontier of New Spain. In order to pacify the Indians and expand the self-sufficiency of the colony, he also proposed to include a series of Franciscan missions. Although schemes of this type had once been popular in the empire, they

had declined sharply after the arrival of the Bourbon monarchs. The new dynasty generally preferred to use military forces and trading posts as the focus of frontier expansion. Gálvez realized that the forces available were too small to really secure California. However, he was convinced that they could at least show some level of Spanish control, and in so doing, discourage the ambitions of Spain's European rivals.

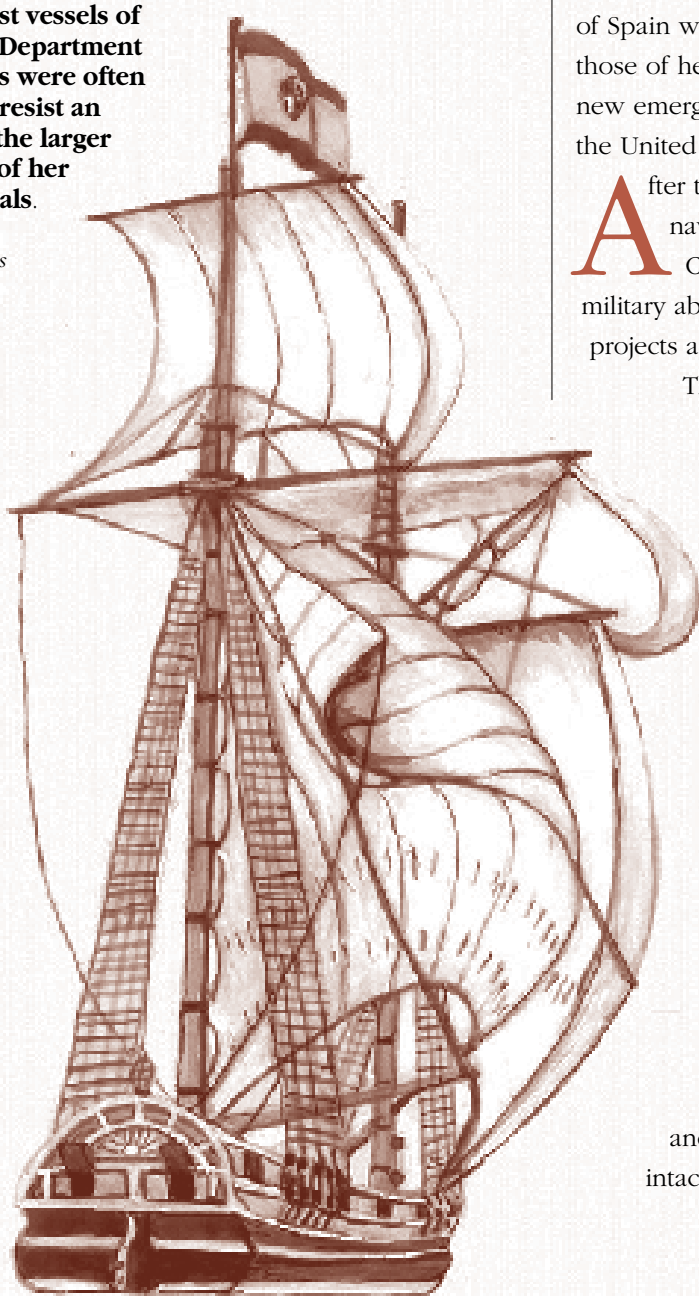
In 1768, Gálvez began to stage the operation that would see the long-anticipated colonization of Upper California. He had no illusions about the region being of any inherent financial value. Throughout the remainder of the period of Spanish rule (1769-1821), California remained a strategic military colony that produced no revenues for the King. Whatever resources were produced by the presidios and missions were plowed back into frontier enterprises. California remained a financial loss for Spain, but it was also considered an asset essential for their defense of the supply and communication links to Asia.

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Gálvez had hoped that the ships of the Naval Department of San Blas would eventually be able to patrol California waters. The royal squadrons provided supplies of essential military goods and luxuries to the new colonies. However, the department never had a sufficient supply of either ships or sailors to effectively face a potential invasion, or even a large-scale raid. A small number of ships were temporarily assigned to protect the coast during periods of declared war, but for the most part California's defense against a seaborne invasion was left to the

The modest vessels of the Naval Department of San Blas were often unable to resist an attack by the larger warships of her Pacific rivals.

*Drawing by
Jack Williams*



frontier troops of the presidios, and the Indian militias of the missions.

Throughout the Spanish Empire the inability of the King's fleets to meet the needs of colonists stimulated an opportunity for illegal trade. The weakness of the strategic situation of the province was demonstrated dramatically in the numerous episodes of smuggling and poaching that took place along the California coast. Without ships, or even small patrol vessels, the presidio troops were not able to curb what became a thriving trade, which was illegal but often tolerated as a necessity. By the end of the colonial period the ships of Spain were out-numbered in California waters by those of her traditional rivals, along with those of the new emerging commercial power of North America – the United States.

After the death of Carlos III (1788), the Spanish navy as a whole entered a period of decline. Carlos IV lacked his father's ambitions and military abilities. His reign was marked by military projects and treaties that almost never benefitted Spain.

The worst disaster by far was the destruction of the finest vessels of the fleet at the Battle of Trafalgar (1803). Spain never fully recovered from this disaster.⁴⁴

In Retrospect

The California venture that had been initiated by Gálvez continued to endure during the waning years of Spanish political ambitions. Despite the military shortcomings of the effort, the basic wisdom of his actions were demonstrated repeatedly. Both the Russians and the British laid claims to the area north of San Francisco, although each of these nations enjoyed only limited success in their bids for colonization. The lines of communication and supply to the Philippines remained largely intact.⁴⁵ The California outposts made it possible

for the Naval Department of San Blas to successfully challenge the British at Nootka Sound (1789). Even after the Naval Department's headquarters fell during the War of Independence in 1810, the colony continued to remain a loyalist stronghold. The troops in the region aggressively resisted the one major assault that took place in 1818. Without the modest forces deployed in California, it is hard to imagine that Spain would have been able to fix the border in its northern position in the treaty that was agreed to by the United States in 1819.

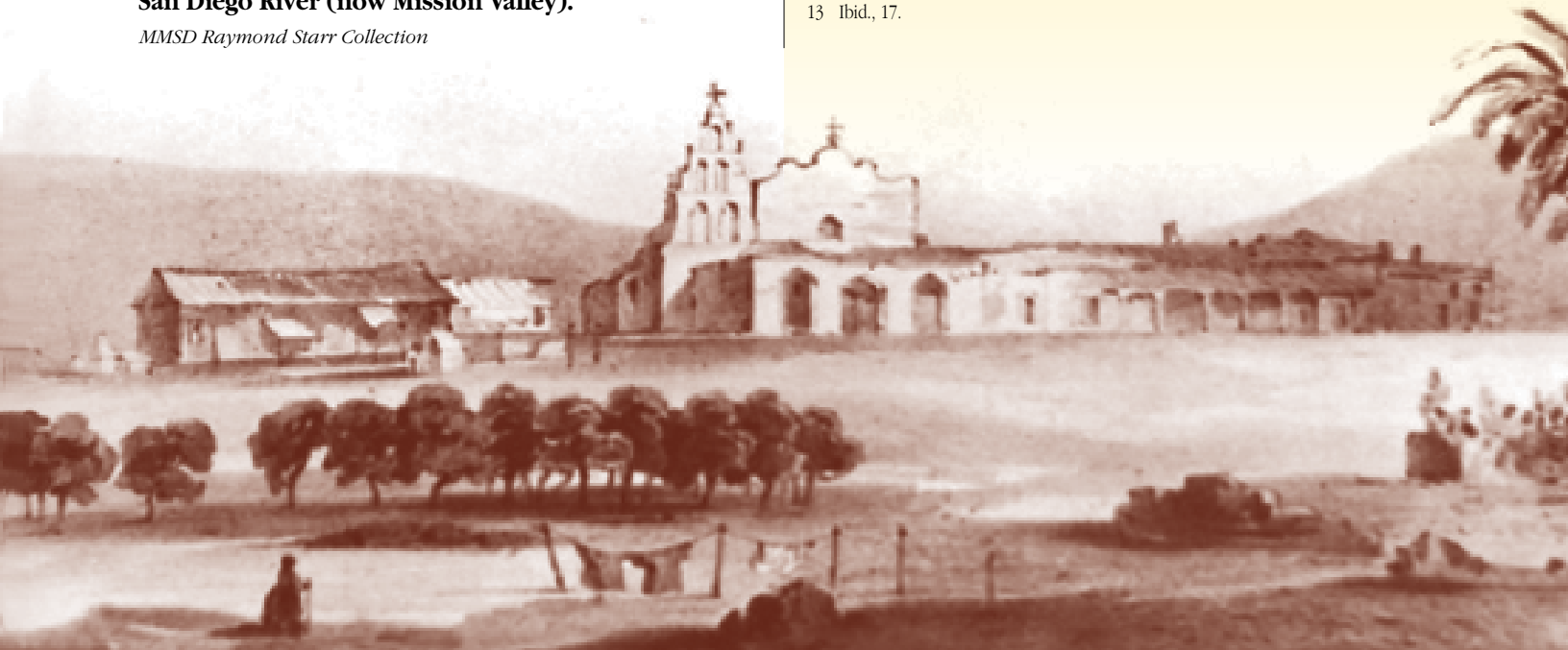
Romantic images of Spain in California remain an important part of San Diego's cultural landscape. Much has been made of the drama that surrounds the story of the mission and presidio. To a considerable extent, people are unaware that San Diego was created first and foremost as a strategic naval base. Despite changes in governments, the city remains linked to strategic military concerns and its position on the Pacific Rim. The man who first envisioned its potential to serve in this role was Juan Rodríguez Cabrillo.

This lithograph by Charles Koppel, 1853, illustrates the San Diego mission of 1813. The mission was moved in 1774 from its original site (now on Presidio hill overlooking Old Town) five miles up the San Diego River (now Mission Valley).

MMSD Raymond Starr Collection

Notes

- 1 J. H. Parry, *The Discovery of the Sea*, (Berkeley: University of California Press, 1974).
- 2 Robert C. Davis, *Christian Slaves, Muslim Masters - White Slavery in the Mediterranean, the Barbary Coast, and Italy 1500-1800*, (New York: Palgrave Macmillan, 2003).
- 3 Fernand Braudel (translated by Sian Reynolds), *The Mediterranean and the Mediterranean World in the Age of Philip II*, Volume 2. (New York: Harper and Row, 1973), 661-678, 836-864, 904-1184.
- 4 Peter Gerhard, *Pirates on the West Coast of Mexico*, (Glendale: Arthur H. Clarke Company, 1960), 32-35.
- 5 William Lytle Schurz, *The Manila Galleon*, (New York: P. Dutton and Company, 1939), 20. Spain ceded all claims to the Spice Islands to the Portuguese, but continued to assert rightful ownership of the Philippines based on Magellan's discovery. Ironically, these islands also lay within the latter's powers sphere.
- 6 *Ibid.*, 30.
- 7 In 1542, Viceroy Antonio de Mendoza sent Ruy López de Villalobos to relocate the islands, Herbert Eugene Bolton (translator and editor), *Spanish Explorations in the Southwest, 1542-1706*, (New York: C. Scribner's Sons, 1916), 43. The maritime aspects of the conquest were headed by the Augustinian priest, Andrés de Urdaneta, Gerhard, *Pirates on the West Coast*, 37.
- 8 Bolton, *Spanish Explorations*, 43; John J. Phelan, *The Hispanization of the Philippines, Spanish Aims and Filipino Responses, 1563-1700* (Madison: University of Wisconsin Press, 1959). Schurz, *The Manila Galleon*. Manila was ruled as part of the small sultanate of Sulaiman Mahmud.
- 9 C.R. Boxer, *The Portuguese Seaborne Empire 1415-1825*, (New York: Alfred A Knopf, 1969), 39-64; Schurz, *The Manila Galleon*, 129-53.
- 10 Gerhard, *Pirates on the West Coast*, 39-41; John D. Harbron, *Trafalgar and the Spanish Navy*, (Annapolis: Naval Institute Press, 1988), 9; Schurz, *The Manila Galleon*. The voyage from Manila took approximately five and a half months. The voyage to Asia took approximately four months.
- 11 It was the Augustinian priest Andrés de Urdaneta who was credited with figuring out the northern current (on an expeditionary voyage with Miguel López de Legazpi), which enabled voyages to return from Asia to the Californias. Carla Rahn Phillips, "Spain and the Pacific: Voyaging into Vastness," *Mains'l Haul- A Journal of Pacific Maritime History*, Vol. 41:4 & 42:1 (Fall 2005-Winter 2006), 9.
- 12 Gerhard, *Pirates on the West Coast*, 61-80; Schurz, *The Manila Galleon*, 303-305.
- 13 *Ibid.*, 17.



- 14 Boxer, *The Portuguese Seaborne Empire*, 106-127; Schurz, *The Manila Galleon*, 30-31, 293-295, 303-357.
- 15 Cortés had led the first aborted attempt at colonization of Baja California between 1533 and 1535. This operation was motivated in part by exaggerated reports of the region's potential as a pearl fishery, Peter Gerhard, "Pearl Diving in Lower California, 1533-1830," *Pacific Historical Review*, 25(1956):239-249. A hostile environment and Indian resistance put an end to this effort.
- 16 Schurz, *The Manila Galleon*, 305-313.
- 17 Antonio de la Ascensión (Herbert Eugene Bolton, translator and editor), "A Brief Report of the Discovery of the South Sea." (an account of the Vizcaino expedition of 1602-1603) in Bolton, *Spanish Explorations in the Southwest*, 104-133; Zephyryn Engelhardt (Fray), *Missions and Missionaries of California*, volume 1 (Baja California), (Santa Barbara: Mission Santa Bárbara, 1929), 40-45; Schurz, *The Manila Galleon*, 232-34.
- 18 Vizcaino planted only one colony in Baja California, which was ultimately abandoned in circumstances similar to those that had seen the end of Cortés' effort.
- 19 See **Additional Sources** for further study of this pivotal era in Spain's history.
- 20 Phelan, *The Hispanization of the Philippines*; Schurz, *The Manila Galleon*, 24-26.
- 21 Gerhard, *Pirates on the West Coast*, 12-13, 101-132; Schurz, *The Manila Galleon*, 342-57.
- 22 Ibid., 293-94.
- 23 Protestant rebels had instigated a revolt in what would become Holland in 1566. Dutch privateers raided the Pacific ports of Peru for the first time in 1599. Another expedition attacked Spanish vessels in the Philippines in 1600, Gerhard, *Pirates on the West Coast*, 102-104.
- 24 Schurz, *The Manila Galleon*, 342-47.
- 25 Known to the Iberians as "Pechelingués," a term derived from the name of the Island port of Vlissingen, or Flushing, in the Low Countries.
- 26 Charles E. Chapman, *A History of California-The Spanish Period*, (New York: MacMillan Company, 1921), 172; Engelhardt, *Missions and Missionaries*, 80; Gerhard, *Pirates on the West Coast*, 101-194.
- 27 In 1632, 1664, 1668, 1679 and 1683, unsuccessful attempts were made to establish a permanent outpost in Baja (Lower) California, Engelhardt, *Missions and Missionaries*, 81-92.
- 28 Schurz, *The Manila Galleon*. The most famous of the early shipwrecks was that of Sebastián Rodríguez Cermeño, which took place in 1595. He managed to return to New Spain using a small launch.
- 29 Michael W. Mathes, *Vizcaino and Spanish Exploration in the Pacific Ocean, 1580-1630*, (San Francisco: San Francisco Historical Society, 1968).
- 30 Schurz, *The Manila Galleon*, 99-128.
- 31 The decline of Spain's naval power may well be related to a number of complex issues involving Hapsburg interests (which were not always the same as Spain's). Perhaps a major factor was the departure of the brain trust represented by the elite strata of Jews and Muslims who were forced out of the Iberian Peninsula. These groups represented important forces in the advances made in the previous century. Another important force was the tendency of the Hapsburgs to favor merchants and industrial capacity in other areas of the empire. In general, the specific rights (*fueros*) held by Spanish kingdoms and towns made the crown seek to promote industrialization and increased productivity in the Spanish Low Countries, where their control was more absolute. Finally, it might be simply the case that the Hapsburg rulers of the empire became less competent over time. In the end, the entire edifice of the state became a shadow of its former self. At the same time, England and France experienced a significant economic revival.
(See **Additional Sources** for further reading on Spain in the Pacific and in the Californias.)
- 32 Harbron, *The Spanish Navy*, 14; Herbert Ingram Priestley, *José de Gálvez: Visitor General of New Spain, 1765-1771*, (Berkeley: University of California Press, 1916), 13; Schurz, *The Manila Galleon*, 49-50.
- 33 Ibid., 301.
- 34 Chapman, *A History of California*, 174; Engelhardt, *Missions and Missionaries*, 102-103.
- 35 The War of the Spanish Succession was waged between 1702 and 1713.
- 36 The French even replaced the Iberian merchant fleets during the struggle to establish Felipe V on the throne, Gerhard, *Pirates on the West Coast*, 201, Schurz, *The Manila Galleon*, 296. The French role in Spanish maritime activities ended in 1717, after the Iberian conquest of Sardinia provoked a British-French compact. The Spanish-French alliance was renewed in 1733 with the Treaty of El Escorial.
- 37 Priestly, *José de Gálvez*, 14-15.
- 38 Gerhard, *Pirates on the West Coast*, 211-15, 226.
- 39 Schurz, *The Manila Galleon*, 243.
- 40 In 1726, the royal shipyards at both Cartagena and Havana were rebuilt, Harbron, *The Spanish Navy*, 34. Carlos III would eventually expand the navy from 37 to 67 ships-of-the-line, C.J. Esdaile, *The Spanish Armies of the Napoleonic Wars*, (Manchester: Manchester University Press, 1988), 88. In 1788, the Spanish Navy was the largest in the world, Harbron, *The Spanish Navy*, 7.
- 41 Harbron, *The Spanish Navy*.
- 42 The Dutch nation was not inclined to send expeditions to attack the western coast of North America after the Treaty of Westphalia in 1649, Gerhard, *Pirates on the West Coast*, 132. However, Dutch, French and English pirates and privateers continued to undertake hostile operations in the region. There were also numerous attempts at large-scale smuggling operations, Ibid., 197-226; Harbron, *The Spanish Navy*, 79. In 1747, ships of the Dutch East Indies Company peacefully visited the California coast, Peter Gerhard, "A Dutch Trade Mission to New Spain, 1746-1747," (*Pacific Historical Review*, 23(1954):225-226), Schurz, *The Manila Galleon*, 301-302.
- 43 Christon I. Archer, "The Political and Military context of the Spanish advance into the Pacific Northwest Coast," in Robin I nglis (editor), *Spain and the North Pacific Coast: Essays in Recognition of the Bicentennial of the Malaspina Expedition, 1791-1792*, (Vancouver: Vancouver Maritime Museum Society, 1992), 9-17, Schurz, *The Manila Galleon*, 297.
- 44 Harbron, *The Spanish Navy*.
- 45 John Galvin, "Supplies from Manila for the California Missions, 1781-1783," *Philippine Studies Quarterly*, 12(3)(1964), 494-510.

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Maritime Museum of San Diego

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in HMS *Dolphin*
approaches the
island of Tahiti,
June 19, 1767.**

Artist Gordon Miller

