2 Islands: The United States as a Networked Empire

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In the spring of 2003, US President Bush, British Prime Minister Blair, Spanish Prime Minister Aznar, and their host, Portuguese President Barroso, landed on the island of Terceira to hold a press conference and present Iraq with an ultimatum for war. The location of their press conference in the Portuguese Azores—a constellation of nine Atlantic islands far from mainland Europe—puzzled commentators. Reporters speculated that this far-flung setting, best known as an exotic holiday destination rather than a convincing projection of US power, symbolized the marginal European support for an invasion of Iraq.

In ways that commentators did not realize, the choice of the Azores brought into focus a projection of American power rooted in networks and islands. Washington's geographical selection was not a remote launch pad for war, but a manifestation of power that often and purposefully remains hidden from view. The Azores transformed from a remote Portuguese outpost into a US hub of information, communication, and military systems. The process of transformation reconfigured the Azores and several other colonial island chains into nodes in the American projection of power. That process fundamentally remapped the globe during the Cold War.

The character of American power has been widely discussed. The historian Arthur Schlesinger Jr., articulating the Cold War consensus, once argued that the United States, though "richly equipped with imperial paraphernalia [such as] troops, ships, planes, bases, proconsuls, local collaborators, all spread around the luckless planet," should be understood as an "'informal' empire, not colonial in polity." That argument became a dominant narrative frame during the Cold War as the US faced ideological competition from the USSR. Since then, others have refined the idea to claim the US is a reluctant empire, an empire by invitation, or the world's indispensable nation. All of these arguments turn on the notion that the US wields a strikingly different kind of power because it lacks overseas possessions. Indeed

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the US does not occupy vast tracts of land outside the American continent like the Roman, British, and Russian empires of yore. But the US does rule over extensive—but to its citizens, invisible—island possessions.⁵ The US territories include thousands of islands in the Commonwealth of Puerto Rico, Guam, American Samoa, Johnston Atoll, Navassa Island, Micronesia, Marshall Islands, the Commonwealth of the Northern Marianas, Palau, and the US Virgin Islands of St. Thomas, St. John, and St. Croix. Most of these possessions have been in US hands for more than a century. These US territories are the largest of the post-colonial era, exceeding the combined population of the overseas territories of Britain and France.

The residents of these islands are second-class citizens lacking the full protection of the law as well as federal voting rights and representation in the US House, Senate, and Electoral College. In their political limbo, garment workers in the Northern Marianas sew "Made in America" labels for American clothing companies such as The Gap, Wal-Mart, Liz Claiborne, and Calvin Klein while receiving 60 percent of the US minimum wage. Puerto Ricans are subject to the death penalty under US federal law, even though their commonwealth law forbids it. Islanders may serve in the US military yet compete in the Olympic Games and beauty pageants as nationals from countries distinct from the US. The islands and their residents belong to, but are not part of, the United States.

America's territories are modest in size, their 4,000 square miles barely larger than the state of Connecticut. But the small size of islands like the Azores and Marianas masks their political, economic, legal, and technical weight. The islands in US domain have been critical nodes in multiple global networks. Home to capital-intensive, low-labor-intensive technologies, islands have helped to nurture America's self-image as a post-colonial, post-imperial power in the era of decolonization and globalization. They also have bridged exceptionalist American history and European colonial history.

This essay casts the United States' islands possessions as a narrative anchor in an alternative cartography of Cold War paradigms by looking at the configurations of large global systems. Skirting along the edges of empire, it seeks to understand the function of islands during a time when both the US and the USSR disavowed territorial expansion as a matter of ideological principle. By looking through the lens of technology, this essay offers an alternative view to the characterization of the US as an informal, deterritorialized global power. It thus anchors the Cold War in the technopolitical geographies of islands to understand how archipelagic areas like the Portuguese Azores have become the central nodes of US global power.

Where in the World Is America?

America has an uncanny ability to be both everywhere and nowhere, omnipresent yet deterritorialized. The historians Charles Bright and Michael Geyer pose the intriguing question "Where in the world is America?"⁷ Indeed, it is the geographical and ideological location of America's exercise of global power that I explore here, using an iconic episode: the Spanish-American-Cuban War of 1898. After US President William McKinley received news from Admiral George Dewey of the naval victory in Manila Bay, he admitted he "could not have told where those darned islands were within 2,000 miles."8 Probably apocryphal, this tale of a president's inability to locate islands that his military was poised to conquer nonetheless brings to mind the geographical illiteracy endemic to Americans. The anthropologist and geographer Neil Smith notes that this malady stands in stark contrast to the extraordinary resources that the US government has spent gathering geographic intelligence. The Department of State, the Central Intelligence Agency, the Department of Defense, and the National Security Agency all have maintained departments staffed with geographers. Collaborating with these agencies, the National Imagery and Mapping Agency represents the geographic nervous system for US global strategy, Smith argues.9 It is no coincidence that the citizens of today's superpower have difficulty locating lands over which their country exerts power. It has been a matter of policy.

To understand this history we need to go back to the British, who invested in islands to lay the foundation for their globally networked power. The British Empire, combining the principles of the old landed empire and the new networked empire, ruled by way of land masses like India and oceanic nodes. Its policy makers pioneered two closely intertwined technopolitical foundations of naval strategy anchored in islands: a global network of underwater communication cables and a comprehensive chain of coaling stations. British politicians and engineers learned that oceanic cables making landfall at small islands offered a far more efficient communications system than short lines strung across hostile countries. 10 Submerged cable infrastructures foiled wire-cutting insurrectionists and circumvented unreliable regimes like the Ottomans and the Egyptians. 11 The British obsession with implementing nationally controlled lines through island possessions eliminated interference from other countries. 12 The construction of a network of coaling stations for refueling, repair, and trade route protection laid the second technopolitical foundation rooted in islands.

This British technopolitical model became an article of faith for American expansionists. The naval theorist and historian Alfred Thayer Mahan

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(1840-1914) argued that the nation with the strongest navy would dominate seas and markets. 13 The US should therefore construct both a powerful navy and a chain of stations to provide for coaling, supplies, and repairs. The political will of Senator Henry Cabot Lodge and his friend President Theodore Roosevelt transformed Mahan's theory into a grand strategy. The US already possessed facilities at Midway (1867), Samoa (1878), and Pearl Harbor on Hawaii's O'ahu Island (1887). Within two decades of the Spanish-American-Cuban War, the US built a navy second only to Britain's, constructing Pacific and Caribbean naval nodes for control of ocean spaces.¹⁴ As Mahan had envisioned, the war enabled the US to acquire sites for coaling stations and underwater cable nodes through strategically placed islands that remain (with the exception of the Philippines) in US possession: Cuba's Guantanamo Bay, Puerto Rico (with its strategically important islets, Culebra, Vieques, and Mona), Guam, and American Samoa. In 1917 the US bought the Virgin Islands from Denmark to complete the chain of coaling stations. Expansion through control of the ocean—politicizing and militarizing oceanic space—thus created a global system of international relations in which islands, peninsulas, and littoral spaces played a key geopolitical role.¹⁵

In what was not a foregone conclusion, Americans went on to perfect this form of global power building. The US was, at the outset, a commercial and coastal territory that fully participated in the oceanic world. In the nineteenth century, the US became preoccupied with territorial conquest, building its nation around a vast continental homeland and incorporating territories like Oklahoma (1907) and New Mexico (1912). Large infrastructures of canals, roads, railways, post, and telegraphy helped forge an internal cohesion as land-starved European nations looked to overseas expansion. During this nation-building phase, representing the American West as virgin and uninhabited became crucial for America's national identity as a republic. When the US reversed its geopolitical orientation in the 1890s, a cognitive gap developed. The myth of a domesticated American West now vied against a reinvigorated projection of American power overseas. ¹⁷

The US Supreme Court's legal frame in the Insular Cases (1902–1922) marks the first indication that the technopolitics of islands helped bridge the cognitive gap between America's self-representation as a republic and its projection of imperial ambitions. The representation of islands as liminal yet crucial sites occupied center stage in the court's legal discussion. At the core of the debate was the status of the 5.2 square miles of Navassa Island in the Caribbean. In 1889 the Supreme Court heard the case of African-American laborers contracted by a Baltimore company to scrape guano

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(fertile deposits of bird feces used in commercial agriculture) off the island's rocks. Venting rage against inhumane conditions and lethal abuse, the workers killed five white supervisors. The court readily accepted the death penalties sought by the prosecutor. The question that occupied the justices was whether the US had jurisdiction over this outlying guano island. The court developed the argument that islands like Navassa "belonged to" but were "not part of" the United States. This ruling exerted a lasting influence following the 1898 annexation of Puerto Rico, the Philippines, Cuba, and Guam. Its legal precedent undergirded the Insular Cases, which established that an "unincorporated territory" was to be "foreign to the United States in a domestic sense," its inhabitants neither aliens nor citizens. This doctrine ended the automatic incorporation of territories and enabled further expansion by introducing separate-but-equal status for overseas territories, exempting them from full legal rights.

After World War II, the ambiguous language of the Insular Cases set the stage for absorbing many other archipelagos into US possession. America took as bounties from the defeated Japanese and German empires the Marshall Islands, Palau, and the Northern Marianas. Despite America's professed distaste for colonialism, most of these islands remained in its possession and resembled old-fashioned protectorates in a time of decolonization.¹⁹

Anchoring Islands for War during the Era of Decolonization, 1931–1945

Island technopolitics further helped the United States build a deterritorialized empire that was based on global communications along with air, nuclear, space, and other technical systems. World War II provided the underpinnings for Cold War expansion when the US enacted a technopolitical regime and an ideological discourse of anti-imperialism and democracy that was more systematic than in previous decades. This discourse resulted in political preferences, military strategies, and design choices of technological systems that shaped each other profoundly.²⁰ Franklin D. Roosevelt first steered America's old naval and air interests clear of the ideological strong winds of decolonization. He used the island territories to bridge the gap between imperial expansion and the new demands of decolonization. As a teenager, he had avidly studied his uncle Theodore's work and Alfred Thayer Mahan's naval theory. As Assistant Secretary of the Navy (1913-1920) under Woodrow Wilson, Theodore Roosevelt put into practice the new philosophy of the US as an island power. He realized Mahan's vision of a chain of stations by supervising the construction of bases, shipyards, and other facilities. When he became president, the geographically astute

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Roosevelt helped to revise navalism for an era of air power. He also updated the imperial thrust for an era of decolonization.²¹

Roosevelt's administration devised a legal basis for turning islands into stepping stones of a combined naval and air strategy, revising the geographic logic of large technological systems well before World War II.²² The Department of State dusted off the Guano Island Act to justify claims for islands that by the 1930s had become commercially useless.²³ This 1856 law, which resulted from farm interests' lobbying Congress to address the British monopoly on the wonder fertilizer of Peruvian guano, gave full government support to any American entrepreneur who found and claimed an uninhabited island worth mining.²⁴ To neutralize critics, the law promised that the US would relinquish jurisdiction over these islands when the guano was exhausted or the claims were abandoned.²⁵ By the 1930s, not only had artificial fertilizer supplanted guano; the Department of State had discovered that the islands' legal statuses were in disarray despite the provision. The US government quickly placed more than twenty private claims on various islands (including Howland, Jarvis, Baker, and Johnston) under US federal (but unincorporated) jurisdiction. The US thus laid the legal foundation for building civil and military aviation systems almost a decade before the Japanese attack on Pearl Harbor.

When war broke out, the islands were ready for further incorporation into the American orbit. Military engineers transformed Hawaii, Midway, Wake, Johnston, Palmyra, and other obscure Pacific islands into stepping stones. With similar lightning speed, the barren Aleutian Islands were also pressed into strategic service.²⁶ Using what it called an "island-hopping" strategy, the US military leapfrogged from one Pacific or Aleutian island to the next, bypassing Japanese strongholds, cutting Japanese supply lines, and starving out the stranded Japanese troops. 27 The term "leapfrogging" sounded innocent, but the strategy left damaging footprints. The Navy's construction battalions of civilian contractors and engineers, known as the Seabees, built naval and air bases. For airstrips the engineers preferred flat, cleared, and cultivated spaces that often coincided with the best farmlands. Appropriating farmland displaced agricultural laborers, whose skills were then mobilized for the construction projects. Blowing up coconut palms to level the ground and dredging up coral reefs to build runways, the construction battalions transformed landscapes within weeks. They left as quickly as they had come. This military-industrial machine operated like an assembly line. From Bechtel's Calships wharfs at Terminal Island in Los Angeles Harbor to Hawaii and on to Midway, an average of 112 base facilities were built per month. The effort dwarfed all earlier ones.²⁸

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The technopolitics of islands allowed the US to straddle two ideological roles when the global expansion justified by war became politically problematic during peacetime. One role was the US as a self-contained, anticolonial homeland. The other was America as a fully engaged superpower that claimed no interest in overseas territories. Already during the war, American policy makers, intellectuals, and historians shunned words of conquest such as "expansion," "colonies," "dependencies," and "protectorates," preferring instead the terms "territories," "commonwealths," "insular areas," and "outlying areas." One advisor urged the British colonial office to avoid colonial terminology and speak about US overseas possessions in terms of union, self-government, and federation. "

The Roosevelt administration fully exploited the islands' ideological value in service to America's self-representation as a non-colonial—even anti-colonial—power. While the Department of State put intense pressure on the British to dismantle their territories, the US Navy and the Joint Chiefs of Staff saw many strategic advantages in occupying the many Pacific islands under British control. The Navy nevertheless understood the radically changed political climate and Roosevelt's anti-colonial stance. "We cannot allow ourselves to be charged with imperialism," said Admiral Richard Byrd. Yet, Byrd noted, the 130 Pacific islands presented an unique opportunity that "may never come again for a comprehensive far-flung chain of bases." He argued that the US occupation of the islands should not be construed as territorial expansion: "None of the islands in question possesses natural features of value from other than the military standpoint . . . [and therefore] cannot constitute territorial aggrandizement." Although the islands possessed no economic value and were, more importantly, "empty," they were crucial for air routes, landing fields, and combined "commerce and political and military strategy."31 In 1945, Secretary of War Henry Stimson and President Harry Truman repeated the semantically self-serving position that islands should be considered prospective military bases, not annexed or colonized territories. The annexed islands, Stimson insisted, "are not colonies; they are outposts, and their acquisition are appropriate under the general doctrine of self-defense."³²

The war and the anti-colonial pressures also established a US preference for leasing instead of annexing territory. The Department of Defense believed that the strategy helped to solve the explosive issue of colonialism, enhancing "our reputation for integrity of international agreement and traditional lack of imperialistic ambition."³³ On the basis of the Destroyers for Bases and Lend-Lease agreements in 1940 and 1941, for example, the US had assimilated an imperial infrastructure by taking over British ports

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in the North Atlantic and the Caribbean on a 99-year rent-free lease.³⁴ The Americans also forced the British to give up their monopoly on global communications lines. In effect, the US used the wartime cover of "partnership" to take over the networked part of the British Empire—its chain of bases and communication systems—but left the territorial pieces alone.³⁵ This deal gave the British enough nominal sovereignty to maintain their fantasy of empire while promulgating the fiction of an anti-imperial US power. After the war, the US military faced political pressure to bring troops home and shut down half of its bases. Peace forced the Navy to abandon its ambition of keeping an "Offshore Island Perimeter." Instead, the Department of Defense began to make separate deals, negotiating with Denmark for base rights on Greenland, with Portugal for rights on the Azores, and with Iceland and Britain for rights on additional territories. George Kennan articulated a foreign policy of containment that helped justify the Navy's "forward strategy" encircling the Soviet Union and China.

However, by the mid 1950s, with the Cold War in full swing, US military planners believed the situation had become acute when the old colonial powers were no longer capable of holding down the fort against independence movements. As David Vine has shown in his fine study of Diego Garcia, the newly established Long-Range Objectives Group at the Pentagon articulated a comprehensive "Strategic Island Concept." In view of "anticolonist feelings or Soviet pressures," the Department of Defense systematically looked for "strategically located, lightly populated, isolated islands still controlled by friendly Western powers." Planners believed that "remote colonial islands with small [colonial] populations would be the easiest to acquire, and would entail the least political headaches." Stu Baker, the author of this strategy, urged the US to stockpile base rights before these islands became independent nations. A race ensued to rack up as many islands as possible before independence movements could take the helm of the local political machine.

Thus in the mid 1950s the US embarked on a systematic policy to lease hundreds of islands, peninsulas, and littoral spaces from declining empires and emerging nations. These agreements—supported by a legal framework of extraterritoriality that asserted the right to apply laws beyond a nation's territory—henceforth set the format for America's global arrangements with other nations.³⁷ They bolstered the legal basis for nonterritorial forms of American expansion, representing, in the words of one scholar, "a floating island of American sovereignty."³⁸ Constructing islands as demographically empty, geographically "thin," and economically worthless—but strategically vital and legally "thick"—helped the US fill the cognitive gap between

its self-representation as a republic and its ambition for empire in a new era. The Cold War reified the strategic claims into a discourse of anti-imperialism, anti-colonialism, democracy, and capitalism.³⁹ As we will see, large global technical systems anchored in putatively empty islands provided the connective tissue between these opposing goals.

Erasing Space, Filling Technology

The legal and geopolitical mobilization of islands into the American orbit took a specific technological shape that would dominate the postwar era: emptying out space by filling the islands with technologically intense systems that obscured the political imprints of the United States. A closer look at three territories demonstrates how the island chains physically anchored the technological systems that wired the US into a networked empire. In the Azores, in Kwajalein, and in Diego Garcia, the US displaced local peoples, supplanting their presence with layers of technological systems—nodes in a global network of power.

"The First Cold War": The Azores and Kwajalein

The transformation of the Portuguese Azores symbolizes the beginning of what historians have called "the First Cold War." A strategic nineteenthcentury node for communication and coal, the Azores became a temporary base during World War II, remaining in US orbit henceforth as a logistical centerpiece of the First Cold War. 40 After weaning the Portuguese dictator Antonio Oliveira Salazar from the Axis powers, the US built naval bases and airports on the Azores that were not completed until one week after Germany signed the peace accord. Nevertheless, the bases proved immediately useful. The airport on Maria Island was used to shuttle more than 50,000 troops home from Europe, and Lajes airport on Terceira Island was used to secretly divert aircraft from Europe to the Pacific during the final months of the war.⁴¹ Then in 1948, just as they were about to close down, the Azores bases were pressed into service as a logistical link in the Berlin Airlift. 42 Two years later, the US pressured the Portuguese government for a permanent US military presence never to leave the American domain again, as the 2003 press conference pressuring Iraq into war testifies so well.

Kwajalein, one of many Pacific islands mobilized for the nuclear age, served as a Cold War proxy on the other side of the globe. Seeking to counterbalance the Soviet Union's supremacy in manpower, the United States saw its nuclear monopoly as a capital-intensive and knowledge-intensive investment that could replace troop power with a technological system.⁴³

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This was not the only way in which labor was displaced. Colonized, recently decolonized, or tribal lands had become the Western power's favored testing grounds for nuclear weapons and other controversial technologies. ⁴⁴ Americans favored testing outside their borders, using distant colonies where populations were sparse and the political costs minimal. Meanwhile, the Soviet Union tested bombs within its borders. ⁴⁵ Because of the atomic bomb, the remote Pacific islands emerged as a nuclear laboratory founded on colonial relationships. As the Cold War accelerated, many of the old guano islands (e.g., Johnston Atoll) and the newly annexed archipelagos (Bikini, Enewetak, Kwajalein) came to operate as offshore labs and testing sites for chemical, biological, and nuclear technologies. ⁴⁶ Of these, Kwajalein best represents the fate of the islands in the transition to the nuclear age.

First, Kwajalein had to become a lab. It was scientifically and politically critical to "empty out" islands for nuclear experimentation by forcibly removing the population. Appropriating islands for military purposes found its most tragic precedent in the Bikinis in the late 1940s. The US Navy relocated the residents of Bikini and Rongelap to the atoll of Kwajalein before using the islands in nuclear testing programs that continued until 1958. The center of US nuclear and ballistic testing then shifted to the 93 islands of Kwajalein. Residents of the Marshall Islands, Bikini, Enewetak, Rongelap, Rongerik, and Utirik sought compensation from the US government. The politics of "emptying out" spaces to fill them with "pristine," high-tech, prestigious, but geographically "thin" technologies were repeated around the world. The peoples of the Aleutian Islands in Alaska, Vieques and Culebra in Puerto Rico, Thule in Greenland, and Okinawa in Japan were removed from their islands. Once emptied out, the islands were filled with technological systems for similar geopolitical purposes in the postwar era. 47 These are well-known stories. Here, I focus on the less familiar, but perhaps more significant labor geographies of the technical systems that sustained the Cold War struggle. The geographically "thin" technologies had their photo negative in the "thick" labor-filled sites that sustained them but remained hidden.⁴⁸ This geographic division of labor came to characterize the particular US exercise of global power during the Cold War, as the examples of Kwajalein and Ebeye show.

The crowded Pacific isle of Ebeye metaphorically orbits Kwajalein at the center of the US nuclear and missile program in the Marshall Islands. Kwajalein is an atoll officially listed as uninhabited except for the residing military personnel. After serving as a naval base during World War II, the island became a temporary settlement for Bikini and Enewetak islanders displaced

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by nuclear testing. ⁴⁹ More than a decade later, Kwajalein—along with Wake Island—was transformed into a missile testing ground vital to President Reagan's missile defense initiative. It also hosts the ground station for the US Navy's NAVSTAR, which spun off into the commercial and hugely successful Global Positioning System (GPS), making it a technologically thick-layered place. In preparation for tests of the Nike Zeus and Nike X weapons systems, Kwajalein islanders and the already displaced Bikini and Rongelap residents were moved to neighboring Ebeye Island, whose small population grew to several thousand amid slum conditions. To create an extra "mid-corridor" for the missile-testing site, the US military also relocated the people of Roi-Namur, Lib, Meck, Lagan, and Ningi to Ebeye. Then the US government cordoned off Kwajalein for military personnel only.

Ebeye is the gritty mirror image to Kwajalein's pristine technology. With 12,000 people, the 80-acre Ebeye serves as the missile site's overcrowded camp for non-US workers. The island's population included the original Kwajalein residents, the expelled residents from the Bikini archipelago, and skilled Micronesian workers. The workers in US employ were ferried to Kwajalein and back to Ebeye each workday, but were prohibited from shopping, eating, swimming, and using the library at Kwajalein's facilities. This commuter workforce was also forbidden from taking highly valued consumer goods off the well-stocked island. A journalist testifying before Congress in 1984 compared the living conditions of the two neighboring islands thus: "Kwajalein is like . . . one of our Miami Resort areas, with palm-treelined beaches, swimming pool, a golf course, people bicycling everywhere, a first-class hospital and a school; and Ebeye, on the other hand, is an island slum, overpopulated, treeless filthy lagoon, littered beaches, a dilapidated hospital, and contaminated water supply, and so forth."50 The acting director of the Department of the Interior's Office of Territorial Affairs observed a broader pattern. He equated the island of Ebeye with the many other labor ghettos that had sprung up around American military installations throughout the world.

Indeed geographically "thin" and technologically sophisticated islands like Kwajalein cannot be understood without the correlates that "track" them, the labor-intensive and "thick" sites like Ebeye. A chain of seedy camp towns runs through South Korea, Guam, Okinawa, Palau, Ologapo, and beyond. Here, poor women and war orphans eke out a living as prostitutes, entrepreneurs, and criminals looking to earn dollars. Sanctioned by the US government, these are places of "rest and relaxation," in the official parlance of the American military. For the women who offer their sexual favors in neon-lit bars, massage parlors, and discos, they are places

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of work.⁵¹ In short, places like Ebeye are the photo negatives of America's technologically thick military-industrial complex.

"The Second Cold War" and Beyond: Diego Garcia

The technological layering that symbolizes the transition to "the second Cold War" is even better illustrated in the waters of the Indian Ocean, midway between Africa and Asia, on the British atoll of Diego Garcia. Situated along oil-shipping lanes in the Chagos Archipelago, this 66-squaremile paradise lies around a large lagoon that is shaped like a footprint on a beach. In November 1968, a contingent of four American geographers, five Filipino technicians, and their cook arrived on Diego Garcia to install a tracking station as a part of the global Satellite Triangulation Program sponsored by the US Department of Defense. The military geographers found a vibrant Creole plantation economy living without electricity, telephones, or postal service, but also an abundance of lobsters that the crew caught in the island's water and preserved in a self-powered freezer to sell to passing ships.⁵² Until then off the electrical grid, the island of Diego Garcia was fully wired within a decade. The island came to host a plethora of ground stations for global systems. It has served as a launch pad for Special Forces for many of their military actions, including the failed 1980 mission to rescue hostages in Iran. It was a base for American B-52 and B-2 bombers in the Gulf War of 1991 and the Iraq War of 2003. Recently, British officials have admitted that Diego Garcia has been one of the CIA's infamous "black holes" where suspected terrorists have disappeared without a legal trace. At least one US ship has been "used as a floating prison for high-profile prisoners while it was in the vicinity of Diego Garcia."53

Like the Bikinis and Kwajalein, Diego Garcia is listed as uninhabited except for its 2,000 military personnel. It has been deliberately constructed as politically empty so that it could be loaded with technologically complex systems. In the early 1960s, in search of suitable sites for its Strategic Island Concept, the US demanded that the British "sweep" and "sanitize" the Chagos Islands. Only then could America turn Diego Garcia into a node in its global power network. The British readily obliged by eliminating any local opposition and expelling over 2,000 residents. To provide the basis for the US-UK agreement, the British government created the legal fiction of the British Indian Ocean Territory (BIOT) in 1965. This arrangement transformed the residents of Diego Garcia—French-speaking British subjects who had worked on the island's coconut plantations for five generations—into temporary contract workers originating from Mauritius and Seychelles. The BIOT scheme, which nullified the Mauritian claim on the Chagos

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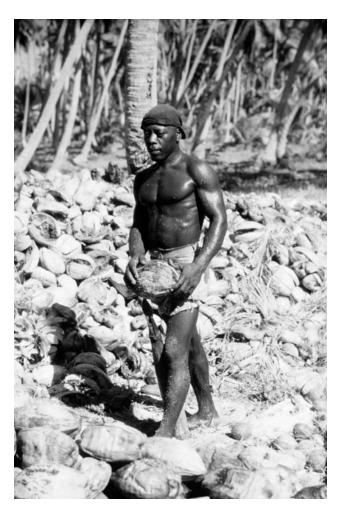


Figure 2.1A Diego Garcia coconut worker photographed by a US geographer on the eve of population's removal from the island in 1968. Source: NOAA Geodesy Collection. Courtesy of NOAA, Washington.

Archipelago in exchange for Mauritian independence, paved the way for a US base at Diego Garcia a year later. British policy makers designated the Diego Garcians as "a floating population" of migrant workers before expelling them through a policy of harassment, starvation, and deportation. Residents who left the island for medical reasons or to visit family elsewhere in the archipelago were not allowed to return, for example. The remainder were forcibly removed. Using the exhaust fumes from military vehicles, a manager in the employ of the British killed all the island's dogs and donkeys. The policy was intended to prevent the residents from claiming that they were an "indigenous population" while keeping them useful as a workforce. On the eve of their deportation, the last islanders helped incoming American geographers and Filipino technicians to unload kits filled with parts for the global satellite system.

Having removed the island's native population, the US rapidly began to fill Diego Garcia with technical systems. The Department of Defense, in collaboration with the Coast and Geodetic Survey, established satellite camera observatories as part of a global network to compete with the Soviet Union. In choosing locations for satellite ground stations, government engineers

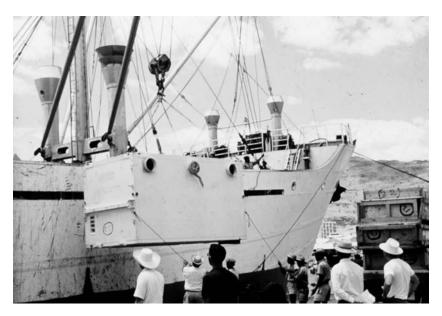


Figure 2.2The last Diego Garcians help US engineers to unload the material for the base camp for the Triangulation Satellite Program, 1968. Courtesy of NOAA, Washington.

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hewed to political rather than scientific and technological demands. The worldwide satellite triangulation program mapped the shape of the earth using sets of two island stations that photographed satellites against a fixed background of stars. Marketed as a science project, it was strategic from the beginning. The program promised to cover the earth's surface in mathematically perfect triangles. But in execution, the project neatly reflected Cold War political geography by adjusting the global net to the political map. This geographic distribution did not match the scientific maps the agency proudly presented in its public relations campaign. In reality, the points of the triangles faithfully followed the islands under American control, including Maui, Puerto Rico, Guam, Samoa, Tinian, Wake, and the Aleutians. Also mapped were the strategically important territories fading from the grasp of America's reliable allies: British Diego Garcia, St. Helena, Ascension, and Tristan da Cunha; Bermuda; French Seychelles; and Australian Christmas Island (now Kiritimati). Touted as a truly global system, the project in fact represented a Cold War geography. For example, the engineers failed to cover the Soviet Union and China because they lacked access to stations needed to complete the triangles.⁵⁵ Moreover, the construction



Figure 2.3 Artist's impression of the US Triangulation Satellite Program suggesting the project covered the earth's surface in mathematically perfect triangles, 1968. Source: NOAA Geodesy Collection. Courtesy of NOAA, Washington.

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BC-4 WORLD PRIMARY NETWORK

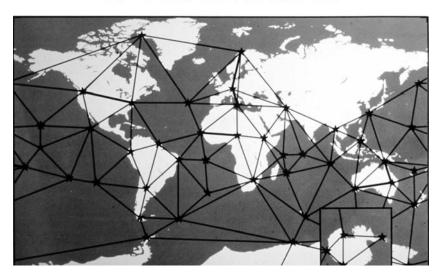


Figure 2.4 Grounded in islands, a map of the Satellite Triangulation Network as a Cold War reality without perfect triangles and excluding China and the Soviet Union, 1968. Source: NOAA Geodesy Collection. Courtesy of NOAA, Washington.

of the global satellite triangulation system during the 1960s used many of the islands under US jurisdiction as earth stations even when their locations did not make scientific sense or failed to generate the perfect triangles presented publicly.⁵⁶

The satellite triangulation program that brought America to Diego Garcia laid the groundwork for subsequent ground stations of the Echelon spy network, NASA's Mercury Project, and the Global Positioning System, for example. As a node of several global networks, Diego Garcia linked myriad technical systems. For example, the global surveillance system Echelon brought together the British and American systems, personnel, and stations under a secret 1947 agreement. The British Commonwealth countries of Canada, Australia, and New Zealand joined in the American-British network and were followed by Norway, Denmark, Germany, and Turkey. So, too, Echelon's spy network anchored its ground stations on the islands of Guam, Kunia, Hawaii, Diego Garcia, and the Japanese-controlled Iwakuni. In the late 1950s, NASA's Mercury Project sought to put a man into orbit around the Earth. For its earth stations, the Mercury Project relied on Diego Garcia, Cyprus, Canton, and Enderbury. During the 1970s, the earth links

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for the Global Positioning System (GPS) were located on Ascension Island in the Atlantic, Diego Garcia in the Indian Ocean, and Kwajalein and Hawaii in the Pacific. In each instance, the islands chosen fell in the extraterritorial domain of US jurisdiction and power.

The satellite triangulation program and its many successors were part of American-based espionage, space exploration, and satellite systems thus anchored in an island empire that had come into being over the course of a century. Again and again, these large Cold War technical networks were grounded in colonized islands in an era of decolonization. In all these projects, satellite systems were linked closely to submarine warfare. Technological systems included ocean acoustics, deep sea bathymetry, and satellite altimetry of sea surfaces. These complex technopolitical nodes (and their commercial spin-offs) did more than that. They integrated oceans, airways, and outer space into a single system under US global command.

The global networks were not just part of the struggle between the superpowers. The meaning of "the global" varied according to political context of these technological systems. During the 1950s, satellite ground stations outside Western Europe often opened with great fanfare. The stations served both as symbols of American success in the superpower struggle against the Soviet Union and as arguments against British colonialism. Commonwealth nations and decolonizing countries believed that American domination of global networks promised to circumvent the British colonial stranglehold on communication systems and to provide a symbol of national independence. 60 For their part, the British sought to prolong their empire by subscribing instead to "the global." In the case of Diego Garcia, for example, the British invested heavily in symbols to claim their sovereignty, issuing commemorative island stamps, flying the Union Jack, arranging a visit by the Duke of York, and preserving old plantation buildings at East Point.⁶¹ The investment in the imperial symbols of British sovereignty could not mask the *de facto* status of Diego Garcia as a US territory, however.

Diego Garcia well represents the Cold War; it also prefigures the post-Cold War world. After its initial buildup in the guise of a communication and geodesic tracking center (1966 and 1973), the tiny island of Diego Garcia became the strategic answer to President Nixon's search for bases free of political headaches like those associated with Vietnam. By then Diego Garcia served as the US hub for an updated Cold War strategy, the so-called Second Cold War.⁶² The island was the pivot point in the Carter administration's plan to protect America's access to Persian Gulf oil after the 1973 oil crisis, the Soviet Union's invasion of Afghanistan, and the hostage crisis in Iran.⁶³ The Reagan administration, which likewise declared Persian Gulf oil

a vital American interest, used the island as a springboard to project American power. In Pentagon doctrine, that projection of power hardened in the design of Diego Garcia as an "empty" island, eventually filled with complex and layered technological systems that spanned the globe.

Diego Garcia, which the Reagan administration called "the footprint of freedom," has also become the model for future bases. The island transformed into a mobile invasion kit to alleviate the military's dependence on vast German- and Korean-style US bases or politically instable regimes. The naval kit consisted of the Marine Amphibious Brigade: seventeen fully loaded vessels, including cargo ships that were "packed with all the supplies needed for a Middle East invasion, already loaded into trucks. Everything right down to water tankers for thirsty troops."64 The principle of the kit—a mobile self-sustaining system for a limited time—was to provide enough supplies and spare parts to allow the integrated naval and air unit to operate for 90 days without external support. Flexible, integrated naval and air kits were designed to roll out a complete war machine within days. Military planners designed these war kits to eliminate the dependence on local politics and geography altogether. Diego Garcia became the model. Although these mobile kits, in combination with long-range flight, airborne refueling, and massive aircraft carriers, seemed to signal the end of the usefulness of the geographical positions of islands like Diego Garcia as anchor points for US power, nothing is further from the truth.

Islands as Boundary Objects of the Networked Empire

Islands went through careers of sorts. Once technologically useful, they lay dormant at times before being pressed into use for novel exploits.⁶⁵ For example, the nineteenth-century geographic logic that demanded a chain of island coaling stations became obsolete when the US Navy turned to oil for power. Samoa became a backwater. 66 Midway and Guam, used as landfalls for underwater cables during World War I, lost out to radio soon after.⁶⁷ The advent of air power changed the geographic logic once again. Guam and Midway were re-enlisted as stepping stones for civilian and military air travel during World War II. The coming of long-range flight, airborne refueling, and massive aircraft carriers threatened to render the Azores obsolete as a transatlantic stopover. The logical conclusion came when the Reagan administration launched a shipbuilding program to free the US of military bases tied to territories by developing units that could roll out as an invasion kit. Even though in each instance the technical and geographic logics changed, the political rationales for keeping islands within the US orbit remained remarkably stable over the course of

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a century or so. Technical obsolescence rarely resulted in abandonment or restoration of sovereignty.

Instead it was the extraterritorial status replete with legal vagaries that made islands so politically desirable. On the map of decolonization, islands were not simply specks on the globe or solitary dry surfaces in a vast ocean, but alluring, brightly colored colonial thumbtacks. Far removed from centers of power on the most peripheral of peripheries, most archipelagos have been located at the center of major twentieth-century historical events.⁶⁸ These dots on the map have allowed America to continually renounce territorial ambitions while expanding to become the sole global power after the Cold War. One could well argue, as Chalmers Johnson has, that the US is not an empire of islands but one of bases connected through a military chain of command lacking civilian oversight. It is an empire in the business of maintaining absolute power, controlling communication through eavesdropping stations, preserving economic control of petroleum flows, and reproducing an institutional income system for the military-industrial complex. Its network of bases maintains an extraterritorial comfort zone with social and medical benefits that include clubs, apartments, gyms, golf courses, swimming pools, and shopping malls-amenities often inaccessible to the ethnic minorities and lower classes in the continental US.⁶⁹

Yet islands are not just privileged sites for employees of the militaryindustrial complex. As the legal scholar Christine Duffy Burnett has argued, the guano islands operated as imperial boundary objects that could expand and contract as needed. 70 The same flexibility applies to the thousands of islands now in US possession and to the many bases and littoral spaces not formally under US dominion. The legal and technopolitical moorings of islands have helped US power to expand, contract, and change as cultural movements and political administrations have waxed and waned. Many islands transformed into novel extraterritorial spaces, some even turning into engines of globalization that seemed to have little to do with military bases. At the height of the Cold War, for example, only two Export Processing Zones (EPZ) and Free Trade Zones (FTZ) existed; by the year 2000 that number had exploded to 800.71 Samoa, once a coaling station, currently serves as America's exclusive tuna-processing zone. The American Virgin Islands and Saipan in the Northern Marianas, no longer just military sites, are free-trade zones for the garment industry and transnational Internet companies. American companies, paying their workers wages well below US standards, maintain sweatshop conditions in these territories that are exempted from American wage and immigration laws and from US tariffs. 72 Other Exclusive Economic Zones (EZZ) are eagerly explored for

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their mineral resources. These extraterritorial zones are neither hollowed out nor adjusted to the nation-state, as some critics of globalization have feared. The zones have permitted the US to exercise sovereignty with its techno-military apparatus while supporting the demands of the free market. In fact, these liminal spaces have helped sustain the military's need for strengthening the American nation-state while also meeting the demands of corporate America.⁷³

Other islands have become precious—if precarious—havens of biodiversity. Given the protracted clean-up of nuclear and military sites, the irony is that many of these islands have turned into environmental showpieces at once pristine and polluted. The Pacific's former guano islands Jarvis and Midway, as well as the Caribbean island of Navassa, now host the NASA earth-mapping projects advertised as balm for the planet's ecological woes. The listening stations of the Sound Surveillance System (SOSUS), which once tracked Soviet submarines, now eavesdrop on migrating whales.⁷⁴ Ecological concerns have been mobilized to justify closure of public lands and to restore a semblance of sovereignty in some locales. Vandenberg Air Force Base in California, from which many space shuttles and satellites were launched, boasts many endangered species. The British government recently established a society dedicated to the protection of Diego Garcia's environment and history. In the words of a high-ranking British official, the US military and the island's remoteness had luckily "spared the impact of mass tourism and factory fishing, the environmental banes which are despoiling more and more of the rest of the Indian Ocean."75

Islands, in short, went through many careers but nevertheless firmly remained within the US domain to become the anchor points of a worldwide, interconnected, and integrated system of nodes. This network has not only aided in sustaining US democracy but fostered a global gulag kept off the official map. The legal distinction made by the US Supreme Court in the death penalty case of the Navassa workers (1898) served as the basis for the status of the Philippines, Puerto Rico, and Guam a decade later. It also made possible the imprisonment of "enemy combatants" at Guantanamo in 2002.76 Guantanamo Bay, as Amy Kaplan correctly argues, rather than the exception, is the rule for how the US has exercised its power. Thousands of other archipelagic spaces under America's domain become visible only when events rupture the powerful narrative of America's deterritorialized power. Anchored in "empty" islands, the reach, power, and prestige of large technical systems—from the first telegraph communications to current outer space systems—have come to replace territorialized empire as an indicator of geopolitical power.⁷⁷

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Anchoring the Cold War: Historiography Revisited

A more complete understanding of the geopolitical locations of large technical systems also has consequences for our scholarship, however. No doubt for political reasons, many of the earth stations and technology systems for outer space are named to obfuscate their geographic locations. For instance, Anderson Military Base often stands in for the island of Guam. This erasure replicates military protocol of secrecy and army habits of community building. It follows the long-standing colonial practice of appropriation as an act of power as demonstrated in the renaming of the Hawaiian Island of Kalama as "Johnston Island." The habit has also percolated into scholarship. In the history of technology, technical systems like the Satellite Triangulation Project, the Mercury Project, the Geographical Positioning System, the Strategic Defense Initiative, and OAO-2 are often analyzed as geographically neutral systems difficult to pinpoint on a map. Even if, as we have seen, high-tech systems map faithfully to island possessions in America's domain, historians have generally ignored the colonial contexts. Similarly, theories of networked societies often portray these arrangements as disembodied entities in a new transnational arena.⁷⁸

A focus on islands offers a fresh reading in the wide-ranging public debates on America's specific exercise of global power. For one thing, it renders visible the geographical moorings of the technopolitics that displaces workers through capital-intensive, labor-poor technologies, launches proxy wars, supplies ground stations for space systems, and provides corporations with havens of cheap labor. Many of the island groups have transformed into critical nodes in exclusionary, globe-spanning systems that make up America's networked empire. Geographically, this island empire is indeed "thin" and "invisible" but technologically "thick." Moreover, focusing on the edges of the American empire helps explain why Cold War historiography exhibits both a persistent difficulty of grasping the territorial basis of America's global power and a recurrent self-definition of the US as an exceptional world power. The discourse of deterritorialization of America's global position has been a powerful narrative indeed.

In the latest incarnation of territorial blindness, Joseph Nye, a scholar of international relations and a Clinton administration official for foreign policy and global markets, introduced the term "soft power" to characterize America's disembodied, deterritorialized exercise of global power, insisting that this form of power is far more important than the hard power of military might. Even Michael Negri and Antonio Hardt present the US as the alternative to the classic territorial model, calling America a networked—not a landed—empire across an unbounded terrain. The historian Charles

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Maier correctly criticizes Negri and Hardt's metaphorical scripting of the networked empire as one without actors or institutions. Yet even Maier concludes that US power should be considered a post-territorial empire of production and consumption. This weak understanding of US power visà-vis its global geography also inflects the discourse of American Studies. It casts America as a topos without geography, an engine of capitalism that is everywhere and nowhere, a cultural production that is ubiquitous and elusive. The lack of geographic precision is thus deeply ingrained in the representation of America's global position. Perhaps it is not so ironic that Americans have trouble pinning down the US even though most of the world-spanning projects of the Cold War involved intense global mapping. As we have seen, the contradiction has been a matter of policy and design.

We need to understand that the US is an empire grounded in networks stretching across the globe and masked by islands. Technical nodes of global networks have been purposefully anchored in politically weak regimes on islands that are strategically constructed as empty to support the notion of a deterritorialized American power.⁸⁴

The successful construction of an island's emptiness devoid of political headaches has nevertheless come back to haunt. In 2000, after years of litigation, the expelled people of Diego Garcia unexpectedly won their right in Britain's highest court to return to their home. In response, the Blair government annulled the court's judgment in 2004, arguing that the US military's occupation made the ruling a de facto impossibility. In March 2006, the British tried to escape the awkward situation by allowing more than a hundred Chagossians to pay respects to their forebears at the graves on the island's East Point Plantation. The expelled Creole inhabitants, accompanied by two priests, a stonemason, a doctor, a nurse, and a British official, held a mass and left behind a memorial marker. Oliver Bancoult, who had been forced to leave the islands as a boy, led the Chagos Refugees Group. "This is not the end of the matter," he vowed. "We maintain our objective of returning to live in our birthplace." To avoid further embarrassment, the British prohibited journalists from reporting on the occasion. Two weeks later, the US Supreme Court denied the defendants their right to return to Diego Garcia. Still, the story did not die. In May, the British High Court dismissed the Blair government's annulment. In 2008, the UK government overturned the court's judgment on appeal. The Chagossians now hope the expiration of the lease in 2016 will offer them the opportunity to return.

Once in a while, other displaced peoples of technologically thick spaces—e.g., the Inuit of Thule or the original people of Okinawa—rupture the narratives of Western newspapers and demand their right of return to

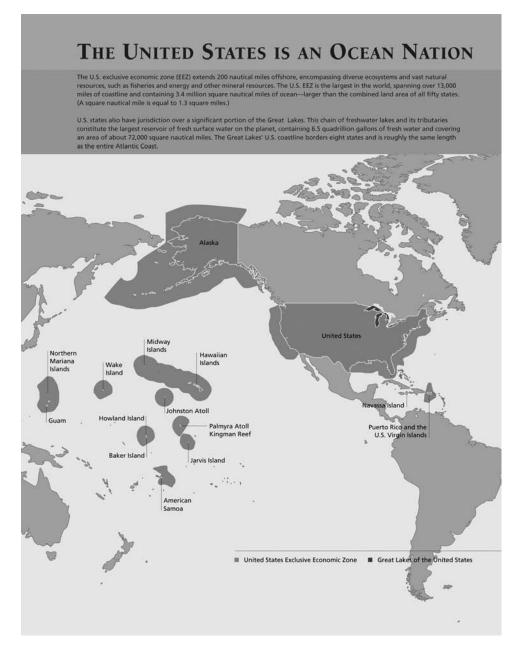


Figure 2.5

The Exclusive Economic Zone (EEZ) of the United States in the Pacific comprises 3.4 million square nautical miles, an area larger the land area of the fifty states. Source: http://aquaculture.noaa.gov.

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the places that barely register with the rest of the world. We may dismiss these struggles as insignificant hiccups in the global scheme of things. But what islands lack in land mass they make up in political and strategic significance. The prime value of these liminal spaces lies in their insular and extraterritorial status—a status reinforced over the last decades with the expansion of the 200-mile island radiuses that have become US Exclusive Economic Zones. These zones encompass 3.4 million square nautical miles, an area about 20 percent greater than the entire land area of the US.⁸⁵ Even the square miles in land and oceanic mass fail to map the real expanse if we take into account these dimensions of outer space encompassed by technological systems. Strung together in powerful global networks, the archipelagic areas offer the American nation-state extraordinary political and ideological flexibility for an era of decolonization recast in Cold War terms.

Conclusion

To the American nation-state, the prime value of islands lies in their extraterritoriality and their offshore status. These island groups have become nodes in exclusionary, globe-spanning technical systems closely connected to the military hardware of a networked empire. The insular prison wards, guano mines, and coaling stations of the nineteenth century were converted to twentieth-century nodes for underwater cables, military operations, nuclear testing, satellite communications, and off-shore processing, and even into biodiversity havens. With their weak political systems, low environmental standards, and improvised labor laws, islands became critical nodes in technical systems during the Cold War. The Satellite Triangulation, Echelon, and Mercury programs reconfigured territorial space into an integrated global network. This alternative mapping of the technical, political, and economic topography of America's islands helps us to identify the striking continuities but also to appreciate the subtle differences between European and American imperial powers throughout the twentieth century. Spread over vast expanses of ocean, the islands are cast as the most peripheral of peripheries. Together, they render US power invisible to the world. Yet many of these islands played a central role in the twentieth century's most important events: World War II, the birth of the nuclear age, the Cold War, and the next wave of globalization.

It is striking how effective America's island empire has been. Island infrastructures and networks have connected ocean floors, littoral areas, and outer space. Most of all, they have remained off the political map. The phenomenon has buttressed the national myth of preserving a continental

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nation or even a federal republic while projecting a global vision of democratic principles. No matter what fundamental incompatibility exists between its insistence on its identity as an exceptional nation and its desire to spread universal values, the US has used its island empire to resolve the problem. The paradox has become a technopolitical reality.

Acknowledgments

I would like to thank Stuart Blume, Charles Bright, John Cloud, Lars Denicke, Park Doing, John Krige, Maria Paula Diogo, Peter Redfield, Damon Salasa, Ana Paula Silva, Erik van der Vleuten, and the members of the Cornell University STS seminar and the TU Eindhoven for their comments and suggestions. In particular, my gratitude goes to Gabrielle Hecht and Nil Disco for their extensive comments on various drafts, to Jay Slagle for his fine editorial hand, and to John Cloud for locating the rich photographic collection at NOAA in Washington.

Notes

- 1. Ed McCullough, "Azores: A Safe, Convenient Place to Decide War and Peace," Associated Press, March 16, 2003.
- 2. Schlesinger 1986: 141.
- 3. Williams 1959. See also Williams 1969; Williams 1980; Perkins 1962.
- 4. Lundestad 1986.
- 5. For studies comparing the United States with the Roman and British empires, see Ferguson 2004; Johnson 2006; Mayer 2006.
- 6. Sparrow 2006: 212-214; Clarren 2006; Stuart 1999: 7.
- 7. Bright and Geyer 2002.
- 8. LaFeber 1963: 361; Smith 2003: 1.
- 9. Smith 2003: 3.
- 10. Kennedy 1971; Headrick 1991: 24. See also Hugill 1999.
- 11. Cited in Headrick 1991: 98; Maurer 2001: 474.
- 12. Dewey to Secretary of the Navy, May 7, 1898, Department of the Navy, Navy Historical Center; Kennedy 1971: 732, 738, 740–743; Lieutenant Cameron McR. Winslow, "Cable-Cutting at Cientguego, May 11, 1898," *The Century* 57, 5 (March 1899); Headrick 1981; Headrick 1999.

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- 13. Mahan 1890; LaFeber 1963: 90-95; Kelly 2003: 357-359.
- 14. Seager 1953: 508-510; Buhl 1974.
- 15. Mancke 1999; Bender 2006, chapter 1.
- 16. LaFeber 1963.
- 17. See Bright and Geyer 2002; Hietala 2003[1985].
- 18. Kaplan 2005: 841; Burnett 2005: 791; Sparrow 2006; Ferguson 2004: 48; Fairchild 1941: 109.
- 19. Sparrow 2006, chapters 8 and 9.
- 20. The Soviet Union remained a land-based empire and relied on manpower with no particular interest in American-style global communications or maritime strategies.
- 21. See also Bacevich 2002, chapter 2. On Franklin Roosevelt, see Louis 1978, passim.
- 22. Smith 2003: 359.
- 23. Nichols 1933.
- 24. Nichols 1933: 506; Orent and Reinsch 1941: 458.
- 25. Cited in Burnett 2005: 785.
- 26. Perras 2003. Kaho'olawe in Hawaii served as the training ground for Iwo Jima and Vietnam; Puerto Rico's Isla de Culebra (1939–1975) and Vieques (1975–2004) sustained troops for almost seven decades.
- 27. Firth 1997: 312–313; MacLeod 2000: Introduction.
- 28. Firth 1997: 312-313; Bechtel 1998: 40-41.
- 29. The British had a Colonial Office; the Americans called theirs the Office of Territories. Stuart 1999: 15; Howe et al. 1994: 229.
- 30. Louis 1978: 111; Smith 2003: 359, 409.
- 31. Cited in Louis 1978: 265-269.
- 32. Hanlon 1998: 44-45; Howe et al. 1994: 229; Gaddis 2005: 41.
- 33. Louis 1978: 265-269; see also Smith 2003: 359, 409.
- 34. Gerson 1991: 11.
- 35. Headrick 1991, chapter 14. See also Sanders 2000.
- 36. Vine 2009: 41–43. Vine reconstructs the emergence of the concept in his finely researched and just published study of Diego Garcia. In chapter 3, he comes to the same conclusion as this essay, which was written before its publication.

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37. The British government repaid the loans only in 2006 ("Britain to Make Its Final Payment on World War II Loan from US," *International Herald Tribune*, December 28, 2006). On other extraterritorial arrangements in Germany and South Korea, see Gerson 1991: 16.

- 38. Ruskola 2005; Silva and Diogo 2006. For similar agreements and loss of sovereignty, see Johnson 2006, chapters 4 and 5; LaFeber 2003: 30; Headrick 1991; Bello 1991; Kent 1991; Kennedy 2004.
- 39. See Williams 1980: vii, ix.
- 40. Silva and Diogo 2006. Before the introduction of weather satellites, they served as gathering and transmission stations for meteorological data for European weather forecasting. Lepgold 1997; Lajes Field, "US. Air Force Fact Sheet. Lajes Field History—Santa Maria and Beyond" (available at http://www.lajes.af.mil); Headrick 1991.
- 41. "US Air Force Fact Sheet."
- 42. In 1973, when all European countries denied the United States access to their bases it used the Azores to support Israel in the fourth Arab-Israeli War.
- 43. Maier 2006: 196-197; Gaddis 2005: 35-36, 66-67.
- 44. Hecht and Edwards 2008. On reproductive technologies testing on Puerto Rico's poor and ill-educated women for the pharmaceutical industry's in clinical trials because of less restricting laws and researchers' colonial attitudes, see Oudshoorn 2003.
- 45. Firth and von Strokirch 2003: 324.
- 46. Nero 1997.
- 47. Vine 2009: 65-68.
- 48. Hecht and Edwards 2008: 25.
- 49. The following is based on chapter 7 of Hanlon 1998.
- 50. Cited in Hanlon 1998: 201.
- 51. Enloe 2000[1989], chapter 4; Moon 1997. Johnson 2004: 6-7.
- 52. Kirby Crawford, "The Very First Americans," at http://www.zianet.com.
- 53. Jamie Doward, "U.K. Island 'used by US for rendition,'" *The Observer*, March 2, 2008.
- 54. Pilger 2004a,b; Winchester 2001; Edis 1993; Vine 2009, chapters 6 and 7. On Diego Garcia's strategic position, see Walker 1991: 41; Doyon 1991.
- 55. US Department of Commerce 1966: 37–44. See also photographic archives chronicling the project's construction at www.photolib.noaa.gov; Schmid 1974;

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Reilly et al. 1973; Satellite triangulation in the Coast and Geodetic Survey, Technical Bulletin 24 (Government Printing Office, 1965); Berkers et al. 2004: 32.

- 56. US Department of Commerce, The Coast and Geodetic Survey: 38–44.
- 57. Cloud 2002; Duncan Campbell, "Inside Echelon: The History, Structure and Function of the Global Surveillance System Known as Echelon," at http://echelononline.free.fr.
- 58. The G. W. Bush administration's policy toward extending it to outer space is outside the scope of this essay, but see chapter 3 of Johnson 2004.
- 59. Johnson 2004, chapter 3; personal communication with John Cloud, September 15, 2003.
- 60. Headrick 1991, chapter 14; Slotten 2002: 349.
- 61. Edis 1993: 87.
- 62. Halliday 1986.
- 63. Odom 2006.
- 64. Walker 1991: 41. For an elaboration on the kit, see Peter Redfield, this volume.
- 65. I thank Park Doing, Nil Disco, and Lars Denicke for helping to articulate these techno-geographical logics.
- 66. DeNovo 1955; Howe et al. 1994: 245.
- 67. Headrick 1997: 3-7; Headrick 1991, chapters 7-10; Redfield 2000: 120-122.
- 68. Hanlon 1998: 1. Hau'ofa, "Our Sea of Islands" cited in Nero 2003: 441.
- 69. Johnson 2000; Johnson 2004: 7; Johnson 2006. See also Evinger 1998.
- 70. Burnett 2005 passim; Kaplan 2005.
- 71. Palan 1998.
- 72. Clarren 2006; Maurer 2001.
- 73. For the archipelagic nations the Exclusive Economic Zones (EEZ) regulating sea zones and exploitation rights of marine sources (fishing and oil drilling) is crucial. The US pushed hard to protect its own natural resources in 1945 when President Truman extended US control over the continental shelf. Between 1946 and 1950, several Latin American countries also extended their sovereign rights to a distance of 200 nautical miles to cover their Humboldt Current fishing grounds. Most nations honor 12 nautical miles.
- 74. Whitman 2005. Environmental groups claim the Navy's use of sonar tracking systems confuses whale and dolphin communication systems, threatening their habitat.

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- 75. Edis 1993: 87.
- 76. Burnett 2005: 794-796; Kaplan 2005: 841-842.
- 77. Hecht and Edwards 2008: 22.
- 78. Castells 1996. For a critique of his thesis, see Smith 1996.
- 79. See e.g., Bender 2000; Bender 2006.
- 80. Nye 2002; Nye 1990.
- 81. Hardt and Negri 2000: 160-182.
- 82. Maier 2006, chapter 2 and pp. 280-283.
- 83. Even non-US-based Americanists subscribe to a discourse of a deterritorialized global US power, best summarized in Pells 1997 and critically analyzed in Van Elteren 2006 and Fishkin 2005.
- 84. Johnson 2006.
- 85. US Geology Service, Western Coastal and Marine Geology, "Research Project: Pacific EEZ Minerals," at http://walrus.wr.usgs.gov.

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