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The Kuroshio Frontier:
Business, State and Environment in the Making of Japan's Pacific

presented by

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Date: April 25, 2022

PhD Dissertation

The Kuroshio Frontier: Business, State and Environment in the Making of Japan's Pacific

Presented by

Jonas Rüegg

To the Department of East Asian Languages and Civilizations

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The Kuroshio Frontier: Business, State and Environment in the Making of Japan's Pacific

ABSTRACT

Pacific islands such as Japan are often unduly represented as isolated places. Land-centric biases obscure the ocean's significance as an economic space and an ecological catalyst of historical change. With fluctuating currents, prolific upwellings, seasonal winds, and migrating animals, the ocean around Japan consists of places and depths that attracted human interest at different moments in time and invited geopolitical confrontations of various kinds. Awash in nutrient-rich currents, the Japanese archipelago is intimately entangled with the Pacific as an ecosystem, an economic space, and a contested frontier. What, then, if we were to rethink modern Japanese history as embedded in this oceanic world?

This dissertation offers a metabolic perspective on the archipelago's radical geopolitical reorientation in the nineteenth century, enmeshed in a rapidly changing oceanic context. Overshadowed by the classical narratives of maritime prohibitions, "national seclusion" and a cultural aversion from the sea, Japan's material and intellectual connections with the ocean have been downplayed in the past. Shifting the focus to the archipelago's Pacific outskirts reveals the ocean as an integral part of an amphibious economic space. Japan's Pacific rim was dominated by the fast and nutrient-rich Kuroshio or "black stream," a warm current that meanders between the Philippines, Taiwan and Japan. The current allocates nutrients, regulates the climate,

and, until the late nineteenth century, defined the scope of the navigable realm. If the Kuroshio's bent path represented the boundary of 'Japan' in the early modern period (1600–1868), with the emergence of pelagic sailing and steam shipping, its interstices became the *Kuroshio Frontier*.

Putting the vernacular geographies of maritime localities into a conversation with intellectual debates on geopolitics, I examine the changing meanings the ocean we now call "the Pacific" assumed for those who traveled and inhabited it, and for those who observed it from afar. The construction of Japan's Pacific since the 1780s stood in dialogue with geopolitical transformations offshore, beginning with castaway reports from lands beyond the limits of regular shipping, continuing with illicit offshore mingling between fisherfolks and Atlantic whalers in the so-called "Japan Ground," and culminating with the Tokugawa shogunate's establishment of an experimental colony in the Bonin or Ogasawara Islands in 1861. Fears of foreign incursion informed maritime defense strategies, while fantasies of adventure and discovery inspired private initiatives to set out and colonize the islands of the ocean frontier despite legal and physical obstacles.

I argue that the expansion to island colonies across the Kuroshio Frontier in the late nineteenth century was a formative moment for concepts, ideologies and networks that proved central in the Japanese empire's subsequent mode of expansion. An oceanic focus on Japan's nineteenth century therefore not only bridges temporal divisions of "early modern" and "modern," but it also reveals the Asia-Pacific as a pelagic region structured in a historically conditioned geography of marine economy, shipping lanes, as well as animate and inanimate resources. Understanding this space

as a contested frontier region brings people, places and environmental transformations to the fore that are otherwise dismissed as peripheral. The Bonin Islanders, Pacific migrants that came to the Kuroshio Frontier during the whaling boom of the 1830s, became agents of knowledge when they transferred technical and technological knowledge to the Japanese. Likewise, networks of 'South Sea' colonization in the nineteenth century spanned those frontier islands that had emerged from the rush to the Kuroshio frontier. In sum, Japan's oceanic expansion transcends the conventional divides of early modern and modern, shogunal and imperial, insular and global. It raises questions of periodization and ethnicity that challenge the spatial and temporal boundaries of "modern" Japan itself.

Unlike terrestrial frontiers of the early modern world, the Kuroshio Frontier so far evades closure. With most living resources reduced to a fraction of pre-industrial levels, the frontier keeps expanding vertically today, towards ever-deeper deposits of oil and rare earth minerals below the ocean's surface. Once again, the frontier's seemingly inexhaustible resources feed hopes for an escape from a resource impasse, accentuating international competition for maritime space in the twenty-first century. With this dissertation, I aim to offer an explanation for the emergence of the ideological and economic mechanisms that drive this expansion today, and thereby, to shed light on the cultural biases behind the crises of the dawning Anthropocene.

Für meine Eltern,

die mich immer und in allem unterstützt haben.

Acknowledgement

For over two centuries, the field of Japanese history has languished in the shadow of the *sakoku* or "national seclusion" paradigm. The word, which describes the restrictive travel policies under the Tokugawa shogunate between the 1630s and the 1860s, was coined by a foreigner quarantined on the contained trading outpost of Dejima in the 1690s. His frustration with the way Japan isolated the few European merchants admitted to Nagasaki has reverberated over generations in Western and Japanese historiography. The years of the Covid-19 pandemic gave *sakoku* a new, real connotation.

Much longer than other governments, Japan hesitated to reopen its borders even to long-term residents of foreign nationality – largely exempting citizens from the measures – and it disheartened international partners with the repeated announcement and sudden abortion of plans to reopen. Losing access to upcoming fieldwork grants and being displaced from collaborative networks on the ground, many scholars had to re-design their research, while juggling additional teaching assignments. But despite these frustrations, the turbulence of the pandemic also underlined the inestimable value of belonging and mutual support among an academic community in distress.

On this journey, I have enjoyed the support of many people to whom I would like to express my profound gratitude. I would perhaps never have embarked on this voyage without the encouragement of my academic advisor David L. Howell whom I first met in 2013. At Harvard University, where I started my MA studies in the next summer, my paths crossed with scholars whose deep insights fundamentally changed the way I look at the workings of past and present. Brett Walker of Montana State University, then a visiting professor at the Reischauer Institute, first drew my attention to the power of environmental theory, inspiring me to explore the surprising history of Japan's Pacific outliers in my master's thesis. Special thanks go to my dissertation committee members. Ian J. Miller, who guided me through my general examinations, was never reluctant to spark some of his unmistakable creative energy, and David Armitage with his critical gaze, pushed my projects to new levels. Kären Wigen, with her bird's-eye perspective from afar, never failed to take me aback with new and unexpected readings of my materials.

The creative freedom and institutional support I enjoyed at Harvard enabled me to spend several summers conducting exploratory fieldwork in Japan and Taiwan from my first year as an MA student. In all my time in Cambridge MA, I never ceased being surprised by the depth of resources available at the University. With librarian Kuniko Yamada McVey of the Harvard Yenching Library, and Stacie Matsumoto of the Reischauer Institute always there to support us graduate researchers, this dissertation took shape even before my fieldwork year in Japan. Nevertheless, the time I spent in Japan on the eve of the pandemic thanks to a generous grant from the

Swiss National Research Fund (SNSF) was indispensable in deepening this project's grounding in local archives all across Japan.

In Japan, I enjoyed the generous support of many leading researchers who vaulted all bureaucratic hurdles to enable a series of shorter and longer stays. Thanks to Matsukata Fuyuko, the Historiographical Institute at Tokyo University became my home base in Japan. Ono Shō, who hosted me in Tokyo in the summer of 2018, and Sugimoto Fumiko, my host professor during my fieldwork in 2019–20 – though cut short by the pandemic – offered a variety of opportunities to study and publish with leading experts in Japan, such as Gakushūin University's Mochida Tomofumi, my resourceful instructor in paleography and the idioms of early modern Japan. I also had the privilege to work with the institute's restorer Takashima Akihiko, who sacrificed his leisure time to repair historical documents I had collected privately for this dissertation. During my fieldwork in Japan, Sophia University's Mariko Iijima and Takeshi Hamashita of the Toyo Bunko library have offered their time and advice in many occasions. Liu Hsiu-Feng's support enabled a summer of research at Taiwan's Academia Sinica that brought new archives along the Kuroshio within my reach.

At my alma mater, the University of Zurich, Hans Thomsen, Martin Dusinberre and Judith Vitale offered a welcoming home base, always generous with their time and energy to advise and inspire my ongoing projects. And how much meaning did work on this piece gain thanks to my friends and informants in the Bonin Islands! Ludy, Yoshino and Yulia Sforza kept me looking forward to my next visit to the Ogasawara Village Archive and they made possible so many discoveries of moss-covered inscriptions, world war remnants, and oral testimonies from their island. In Hachijō, *Nankai Times* journalist and history enthusiast Mari Kikuchi helped make local connections that informed the course of this project. On the mainland, as well, some of the greatest discoveries happen outside the archives. Tanaka Hiroyuki, a veteran of Ogasawara studies and collector of historical documents, contributed some of the cardinal sources at the heart of this dissertation. Ultimately, I would like to thank my friends and fellow students Lu Yi, Anne-Sophie Pratte, Reed Knappe, Aaron van Neste, John Hayashi, Shiori Hiraki, and Fynn Holm, as well as Iijima Keitarō and Anton Stigö for the uncountable conversations that all inspired different parts of this work.

Jonas Rüegg

Cambridge, MA
May 2022.

Note on Japanese Names, Calendars, and Measures

Japanese Names

Life dates and Japanese characters are given at first mention and in the appendix.

As is conventional in the modern Japanese language, Japanese names are given in the order family name – first name throughout this dissertation. In the early modern period, this applies only to individuals of elevated or "samurai" status. For commoners, it was not formally consented to use last names in public. Accordingly, commoners appear in official records with simple first names and, if necessary, a qualifier such as their home village or domain, e.g. Chōhei from Tosa. Notorious officials sometimes carried the same first and last names over generations, to which one or several qualifiers could be added, as in the example of Nirayama Magistrate Egawa Tarōzaemon Hidetatsu "Tan'an," or the Nagasaki Magistrate Suetsugu Heizō "Shigetomo." Official ranks in early modern Japan are generally difficult to translate, literally or by meaning, since their function and naming often had no obvious correlation, as is true for "Minister of the Right" Iwakura Tomomi. Accordingly, there is no standard translation for most positions. In the interest of general intelligibility, I follow the strategy of translating each rank conveying a sense of its actual function.

Japanese Calendar

Unlike occidental calendars that divide human history into a pre- and post-Christian era, the Japanese calendar counts the years elapsed since the periodical proclamation of a new political era called *nengō* or *gengō.* Between 1600 and 1868, the Japanese calendar is divided into 36 eras with individual era names. The year-count restarts with every era change, as it still does in contemporary Japan: the year 2022 is the year 4 of the *Reiwa* era. As has been common since the Meiji era (1868–1912), the era change from the *Heisei* (1989–2019) to the *Reiwa* era (2019–) marked the imperial succession from Emperor Akihito to his son, Emperor Naruhito. In the early modern period, however, era changes were effectuated independently of investitures on the throne, but rather, to mark a change in political strategy.

The Japanese calendar followed a lunar measure until its harmonization with the Gregorian calendar in 1873. Until that time, the Japanese year, which usually began during the Western January or February, relied on the occasional insertion of intercalary months as an astronomical adjustment to the observed season. Accordingly, the dates found in Japanese sources cannot be translated linearly into a Gregorian correspondent, as every year, the dates match up differently. It may be confusing that the first month *ichi-gatsu* of the lunar calendar does not correspond to January, or *ichi-gatsu* in the modern Japanese meaning, but the distinction is important: whereas the nineteenth day of the third month in the year *Kaei* 4 (1851)

corresponded to April 20, the same nineteenth day of the third month in the following year *kaei* 5 (1852) corresponded to May 7.

For the sake of simplicity, I list years in the Gregorian calendar, but keep specific dates *in numbered months* as they are given in the Japanese sources. In the case of ambiguity I add a Gergorian rendering, *naming the months,* as necessary.

Units of Measure

Exact units of measure varied regionally in early modern Japan and were standardized inconsistently over time. The following rounded decimal numbers correspond to the standardized value of each unit in the early Meiji period, reflecting the ratios between the units.

Distance

里	*ri*	3.9273 *km*	36 chō
町	*chō*	109.09 *m*	60 ken
間	*Ken* (*hiro*[1])	1.8182 *m*	6 shaku
尺	*shaku*	30.303 *cm*	10 *sun*
寸	*sun*	3.0303 *cm*	10 bu
分	*bu*	3.0303 *mm*	

Volume

石	koku	278 *l* (for ship's capacity).	10 “cubic shaku”
石	koku	180 *l* (measure for rice).	10 *to*
表	hyō	72 *l*	3 *to*
斗	to	18 *l*	10 *shō*
升	shō	1.8 *l*	10 *gō*
合	gō	1.8 *dl*	10 shaku
勺・夕	shaku	1.8 *cl*	10 *sai*
才	sai	1.8 *ml*	

[1] The reading *hiro* for 間 applies in the case of a vertical, or depth measurements.

Table of Contents

Introduction:
Japan, the Kuroshio, and the Creation of a Pacific World

> Born a people of the sea
> Born to be true men
> We once stood in awe
> Of the vast Pacific's Kuroshio
> The day has come on which
> Our blood boiling with ambition
> We celebrate its crossing
>
> *The Pacific March,* Imperial Japanese Navy propaganda song, 1939.[1]

Perhaps it was a series of coincidences that led John Bravo (*b.* 1812) to the Bonin islands. Like many others in search of a better life, this son of Cape Verdean farmers signed on to a London-based whaling vessel at the age of eighteen. Headed to the most prolific whaling grounds of the time, John's ship soon entered the Pacific and steered into the warm Kuroshio current. While cruising the coasts of Japan – then a "double bolted land" for the whalers, to borrow Herman Melville's phrase[2] – John was seized by a disease that may have been scurvy or a similar form of vitamin deficiency, forcing his captain to drop him off at the nearest harbor that offered hope of a cure.[3] In the Bonin Islands, also known by the Japanese name "Ogasawara," located in the

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[1] "海の民なら、男なら、みんな一度は憧れた、太平洋の黒潮を、共に勇んで行ける日が、来たぞ 歓喜の血がもえる" *Taiheiyō kōshinkyoku*, by Yokoyama Masanori, in: NDL, rec. no. J-54701.

[2] Melville 2003 [1851], 125.

[3] The biographies of John Bravo and other islanders were recorded in the population survey of 1862. *Sadame,* in: OVBE acc. no: Great Safe, Comp. 2, 2-5. Into the nineteenth century, it was commonly believed that absence from land over extended periods of time, rather than malnutrition, caused scurvy. (Chaplin 2012, 517.)

very heart of a prolific offshore zone then called the "Japan Ground," a group of settler-farmers made a living by catering to the frequently approaching foreign vessels. The migrants – sailors, farmers and laborers who since 1830 had immigrated from Hawai'i, other Pacific Islands, and Western countries – grew bananas, sugar, taro and yams, turning the islands into a cosmopolitan entrepot in the rising tide of Pacific traffic. Far from the shores of any state, the islands became a transit hub of people, goods, and introduced species. Despite the business opportunities that sea traffic had brought to the region, life was harsh for John, who, having survived his disease, started a farm together with a woman who had been brought from her native Hawai'i in 1832, it must be assumed, by one of the traffickers that moved native labor around the Pacific.[4] Mice infested the harvest; tropical storms, tsunamis, and pirates posed ongoing threats. Since the number of vessels hunting whales had risen to 700 by the 1840s, carrying 20,000 sailors and their portmanteau biota across the seas at any given time, this region in the vast ocean experienced rapid transformations both ashore and under the surface.[5]

These changes were noticed in Japan, as well. The presence of western whalers all around the archipelago discomfited Japanese leaders and caused controversy among scholars and officials. Where the astronomer Nishikawa Joken 西川如見

[4] John Bravo's biography is rendered according to the population survey of 1862. *Sadame,* in: OVBE acc. no: Great Safe, Comp. 2, 2-5, pp. 5–6. As chapter 7 will show, the Bonin Islands at times served as an entrepôt for indentured labor, especially so during the presence of Benjamin Pease (1868–74).

[5] McNeill 1994, 321.

(1648–1724) once stated confidently that Japan was "surrounded by an impregnable sea,"[6] by the close of the eighteenth century, geographers and strategists had remapped Japan as embedded in an archipelagic world. Russian incursions from the North and a violent encounter with a British frigate in Nagasaki in 1808 had laid bare the growing pressure on the Japanese system of foreign policy, a cornerstone of Tokugawa rule (1600–1868).[7] Increasingly frequent observations of foreign vessels, and the discovery of offshore mingling between Japanese fisherfolks and foreign seafarers provoked anxious reactions and stepped-up seclusion policies deepening the shogunate's conservative attitudes towards the rapidly transforming Pacific world. In the vernacular discourse, on the other hand, reports of returning castaways and rumors of barbarians cruising off Japanese coasts inspired fantasies of adventure and exploration, colonial riches and violent subjugation of foreign peoples. By the time the shogunate decided to join the scramble for naval influence in the Pacific in the 1850s, it had become clear that taming the ocean required appropriating know-how and technologies from those whalers and seafarers who had come from half a globe away to turn the formerly 'empty' sea into a churning frontier.

This study begins with the observation that Japan's turbulent nineteenth century – with its modern revolutions, rapid industrialization, and imperial

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[6] *Nihon suido kō* by Nishikawa Joken, 1720, cited in Endō 2007, 29.

[7] Until the founding of a unitary state in the Meiji reform of 1868, Japan represented a patchwork of hereditary clan lands with the shogun or 'generalissimo' of the house Tokugawa in Edo (Tokyo) at the apex, who directly controlled around one-third of the archipelago's agrarian lands. As Ronald Toby has shown, monopolizing foreign relations had been of particular significance to legitimate Tokugawa rule during its first century. (Toby 1984, 106–9.)

expansion – unfolded in intimate connection with developments in the oceanic world we now call "the Pacific." Looking at the archipelago from the sea, it appears strange indeed that "Japan," a major colonial power in Oceania throughout the first half of the twentieth century, is hardly ever considered as a part of the Pacific world itself. Tongan anthropologist Epeli Hauʻofa famously criticized the terracentric biases that belittle Pacific islands as small and isolated, instead introducing the idea of Oceania as a "sea of islands," to account for the region's connectedness and expanse.[8] Likewise, it is important to notice that Japan is by no means an *island* limited to a confined terrestrial world, but rather, an archipelago with an amphibious economy. Awash in the greater Pacific, currents surge across the archipelago, nourishing fishing grounds, regulating the climate, and dictating the direction of drift and travel.[9] Despite the introversive policies codified in maritime prohibitions since the 1630s, the ocean never ceased to figure as the chief base of existence for a large part of Japan's coastal population. Networks of trade in marine produce spanned the entire archipelago and beyond, enmeshing even the most remote farming villages with the marine origins of their herring fertilizers and whale sinew tools.[10] With growing

[8] Hau'ofa 1994, 153.

[9] The idea of pristine environments or completely sustainable premodern economies has been complicated by environmental historians since William Cronon's 'The Trouble with Wilderness; Or, Getting Back to the Wrong Nature' (Cronon 1996, 7–28). Though myths of total isolation and ecological harmony in isolation have been corrected in the aftermath of Ronald Toby's works, insular views of Japan die hard. (Toby 1984). For more recent contributions that reveal the true scale of Tokugawa Japan's commercial and political entanglement with the Asia-Pacific, see Hellyer 2009; Hang 2016, 111–36. We shall see that in an ecological context, entanglement is not limited to formal commercial or political intercourse.

[10] On whale produce markets and the impact of falling whale catch, see Arch 218, 59–66, 101–3; Arch 2015, 104. Of particular importance for the ocean-land nexus were fish fertilizers that were, since

awareness of foreign traffic off Japan's eastern shores in the early nineteenth century, accounts of sub-elite maritime encounters far from the centers of political power shaped a new vernacular imaginary of the Pacific as a defined body of water with inhabitants, travelers, and looming empires along its rims.[11]

The myths of Japanese isolation that still pervade popular narratives are kept alive by the practice of ignoring the ocean as a crucial catalyst of cultural and political change. More broadly, in the words of W. Jeffrey Bolster, "the interactions of human maritime communities with the marine biological communities on which they depended seem to have remained largely uninvestigated because of the enduring assumption that the ocean exists outside of history."[12] What, then, if we were to reconsider Japan's modern transformations as immersed in the greater currents of Pacific history?

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the eighteenth century, produced at an expanding scale and at sites as far north as Ezo (Hokkaido). (Howell 1995, 38.) Arne Kalland's study of Tokugawa period fishing villages describes the commercial mechanisms that expanded the scope of trade in marine produce far beyond the markets that fishermen could reach directly, see Kalland 1995, 198–210. Note that not all marine products are perishable, for example, dried seaweed, fertilizers, or tools produced from whale bones and strings.

[11] As Kären Wigen's forthcoming piece shows, the appearance of foreign vessels, depicted along with sea lanes and distance indications on Japanese world maps of the 1840s, illustrates a growing unease about foreigners that cruised in Japan's vicinity. See Wigen 2023 (forthcoming). *Early citation kindly granted by the author.*

[12] Bolster 2008, 23.

Oceanic Japan

The word 'oceanic' has been understood by many as 'relating to Oceania' in a broad anthropological sense.[13] In speaking of Oceania as a vast and connected sea of islands, Hau'ofa sought to undo the "imaginary lines across the sea, making the colonial boundaries that confined ocean peoples to tiny spaces."[14] Ironically, much of the subsequent scholarship on Oceania has created a similarly artificial separation of the island Pacific from the Rim and its empires, or even to other colonized populations along the rims. As Lorenz Gonschor criticizes, "a majority of current Pacific scholars have no interest in a reconnection across the Pacific with other Austronesian peoples that have been separated by the imaginary line dividing the 'Pacific' from 'Asia,' supposedly somewhere between the Maluku islands and New Guinea, but hardly identifiable on the ground."[15] Expanding 'Oceania' as an analytical framework to encompass coastal peoples of Pacific rims and islands helps overcome the limitations of national categories and connect local experiences of colonization, commercial expansion, and environmental change withing the greater currents of Pacific history, as Ryan Tucker Jones emphasizes.[16] If the field of Pacific History tends to be exclusively concerned with the "doughnut hole," to borrow another one of Hau'ofa's phrases, the blank left by rim-centric visions of the Pacific, a materialist conception of

[13] E.g. by Matt Matsuda (Matsuda 2006, 759).
[14] Hau'ofa 1994, 153.
[15] Gonschor 2019, 10.
[16] Jones 2014a *Kelp Highways*, 373–95.

oceanic history necessarily puts the rims and their ideologies into conversation with locations in the Pacific, as centers of consumption, capitalist, and bureaucratic power. The resulting struggle between local agency and imperial power comes to the fore in Bathsheba Demuth's comparative study of Communist and Capitalist biomass extraction in the Bering Strait, for example.[17] The study of commercial and ecological connections between the rims and the island Pacific gains importance today as established patterns of influence over the region are being contested by China, as Paul D'Arcy and Lewis Mayo argued recently in the *Journal of Pacific History*.[18] Japan, an archipelago-turned-continental-empire, holds a key position in this history of Pacific-Rim interaction.

The fact per se that Asian and Pacific histories are linked is hardly a new discovery. Scholars in the tradition of Fernand Braudel, such as François Gipouloux, Oka Mihoko and Haneda Masashi, have recognized the intricate economic entanglement beyond the rigid maritime policies of early modern East Asia, and have sought to explain the Asia–Pacific region as an "East Asian Mediterranean," with seasonal rhythms that dominate traffic between the commercial and political centers.[19] Within the Japanese scholarl**y** discourse, maritime historiography still bears the enduring imprint of Yanagita Kunio's 柳田国男 (1875–1962) quest for the

[17] Demuth 2019a: 483–510.
[18] D'Arcy, Paul, and Lewis Mayo 2021, 3.
[19] Haneda Masashi and Oka Mihoko, eds. 2019; Gipouloux 2009. For a representative compendium on commercial connections across the 'East Asian Mediterranean,' see Schottenhammer 2008.

origin of the Japanese people along the upper reaches of the Kuroshio, as outlined in his seminal work *The Maritime Path,* which was published in 1961.[20] In the 1970s and 80s, Amino Yoshihiko paired the ethnographically oriented school of *minshūshi* or 'Popular History' with Braudelian ideas, reframing Japan's coasts as embedded regional networks of maritime exchange.[21] In a similar vein, Hamashita Takeshi argues that East Asian harbor towns, nodes in a chain of regional trading networks, had been directly or indirectly linked with distant commercial partners through a multitude of entrepôts long before the advent of Western maritime empires.[22] What connects all of these works is their exclusive interest in encounters across the seas west of Japan, mostly commercial and military in nature, while the archipelago's southern and eastern rims continue to figure as the limit of the known world.

This study departs from the classical concepts of maritime history by looking at the ocean proper as an ecosystem in constant transformation and a source of historical change. Shifting the focus to the eastern boundaries of the 'Asia-Pacific,' it becomes clear that the oceans around Japan are an environment that does not fit the Eurocentric model of an "East Asian Mediterranean." Characterized by a fluid geography of monsoon winds, fluctuating currents, and migrating species, the ocean consists of a multitude of specific places and depths that attracted human interest at

[20] Yanagita 1961. Yanagita Kunio, is widely considered the "founder of Japanese folklore studies (*minzokugaku*)," and by extension, a founding figure of modern anthropology in Japan. (*Kodansha Encyclopedia of Japan*, keyword "Yanagita Kunio," in: JK.)
[21] Amino 1992, 154–189.
[22] Hamashita 2008.

different moments in time. A close focus on the history of the oceans and islands along Japan's southern and eastern ends – a region I call the *Kuroshio Frontier,* after the abundant Kuroshio Current that connects the region ecologically – reveals seemingly marginal places, agents and events as deeply implicated in Japan's radical geopolitical reorientation over the nineteenth century, its reinvention as an expansive empire, and its technological ambitions in the present. (See fig. 0.1)

As opposed to classical, harbor-centric maritime histories represented by Gipouloux and Haneda, the focus of 'oceanic history' is directed at human-environmental co-transformation at and beyond the verges of the human habitat.[23] The study of oceans requires a methodology that pays close attention to the workings of the ocean as an ecosystem – distinct from grasslands, forests, or deserts – that is yet affected by the same ideological precepts that inform human actions. Helen Rozwadowski and Jennifer Hubbard have discussed the intellectual and ecological problems that arise from terrestrial models being employed to understand the ocean. Yet, romantic analogies to the land-borne frontier pervaded the cartographic subjection and territorial incorporation of the "ocean wilderness" since the emergence of pelagic whaling.[24] In the twentieth century, attempts to subject the ocean to bureaucratic fisheries management principles and geopolitical interests gave rise to faulty concepts such as *Maximal Sustainable Yield* that, as Carmel Finley

[23] Haneda Masashi, and Oka Mihoko, eds. 2019. Gipouloux 2009.
[24] Rozwadowski 2012, 578–602; Hubbard 2013, 88–100.

shows, are part of the problem rather than the solution to the unfolding marine life crisis.[25] On a similar note, W. Jefferey Bolster's studies of maritime New England criticize the millennia-old idea that the ocean existed 'outside of time,' demonstrating that effects such as the 'shifting baseline syndrome' of falling catch rates already evidenced the regional decline of marine fauna centuries ago.[26] To write the living ocean into the history of Japan thus means to look beyond anthropocentric categories and to embrace an *amphibious* understanding of the archipelago's economy.

I second Jones' call for a 'new species of oceanic history,' "one attuned to the specificities of discrete locations in the ocean, both across horizontal space and through the water column."[27] Beyond purely ecological transformations, Jones is interested in the "ways in which marine animal and marine human communities are structured, how they change, and how they change each other."[28] Demuth, also an advocate of Arctic perspectives on the Pacific, states that "modern, growth-oriented states do not just change or provoke nature. They themselves function ecologically, sunk into and thus governed by the distributed agency of entire ecosystems."[29] Human exceptionalism and the firm modernist belief in the mechanical engineerability of natural environments crumbles in view of the unpredictable

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[25] Finley 2011, 1–10.
[26] Bolster 2008, 47. Bolster points out that the end of history is not to predict the future, but to show how context affects each specific, non-reproduceable situation. As such, historicizing the ocean proper helps understand "how historically and culturally specific people made themselves as they remade the world around them." (Bolster 2006, 579, 82).
[27] Jones 2013, 352.
[28] Ibid.
[29] Demuth 2019, 487.

environmental transformations this new generation of historians is witnessing. As Bruno Latour puts it,

> we encounter an agent which gains its name of "subject" because he or she might be subjected to the vagaries, bad humor, emotions, reactions, and even revenge of another agent, who also gains its quality of "subject" because it is also subjected to his or her action … the Earth has now taken back all the characteristics of a full-fledged *actor*.[30]

In the accelerating and largely chaotic transformations of the earth system, oceans have gained power both as geological forces that revise coastal and oceanic geographies, and as carriers of the accumulated energy unleashed in violent storms.[31] The chaotic transformation of global ecosystems is undermining the modernist faith in the power of technology at its very foundation.

Embedding Japanese history in its oceanic context also raises questions of periodization. The downfall of the Tokugawa shogunate, the radical reshuffling of state institutions during the Meiji reforms, and the empire's military emergence in wars fought on the Korean peninsula all appear in a different light if contextualized with the incorporation of the archipelago's insular outskirts since the mid-nineteenth century. The shogunate's pivot to the Pacific, involving costly naval projects and a colonial venture to the Bonin Islands, set the stage for the expansionist thrust that would soon give rise to Japan's modern empire. Before century's end, Japan had

[30] Latour 2014, 3, 5.

[31] Increased temperatures in the upper layers of the ocean cause more intense storms. While the number of tropical cyclones is expected to decrease overall, the particularly violent ones will strike more frequently. (See IPCC Report 2018, Chapter 3: Hoegh-Guldberg et al. 2018, 178; 203–5.)

gained control over a vast maritime territory, studded by minute colonies on formerly uninhabitable isles. As Catherine Phipps observes, "Japan holds a unique position in world history in that it added to its territorial holdings while its sovereignty was compromised through asymmetrical treaties."[32] A gradual enlargement of the archipelago's marine catchment area paved the way for the *pelagic empire* of Japanese fisheries in the 1930s that William Tsutsui identifies as stretching "from the Bering Sea to the Antarctic and along the coastlines of virtually every Asian country, from the pearl beds off of Darwin, Australia, to the trawling grounds of the Gulf of California."[33]

As a source of protein, cash commodities, and ideological orientation, 'Japan's Pacific' was never limited to the empire's formal boundaries, but expanded along currents and migration routes to remote ecosystems, driven by technological change, industrial policy, and ideological momentum. The observation that the ocean represented not just a direct source of foodstuffs, but a supplier of commercial fertilizers for the metropole's increasingly intensive agriculture raises questions about the geography of growth in the archipelago since the early modern period. In his work on the history of fertilizers, Toshihiro Higuchi finds that: "Japan's nitrogen cycle rather describes an open system in which its agricultural core managed to avoid a biogeochemical crisis by sucking up nitrogen and other soil nutrients from outside."[34] Transcending both the downfall of the Tokugawa shogunate and the

[32] Phipps 2020, 149.
[33] Tsutsui2013, 31.
[34] Higuchi 2015, 140.

collapse of Japan's modern empire, the nation's endless quest for formal and informal influence over a vaguely defined maritime sphere of extraction expanded the archipelago's ecological resource base steadily over the course of two centuries.[35]

Writing the ocean into Japanese history blurs the archipelago's geographical boundaries, as well as the very idea of Japanese nationality. As a shift of focus, oceanic history brings once-marginalized locations and subaltern agents to the fore. In the early nineteenth century, castaways acted as transmitters of crucial information about international affairs, while petty fishermen undermined the shogunal monopoly on international exchange by peddling with foreigners offshore, thereby eliciting anxious strategic responses among the top tiers of shogunal bureaucracy. Migrants to the frontier, such as the settlers of the Bonin Islands, revealed themselves as agents of knowledge production in the 1860s, when they were hired at lavish salaries to instruct Japanese crews in the methods of pelagic whaling. In the early years of the Meiji Period (1868–1912), this community of islanders was among the first to choose naturalization and become legally Japanese. Immigrants from Japan's maritime outliers, again, went on to form migrant networks that sprawled across the so**u**th Pacific in search for still-abundant fishing grounds. This imperial legacy remains alive in Japan in the form of 'South Sea Dances' cultivated in the Bonin Islands,

[35] Noticeably, the collapse of the Japanese empire represented but a brief caesura in the development of Japan's oceanic footprint. As Arch has shown, the Supreme Command for Allied Powers (SCAP) by 1947 made the reconstruction of Japan's whaling fleet a priority project in order to rebuild Japan with 'domestic resources.' Arch 2016, 470, 483.

the 'traditional' outrigger canoes of Hachijō, and the fact that Japanese remains to this day an official language in the state of Angaur in Palau.[36] In short, revisiting Japan's modern revolutions from the archipelago's Pacific fringes challenges the metropole's bureaucratic gaze and brings formerly peripheral agents and processes to the fore.

In sum, Japan's oceanic expansion bridges the conventional divides of early modern and modern, shogunal and imperial, insular and global. To understand the historical processes that steered the interests of state and industry to specific places within the dynamic land- and seascapes of currents, habitats, and mineral deposits, historians need to explore the inner workings of the ocean in their *volumetric* dimension. In this tridimensional landscape that complicates terrestrial notions of sovereignty and empire, the Kuroshio Current is the probably most prominent landmark, both in ecological and ideological terms.

The Kuroshio Frontier

The Kuroshio or "Black Tide," named after its dark color, flows as a cohesive mass of water that differs from its surroundings in temperature, density and salinity. The warm current – a western boundary current like the Gulf Stream in the Atlantic – meanders northwards between the Philippines, Taiwan and Japan. Given its strong influence on navigation all along the southern rims of the Japanese Archipelago, the

[36] *Angaur State Constitution*, 1982, Art. XII, p. 9, in: Pacific Digital Library, (no Acc. No). Since no law in Japan defines Japanese as the official language, Palau is in fact the only state that attributes such a status to the Japanese language.

current is also known as the "Japan Current."[37] (Fig. 0.1) From where it is deflected north by the shore of Luzon, it acts like an enormous pipeline or 'nutrient stream' that transports energy in the form of warm and salty water rich in phosphate and nitrate to northerly climes. The nutrients are consumed by plankton and attract fishes of all kinds wherever the current climbs over underwater ridges or onto the continental shelf into the photic zone, within the reach of solar rays.[38] On its meandering path, the current creates a fluid geography of prolific upwellings, seasonal fluctuations, and navigable routes. At times fluctuating over hundreds of kilometers within a span of weeks, the current exerts a vast impact upon coastal and pelagic fisheries. If the Kuroshio's bent path represented the boundary of the navigable realm for early modern Japan, with the emergence of pelagic sailing and steam shipping, its interstices became the Kuroshio Frontier.

[37] On the variability of the Kuroshio's flow pattern and its impact on climate and fisheries, see Gallagher et al. 2015, 1–23; Qiu and Chen 2005, 2090–2103. On the cultural impact of life with the current, see Miyata 1991.

[38] Oceanographers have shown that the confluence of the deep Ryukyu current east of Okinawa contributes a significant quantity of unused nitrate to the Kuroshio which, having left the shallow East China Sea, has lost some of its original nutrient content. Guo et al. 2013, 6404.

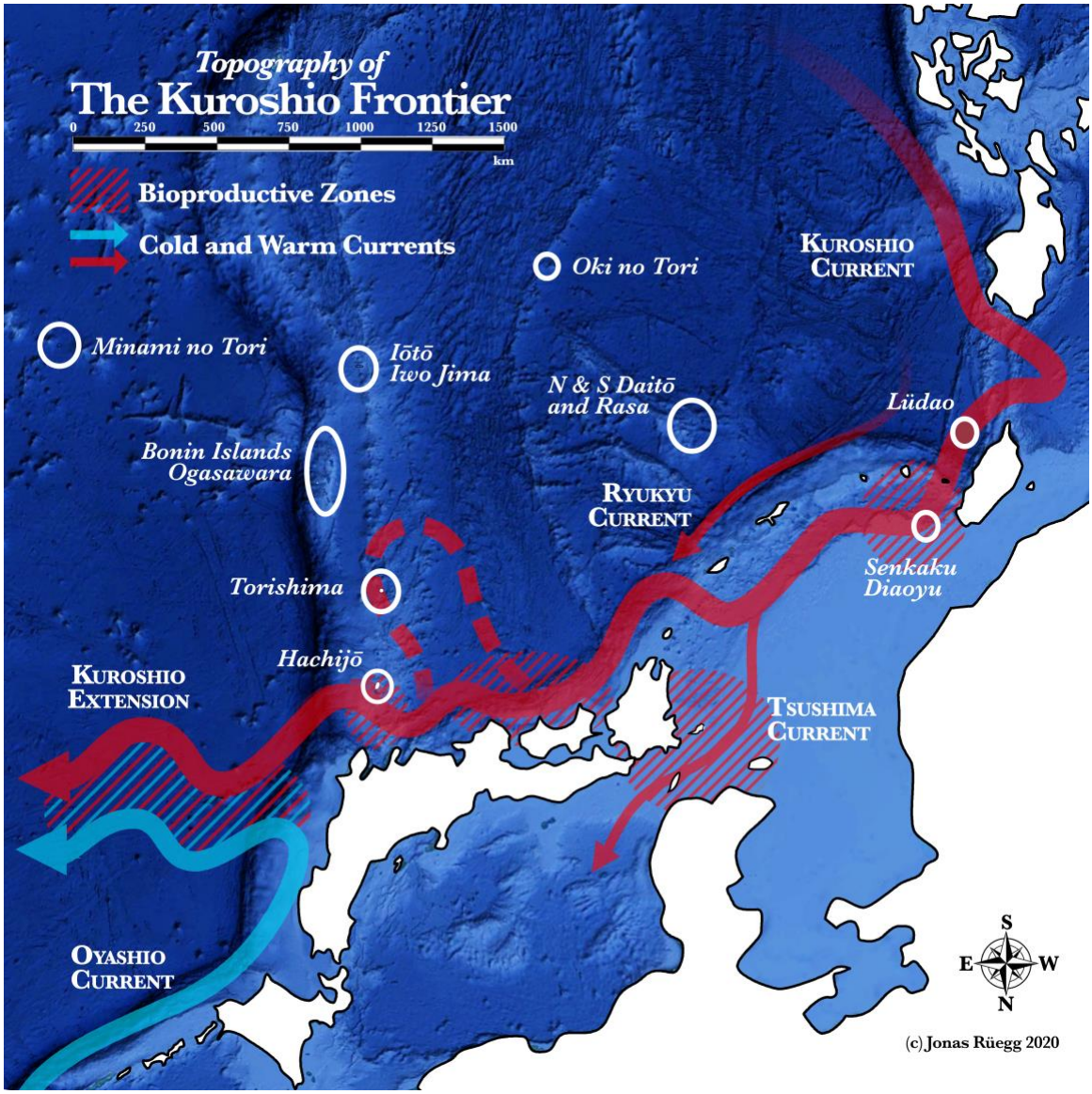

Fig. 0.1) Bathymetric map of the Kuroshio Frontier, oriented with south at the top, showing major currents in their usual patterns. The warm and nutrient-rich Kuroshio current (red) creates prolific environments as it climbs over underwater ridges and on the continental shelf within the reach of sunlight. The current can shift its path over hundreds of kilometres within a few weeks, affecting the local climate and reshuffling the geography of fishing grounds (dotted line). Author's design, 2020.

I use the term 'frontier' as a strictly analytical tool here, as the Japanese language does not know an exact correspondent for the concept in its historical dimension.[39] The concept chiefly serves my purposes as an ecological category that helps analyze the material connections between sites of extraction and centers of consumption. At the same time, the frontier also serves as an actor category, though one that produces clearly distinct actions on shore and at sea, as will be explained further along. The frontier's fluidity – as much in terms of its physical fluidity as in terms of the resulting mobility of people, animals and resources – is crucial to understanding the way migrants, governments and corporations understood and engineered the frontier's ecosystems. Thinking of the ocean as a frontier in Japanese history ultimately helps understand the hopes and ideological biases that inform collective decisions pertaining the Pacific down to the present.

Originating in the scholarship of the American West, the frontier concept has come a long way since it was minted at the close of the nineteenth century. Though the term is applied liberally to various historical settings today, it is important to stay aware of the teleological pitfalls and ethnocentric biases that defined the original concept still pose enduring challenges . For Frederick Jackson Turner (1861–1932), reproducing ethn**o**centric assumptions of cultural hierarchy rampant in his time, the

[39] As a loan word, the Japanese term *furontia* is used as a specific term to discuss the history of frontier incorporation in the United States, or as a term that describes the frontier of research and technology. In less specific discourses, Japanese authors tend to translate the term as '*henkyō'* (periphery), '*kaitaku zensen'* (frontline of incorporation), or *'kokkyō'* (national border). *Sekai daihyakka jiten,* keyword 'furontia,' in: Japan Knowledge.

frontier was a "record of social evolution" that "begins with the Indian and the hunter; it goes on to tell of the disintegration of savagery by entrance of the trader, the path-finder of civilization; (…) and finally [of] the manufacturing organization with city and factory system."[40] Patricia Limerick is right in pointing out that "that essential word 'frontier' requires a point of view, a center, by which that 'other place,' out there, separate from the center, becomes the 'frontier.'"[41] Yet, it would be rash to assume that the frontier can't be used conversely, to dismantle that same metropole's very hegemony. Such postcolonial adaptations have flourished especially among scholars interested in non-Western empires, most notably representatives of the 'New Qing History' movement, for whom the very existence of imperial frontiers with frontier migrants, ethnic tensions and large-scale environmental alterations undermine Han-Chinese dominance and globalize questions pertaining to the emergence of modern state institutions.[42] In particular, the concept offers a macroscopic perspective on the subversive activities of native populations in the liminal spaces of fading state power. Ways of life and patterns of agency gain importance, that, though autonomous, grew up in the long shadow of metropolitan power structures.[43]

Far from reproducing a "triumphalist and Anglocentric narrative of continental conquest,"[44] contemporary frontier studies are interested in centering the *anti-*

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[40] Turner 1993 [1893], 66.
[41] Worster et al. 1989, 317.
[42] Perdue 2005a, 5–6.
[43] For a compendium of frontier applications to the non-Western world, see: Parker and Rodseth, 2005.
[44] Adelman and Aron 1999, 814.

metropole, while at the same time bridging ethnic and socio-economic categories. For Peter Perdue, to take one example, the frontier is an analytical tool for studying subversion and subaltern agency along the Qing Empire's Inner Asian and maritime fringes.[45] Likewise, James Scott, looking at migrants in the Southeast Asian uplands, observes that "the existence of an open frontier operated like an automatic brake on what the state could extract," as "mobility allowed farmers to escape the impositions of states and their wars."[46] The formerly uninhabited Kuroshio Frontier is thus not simply the metropole's frontier, but rather, the frontier of migrant actors on the ground. Azuma Eiichirō shows how the frontier idea soon provided the ideological coordinates for Japanese "frontiersmen" both bound for the American west coast and, after the "gentlemen's agreement" had banned Japanese migration to the U.S.A. in 1907, to the colonies of Taiwan and in the Pacific.[47] As a sociological concept as much as in environmental history, the borderless frontier is characterized by its hierarchical social and metabolic relationship with one or multiple distant metropoles.

The people of the Kuroshio Frontier – sailors, farmers and laborers from Hawai'i, various Pacific Islands, Western countries and, ultimately, Japan – who traveled and settled across the region made self-interested choices at sea and on the

[45] Elliott 2014, 336–60. Perdue 2005b, 27–51. Perdue develops the frontier model for Qing China further in his massive book *China Marches West* (Perdue 2005a).
[46] Scott 2009, 4, 37.
[47] Azuma 2019, 1–9.

ground that affected the appearance of the empire that would soon encompass them.[48] Many immigrants to the Bonin Islands had followed opportunities created by the advent of the whaling industry, and they readily offered their know-how in pelagic whaling to the Japanese. These subjects were co-opted with varying degrees of coercion, and often found themselves on the receiving end of a centralizing imperial bureaucracy. By the close of the 19th century, the frontier had become the scene of pervasive commercial resource extraction that encompassed Japanese migrant labor beyond direct state control in rudimentary settlements on Torishima, Marcus Island, and even the Midway atoll.[49] In many of these places, the extension of commercial activities at the hands of entrepreneurs such as Mori Koben 森小弁 (1896–1945) in Micronesia ultimately paved the way for eventual Japanese takeover during World War I.[50]

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[48] Biographical records of the Bonin Islands discussed in more detail in chapter 7 suggest that around 1862 only eight out of 48 islanders can be identified as "Euro-Americans." Later surveys show that by 1876, when the population had almost doubled since the last survey, the share of immigrants from Pacific islands had increased to some 56%, whereas an additional 34% of the population were mix-blooded islanders of the second generation. (*Ogaswara-tō Yōroku,* vol. 2, entry 18, pp. 37–9, in: OVBE, Acc. No. Great Safe 3-3-11.) A Japanese castaway report from 1840 moreover shows that the language spoken in the islands at the time was heavily influenced by Hawaiian. (Long 2007, 53–4). On early settlement in the Bonin Islands, see: Cholmondeley 1915, 14–22; Chapman 2016a *The Bonin Islanders*, 27.

[49] Kreitman stresses local responsibility in the unsustainable choices made on frontier islands, though he is wary of the frontier, as no frontier ever moves in one specific direction or towards the *telos* of incorporation. However, the unsustainable choices made by a diversity of agents, metropolitan and on the spot, stand in no contradiction with the frontier as a gradually degrading site of extraction that subsequently necessitates mutating technologies to replace depleted resources. Kreitman 2015, 7–8; 138.

[50] Peattie 1988, 26–33.

Focusing on extractive relationships between a vaguely defined, borderless frontier region and a consuming metropole has proven especially useful for analyzing environmental transformations at an imperial scale, beyond the borders of formal empire.[51] In this sense, the frontier is comparable to an ecological footprint or a catchment area that expands along political power lines as a result of technological innovation, changing business practices, and consumptive behavior in the metropole. The cost of modern life in Japan cannot be mapped exclusively within Japan. Neither can the Japanese economy be understood as separate from the far-flung sources of the fuel, fertilizers or foodstuff that power it. To speak about ecological sustainability, or the commercial mechanisms that demand an ecological toll beyond view of the metropole, it is crucial to overcome the framework of national economies and account for the oceanic spaces at and beyond the boundaries of the human habitat, in its fluid, volumetric capacity.

Seen as a tridimensional landscape of currents, catchment areas, and migrating animals, the ocean's dynamism and depth complicate territorial notions of sovereignty, empire and historical change. As the arrival and disappearance of Atlantic whalers in the "Japan Ground" in the 1830s, or the later mushrooming of short-lived bird hunting colonies on desolate isles show, resource extraction operates

[51] John Richards, for example, finds the modern non-acceptance of growth limits rooted in an age of frontier expansion between 1500 and 1800. (Richards 2003). Jason Moore's Marxist analysis of the *commodity* frontier, again, sees the unsustainable shifting from resource to resource in the process of incorporation as formative for capitalism. Moore 2000, 409-433.

in a spatially layered manner. Since the emergence of industrial practices, these layers are have been worked through one by one as a result of unsustainable practices offshore that rely on continued expansion and technological innovation. Like the 'bomb-lance' whale gun brought to the frontier around 1860, new technologies have rarely enhanced sustainability, but mainly, they delayed the extractive industry's collapse by enhancing the efficiency of extraction.

In the twenty-first century, we have entered an age in which the oceans are becoming increasingly powerful agents that revise coastal and oceanic geographies with violent vagaries. The challenges that come to us as manifestations of rising sea temperatures, melting polar ice caps and declining fish stocks are expected to aggravate struggles over oceanic space and resources. Meanwhile, Japan's *unending* frontier, to borrow John Richards' expression, continues to expand beneath the surface towards deposits of methane ice, petroleum, and rare earth minerals expected to become exploitable in the near future.[52]

Oceanic frontiers across time generally evade closure, remaining geographically and historically open-ended.[53] Accordingly, the Kuroshio Frontier is

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[52] METI 2019, 17–8. Bold estimates expect as much as 126 billion m^3 of methane ice, and a value of around 100 billion USD in rare minerals within Japan's EEZ. Yamada 2016, 86; 98.

[53] Noticeably, frontier closure has come to mean both solidification of national borders and the depletion of frontier resources, as in Butcher 2004. Oceans as frontiers undermine both forms of closure: Carmel Finley, in her study of tuna fisheries regulations, has shown how migrating "resources" challenge static approaches to regulation in international treaties such as the UNCLOS of 1982. In practice, partitioning the seas into Exclusive Economic Zones does little to mitigate the dilemma of the global commons. (Finley 2013, 62-75.) Growing migration flows across the Mediterranean sea or illegal coral fishing activities at the hand of Chinese vessels near the Bonin Islands further evidence the difficulties of effectively policing maritime borders. (Ministry of Foreign Affairs of Japan 2015).

not simply a 'Japanese lake,' but rather, the object of an ongoing inter-imperial competition with profound ideological significance. The Atlantic whalers who plied the frontier in the early nineteenth century caused Euro-American clashes over frontier islands, and the data they collected trained the imperial gaze on the resources and waterways of the Pacific as a natural extension of the continental frontier.[54] In a related sense, to establish and enforce its claims to the frontier was an act of symbolic significance for the Tokugawa shogunate – just as today, staking claims to the now-uninhabited Senkaku or Diaoyu islands off Taiwan and the rich fossil deposits underneath them has become a symbolic battle for China, Japan's chief regional competitor. In contrast to Jason Moore's definition of 'commodity frontiers,' which takes frontier incorporation as a product of metropolitan consumerism and expansion, most islands of the Kuroshio Frontier experienced no lasting incorporation.[55] Rather, enterprises emerged *within* the frontier, and created new forms of capitalist management based on unsustainable and therefore spatially shifting resource extractions. Exploited resource by resource, and affected heavily by invasive species, most of these islands now lie abandoned.

With fish and other living resources reduced to a fraction of pre-industrial levels, the imperial competition over maritime space has largely shifted to a focus on

[54] Matthew Fontaine Maury, for example, refers to the ocean as a 'wilderness' through which "the navigator, like the backwoodsman in the wilderness, is enabled literally 'to blaze his way.'" Maury 1855, x.
[55] Moore 2000.

deep sea resources and naval access. The unending Kuroshio Frontier has therefore by no means entered a post-frontier stage in which "fluid and 'inclusive' intercultural frontiers give way to hardened and more 'exclusive' hierarchies,"[56] as in Adelman and Aron's description of modern borderlands.[57] While maritime border solidification may be real in the perception of human travelers, oceanic borders as seen from 'below the waves' remain essentially virtual and permeable. Rather, the discrepancy between territorial legislation, extended to the sea by the 1982 UN Convention on the Law of the Seas (UNCLOS) in the form of Exclusive Economic Zones (EEZ), and the fluid connectedness of the ocean keep confounding the attempts of bureaucratic states to pin down and inventory people, animals, and resources. As Carmel Finley argues, international attempts to tackle the 'tragedy of the oceanic commons' in a territorial manner have been obstructed by national governments, chiefly the U.S.A., Japan, and, most recently, China, which subsidize fisheries beyond their EEZ for naval strategy and as negotiating tokens.[58] John G. Butcher, in his study of Southeast Asian fisheries, equates the depletion of fish stocks to a frontier closure.[59] If, however, we see frontiers as a network of entangled and increasingly complex industries, as in Jason Moore's description of commodity frontiers, the Kuroshio Frontier is an ongoing process that transcends the decline of the whaling industry, the extinction of

[56] Adelman and Aron 1999, 816.
[57] Ibid.
[58] Finley 2013.
[59] Butcher 2004.

sea birds, or the depletion of guano mines. Depletion continues to necessitate shifts to new resources – most recently petroleum, methane and rare earth metals – essentially driven by technological innovation and the spatial expansion to more remote resources. In this sense, the vertical expansion toward ever-deeper deposits of inanimate resources in the twenty-first century represents an open-ended sequence of short-lived frontier stages.[60]

Chapter Outline: The Oceanic Context of Nineteenth-Century Japan

Intellectual and institution-centered histories of Japan tend to reproduce the prominent caesura around the downfall of the 'early modern' Tokugawa and the founding of the 'modern' Meiji state in 1868. This study encompasses the nineteenth century in its entirety, beyond the political disruptions in the century's second half. This is not to say that the radical social reforms of the Meiji period were unimportant. Neither does it mean that the proto-industrial and quasi-capitalist developments under the Tokugawa shogunate programmed the rapid, fossil-fueled industrialization or the empire's colonial expansion of the subsequent decades.[61] Rather, my choice of

[60] The notorious dispute over the Senkaku/Diaoyu islands in the East China Sea between China, Japan, and Taiwan, for instance, started immediately after the discovery of fossil fuel deposits in 1970. Drifte 2014, 1–61. In Japan, as well, the vertical expansion of the Kuroshio frontier remains an ideologically loaded program point in economic arguments, closely tied to affirming control over contested islands and waters, as right-leaning publicist Yamada Yoshihiko's work best illustrates (Yamada 2010).

[61] Jack Goldstone has pointed out that *advanced organic societies* are by no means proto-modern or proto-industrial, as they did not experience a high growth period that would inevitably provide the impulses for mechanical industrialization, or the shift to inanimate energy. (Goldstone 1998, 264). David Howell, studying fisheries businesses, points out that the prominence of commercial, yet

a temporal scope that ranges from the late eighteenth century's emancipation from continental worldviews to the archipelagic empire's landing on the Eurasian continent in the Sino-Japanese war, is consistent with the quest for a metabolic understanding of the archipelago's modern transformations as embedded in a changing Pacific world.

Chapter One argues that the Japanese archipelago, embedded in a monsoon zone rather than an 'East Asian Mediterranean,' should be read as an amphibious economy, with marine industries that over the early modern period integrated the sea into the terrestrial economy in two essential ways: first, the increasingly systematic extraction of nutrients from oceanic ecosystems expanded the resource base of Japan's sprawling cities and intensely farmed core lands, injecting nitrates, phosphates and potassium into the terrestrial metabolism, thereby fueling demographic and commercial growth. Second, the densely traveled seas within and around the archipelago came to constitute an integral part of Japan, not only as an economic space with an ecology that shaped coastal communities, but also as the most critical piece of transport infrastructure between commercial centers and the agrarian zones that fed them. By the nineteenth century, the increasingly complex and commercial webs of resource distribution that spanned across the archipelago connected even inland villages to the marine origin of their fertilizers.

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state-led businesses based on unfree labor actually hampered the growth of fully capitalist enterprises. (Howell 1995, 47–8).

Chapter two shows that early modern Japan in fact extended beyond the rapid and dangerous Kuroshio current, as a local perspective from the island of Hachijō, 200 kilometers southeast of Honshu, underlines. Life on the island, which was contacted on an annual cycle dictated by the region' monsoon wind patterns, developed institutions and economic practices that were intimately connected to the eastward current. A constant influx of flotsam and castaways from western Japan and even continental East Asia gave rise to a 'castaway economy' in which repair and repatriation fees, as well as cargo confiscation constituted a major source of income for the islanders. Informal encounters at this maritime outpost of the Tokugawa world connected the island's cultural identity to a virtual geography spanning from the Kuroshio's presumed origins in India to its ultimate destination in North America.

Chapter three relates this local perspective to a problem of sources at the core of conventional narratives of maritime history: a striking discrepancy prevails between the urban-intellectual perception of the sea as a flat and empty space, marginalized on graphical maps, and the practical experience of those who lived and worked on the ocean. Since the 1780s, geopolitical shifts in the North Pacific became reflected in shifting notions of the ocean, the continent, and Japan's place in between. Urban intellectuals – mostly private scholars, commercial authors, and interested commoners – effectuated a conceptual shift that emancipated the Japanese islands from the cultural hegemony **o**f the continent. Hayashi Shihei 林子平 (1738–1793), an independent security advisor, mapped Japan at the center of an archipelagic world that stretched from Taiwan and the Ryukyus to the Aleutian islands and Kamchatka,

and as far as the Bonin Island in the south. (See fig. 3.6, chapter 3). As the ocean came onto the map with its currents and waterways, bold calls to action such as Satō Nobuhiro's 佐藤信淵 (1769–1850) *Plan for Unification* of 1823 envisioned the Pacific and its islands as a space for aggressive expansion, the first step towards Japanese world power.[62]

Chapter four discusses the convergence of Japanese and international whaling frontiers in the Kuroshio region and assesses the impact of subsequent geopolitical transformations on Japan's domestic and foreign policies. Though tied to coastal bases, Japanese whalers had expanded their frontier over the early modern period. Whaling businesses had grown in number and scale over the seventeenth century, perfecting their catch methods and migrating towards more resilient whaling grounds close to the Kuroshio.[63] When pelagic whalers sailing out of Atlantic harbors reached the Kuroshio in the 1820s, the pressure on whale stocks increased significantly, a fact reflected in the declining catch rates in Japan. While American whalers chiefly sailed to the "Japan Ground" east of Honshu around 1820, their activities had expanded to the Bonin Islands over the subsequent decade, and by the 1840s, American vessels were sailing all around the Japanese archipelago. Often, they were cruising within view of the land. (See Fig. 4.1, chapter 4). This elicited a reflex-like tightening of seclusion policies that, over the long run, delayed institutional

[62] *Kondō hisaku*, in: NDL, Acc. No. 569-361, 106–10.
[63] Arch 2018, 52–3; 58–9. Holm 2020a *Living with the Gods*, 109–15.

reforms and resulted in inadequate preparedness for the foreign naval incursions of the 1850s and 60s.

When Commodore M.C. Perry's (1794–1858) squadron of Black Ships entered the harbor of Uraga in 1853, it had been clear for years that trans-Pacific traffic and steam shipping between America and its new treaty ports in China would invite new forms of maritime conflict. In particular, plans for Pacific steam navigation stoked interest in the Japanese archipelago with its rich coal deposits. Chapter five argues that Japanese domains had tackled infrastructural and technological projects for years before the diplomatic showdowns of the 1850s. Yet, political fragmentation left the domains competing against each other, weakening the shogunate's ability to react promptly. The projects tackled in the aftermath of 1853 marked a move from coastal defense to the offshore. Based on pirated naval technology and powered by creative craftsmen and agile administrators, these projects paired state interests with private investment. In retrospect, the quick success of naval projects is overshadowed by the ultimate confrontation between the shogunate and the most technologically advanced domains, a fact that should not distract from the swift strategic pivot conducted by the Tokugawa regime.

Within a mere decade, the shogunate was ready to effectuate a veritable pivot to the Pacific, culminating with a breakneck expedition of symbolic significance. Amidst the turbulences of foreign pressure, unequal treaties and major socio-economic shifts, the Japanese dispatched an expedition to the Bonin Islands, the whaling h**u**b at the heart of the Kuroshio Frontier. Chapter six discusses how the

mapping and inventorying of Japan's first overseas colony with its plants, animals, and foreign settlers, represented a scientific flagship project at a foundational time for Japan's participation in modern scientific networks. Most significantly, control of this whaling entrepôt granted access to technical and technological know-how of the chief frontier industry, which the Japanese appropriated systematically. Though short-lived, the Tokugawa state's attempts to expand into the Kuroshio Frontier created new spatial, ethnic and legal definitions of Japan at a time when cards were being reshuffled both in international politics and at home.

The opening of Japanese treaty ports and the downfall of the Tokugawa shogunate in 1867 temporarily deflected state interests away from the islands of the Kuroshio Frontier, inviting new players to the region. At a time when Japan was yet to define its understandings of sovereignty, citizenship and economic regulation, these entrepreneurs, from the pirate Benjamin Pease (*d.* 1874) who controlled the Bonin Islands in the early 1870s, to the self-made island tycoon Tamaoki Han'emon 玉置半右衛門 (1838–1910), tested the boundaries between corporate management and local statehood. Chapter seven discusses the divergence of business and state interests on the frontier and the way their integration gave rise to a new form of corporate capitalism. The state developed its colony in the Bonin Islands with experimental plantations growing exotic fruits and "useful" species such as cinchona bark, experiments that also granted access to the international scientific conferences. Business on remote isles in the liminal space of fading state control, by contrast, was often initiated by petty entrepreneurs of dubious reputation that were denied state

protection. Conversely, businessmen found reputable enjoyed official approval to claim islands "not just for the profit, but for the honor"[64] of it, under the aegis of elite strategists such as navy minister Enomoto Takeaki 榎本武揚 (1836–1908).[65] The government hardly interfered with these frontier colonies, and some developed their autonomy to the point of issuing their own currencies.[66] By the close of the century, corporate islands enjoying a great degree of autonomy beyond the reach of state control mushroomed throughout the frontier.[67]

The process of island colonization in the Kuroshio Frontier created concepts, ideologies and networks that proved central in the Japanese empire's later mode of expansion. Romantic ideas about the 'South Sea's' conquest – enthusiastically propagated by Enomoto – redirected the momentum of domestic unrest into expansionism.[68] Novels and polemic debates that engaged with romantic conceptions of destiny, discovery, wilderness and conquest, picking up on exoticizing fantasies

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[64] "只利の為にせず,名の為にせば,竟に開拓の成功も見ん" *Ogasawara-tō yōran*, p. 103, in: OVBE, acc. no.: Anti-Humidity Safe A-12.

[65] Enomoto Takeaki, in his function as minister of communications, was one of the most fervent propagator of the *nan'yō ron* or *South Sea expansionism debate* beyond the intellectual elite. (Hiraoka 2015, 24–8; Peattie 1988, 7).

[66] This was the case in the short-lived colony on Nishizawa (or Dongsha) island in the South China Sea, colonized by Nishizawa Kichiji, as well as in Tamaoki's Daitō island. (Hiraoka 2013, 228–9; Hiraoka 2015, 166–8). These corporate islands were comparable, at a smaller scale, to the "chartered company governments" Steven Press describes in *Rogue Empires.* Press 2017, 7.

[67] On these frontier businesses, see Hiraoka 2012; Hiraoka 2015; Hiraoka 2018; as well as Kreitman 2015.

[68] Enomoto Takeaki propagated South Sea expansionism far beyond the intellectual elite. Hiraoka Akitoshi points out that many of the novelists that propagated expansionism in their writing were former activists in the popular rights movement of the 1870s. See Hiraoka 2015, 24–31; Peattie 1988, 7.

about southern island paradises and commercial success.[69] With Shiga Shigetaka's 滋賀重昂 (1863–1927) *Recent Developments in the South Sea,* published in the aftermath of a government-sponsored expedition to the South Pacific in 1887, the widespread fascination with southern islands was mapped onto a greater geographical entity called '*nan'yō*' (lit. 'South Sea'), an archipelagic conception of a connected ocean spanning from Hawai'i to Southeast Asia, and as far south as Tasmania.[70] "Our Japan," Shiga wrote, "is towering above the Pacific, as it overlooks the islands of the South Sea on its sunny side."[71] The parallel use of 'Pacific' (*taiheiyō*) and 'South Sea' (*nan'yō*) in the late 19th century expresses the unravelling of two diverging conceptions of the ocean as either a void space rimmed by terrestrial empires, or as a sea of islands in-between, an extension of archipelagic Japan.

Unsustainable modes of production in the Kuroshio Frontier prefigured and informed the management of industrial fisheries and scientific agriculture in the empire's later colonies. The corporate colony on Daitō island near Okinawa, for example, outlived its exhausted bird hunting and guano mining businesses as a part of Dai Nippon Seitō sugar corporation. In 1934, the company stressed the value of its

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[69] *Nan'yō-ron* is also translated as "south sea *expansionism*," an equally suitable term, though it understates the role that literature with an emphasis on romantic conceptions played in the discourse's propagation among the broader public.

[70] *Nan'yō jiji* (1887) by Shiga Shigetaka, in: NDL, Acc. No. 33-137. On Shiga's geographical imagination, see Wigen 2005, 10–15. While the word *Tōnan Ajia* for 'Southeast Asia' circulated since the 1910s, the term *Nan'yō* or 'South Sea' remained the standard reference for the region until the collapse of the Japanese empire. See Tsuchiya 2013, 9. The Kingdom of Hawai'i figured prominently as a cornerstone of Japan's envisioned Oceanian sphere of influence, especially since King Kalākaua's visit to Japan in 1881. See Gonschor 2013, 163.

[71] *Nan'yō jiji* (1887) by Shiga Shigetaka, in: NDL, Acc. No. 33-137, p. 11.

perfectly administered island empire as a laboratory for the state's management of major colonies: "Not only does the government wisely refrain from the slightest interference, but it provides favorable conditions in many ways (…) This remarkable situation will yield the most valuable insights for colonial administration."[72] In this way, the frontier, opened by Pacific migrants a century before, had become the spatial and temporal nexus between the metropole and its pelagic empire.

The Frontier in the Twenty-First Century

Having changed its appearance radically over the course of the nineteenth century, the Kuroshio Frontier keeps developing new meanings in the twenty-first century. With most animate resources reduced to a fraction of pre-industrial levels, the frontier keeps expanding vertically, ever deeper towards deposits of rare earth minerals and fossil fuels expected to become accessible in the near future. Bold estimates expect as much as 126 billion m^3 of methane ice, and a value of around US$100 billion in rare minerals within Japan's Exclusive Economic Zone (EEZ).[73] When large deposits of manganese nodules – compounds of cobalt, nickel and copper – were discovered near the Japanese outpost of Minami no Torishima in 2019, one news report stressed that: "lumps of precious metals are also found outside of our Exclusive Economic Zone (EEZ), and already has China seized the rights to mine parts

[72] Dai Nippon Seitō Kabushiki Gaisha ed. 1934, 167–8.
[73] Yamada 2016, 86, 98.

of them."[74] For Japan, the geo-politicization of the deep sea is a race for rare earth minerals. Under a state-corporate partnership Japanese industries target deposits of methane ice, petroleum, and rare earth minerals, a strategic resource for IT infrastructure and export-oriented high-tech industries largely controlled by China so far.[75] The race for technological leadership in deep sea mining is further accentuated by the high demand for 'critical rare minerals' to implement the transition to renewable energies.[76] To secure control over deep-sea deposits of such strategic resources, Japan, is suing for 'extended continental shelf' privileges that extend its EEZ beyond the customary 200 nautical miles to encompass rare earth fields between Okinawa and the Bonin Islands, west of Minami no Tori Island, as well as south of Oki no Tori reef.[77]

Just as the shift from coastal fisheries to pelagic whaling expanded Japan's resource base to the deep sea, the unending Kuroshio frontier keeps growing vertically. Once again, the frontier's seemingly inexhaustible resources feed hopes for an escape from a resource impasse. In John Hannigan's word, the oft-cited idea of a 'final frontier' in the deep sea promises "to save humankind by providing unlimited

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[74] *AAN News,* Dec. 11, 2019.

[75] China controls the vast majority of worldwide rare metal production, and it has a monopoly on separation and purification of rare mineral ores. As of 2018, 58 per cent of Japan's rare earth imports originated from China. See DeWit 2021, 13.

[76] METI 2019, 17–18. Noticeably, the quest for rare minerals, driven by conventional resource corporations such as Japan Oil, Gas and Metals National Corporation (JOGMEC), is inextricably tied to the exploration of subaqueous fossil fuels. See JOGMEC 2020.

[77] The Government of Japan 2008, 6; Tokyo University Ocean Alliance, ed., *Umi no daikoku Nippon*, 28.

energy, low-cost, high-grade minerals and miracle drugs."[78] However, as John F. Richards recognized, "in the early twenty-first century, the frontier is no longer unending."[79] The superficiality of human interaction with oceanic frontiers resonates with the capitalist alienation between centers of consumption and the subaqueous sites of extraction, and it delays the implementation of more circular economies. While manmade disruptions in the global ecosystem underline the importance of a systemic understanding of the planetary system, the frontier persists as an economic and ideological structure, fundamental to the capitalist logic of continued growth in indifference to the idea of planetary boundaries.[80] In this sense, 'frontierness' is an idea as much as it is an objective, material condition.[81] With this study, I hope to provide an explanation for the emergence of those ideological and economic mechanisms that drive such alienations today, and in the process, to shed light on the cultural biases behind many crises of the dawning Anthropocene.

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[78] Hannigan 2016, 20.
[79] Richards 2019, 22.
[80] Planetary boundaries describe the 'biophysical constraints to the growth of the economy', based on the observation that passing certain thresholds of pressure upon the environment can trigger abrupt and chaotic transformations in the earth system. See Rockström et al. 2009, 472–75. On ecological issues around deep-sea mining, see Niner et al. 2018, 1–10.
[81] Derek Hall, cited in Hannigan 2016, 21.

CHAPTER ONE

The Oceanic Metabolism of Terraqueous Japan

> It isn't hard for a layman to study the chief directions of maritime currents from scholarly books, but the fact that these currents at times change their routes dramatically, refracting, splitting, and affecting the condition of their destination, is something that hasn't entered the common consciousness at all.
>
> Yanagita Kunio, *The Maritime Path,* 1961.[1]

In the spring of 1868, the New Bedford bark *William Rotch* on its voyage out of Honolulu approached a rocky and treeless isle several hundred miles south of Japan in search for guano deposits. On shore, the sailors noticed the remains of a wrecked ship and several large planks with Japanese script, and soon they came upon a castaway crew of seven. The men had survived for eighteen months in complete isolation, feeding off of albatross meat, limpets, and collecting rain in egg shells. The castaways explained how, sailing out of Osaka, they had got caught in a storm that badly battered their junk, leaving them adrift for two weeks before they were washed to this desolate place. Captain E.F. Nye, intrigued by his discovery of the remains of large dwellings, followed the castaways up the valley to find three 'bomb-proofs' cut

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[1] "大きな海流の常の方向だけは， 文書の学問として夙(はや)く我々も学ぶことを得たけれども，それが時あって著(いちじる)しく流路を変え， または屈折し分岐して到る処に影響する実状に至っては，今は必ずしもまだ常識とまではなっていない" Yanagita 1961, 43.

into the solid rock with a fireplace each and several sleeping bunks, and hundreds of albatross eggs filled with water and oil. As the captain later reported in the Hawai'i-based *Pacific Commercial Advertiser*,

> near by were a number of niches cut into the rock, each containing several smooth flat stones with Japanese writing on them. My Japanese stopped and translated the inscriptions for me: they were records of six different shipwrecked crews that had been cast upon the island, some of them a long time ago. We next came to one with three stones set up in it, which proved to be the record of Manjaras [Nakahama Manjirō, see chapters 4 and 5], who was shipwrecked some 30 or 35 years ago. He was taken off by Captain Whitfield of the *William & Eliza,* I think.[2]

Over the years, decades and centuries, a recurring southward deviation of the Kuroshio had driven uncountable sailors out on the open ocean, and but a few of them were fortunate enough to land on an isle large enough to grant food and water to survive. Even fewer sailors managed to improvise rafts out of driftwood and debris collected over decades to return home and record their experiences for posterity.[3] Out on the open Pacific, on the volcanic islands of the Izu Ridge, winds and currents had created an involuntary colony of Japanese castaways.

In the context of Japan's political isolation, the offshore was an important site of encounters and exchange, and an important element of Japan's terraqueous realm. Drifting events were common throughout the early modern period, and the return of castaways from foreign countries, often instrumentalized for diplomatic purposes, informed Japan's attitudes towards the world. In the swelling tide of Pacific traffic,

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[2] "Rescue of Japanese from St. Peter's Island," in: *Pacific Commercial Advertiser,* 17 Oct. 1868, p. 3.

[3] The 1992 reprint of Ishii Kendō's massive collection of early modern shipwreck records, originally published in 1900, counts 4,024 pages in six volumes. Yamashita ed. 1992.

the odds improved for these castaways to be rescued, and by the time of Captain Nye's writing, it was not uncommon that whaling ship crews included former Japanese drifters.[4] Time and again it had happened that distressed castaways reached Japan with news of unknown places beyond the vast ocean. In 1670, a crew of drifters first reported the discovery of a group of 'uninhabited' *munin* or "Bonin" Islands, inspiring a costly expedition into the open Pacific to map and inventory the remote archipelago (see chapter 3).[5] In 1797, a certain Chōhei from Tosa province (1762–1821) returned from a 'bird island' or *torishima* south of Honshu. Chōhei, having outlived his crew, had spent thirteen years collecting driftwood and fragments of vessels lost at sea, before he, joined by two more castaway crews that were carried to the isle in the meantime, succeeded in sailing north.[6] The Kuroshio current, which meanders along some of the most densely traveled maritime routes of Japan with its recirculation and occasional fluctuations, kept carrying drifters blown off course to the islands of the "Great Eastern Sea," and at times as far as North America.[7]

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[4] As one Hawaiian missionary newspaper reported in 1850, an entire community of Japanese castaways had gathered in Honolulu. "An Hour with the Japanese," *The Friend,* Nov. 01, 1850, p. 86, in: HMH.

[5] On the expedition of the Nagasaki captain Shimaya Ichizaemon to the Bonin Islands in 1675, see chapter 3.

[6] Records of Chōhei's odyssey are included in Ishii Kendō's monumental collection of early modern castaway reports (Yamashita ed. 1992, vol. 1, pp. 461–73, 581). Roberts 2015, 112.

[7] Most famously, a certain castaway named Otokichi, with two surviving crewmates, arrived in North America in 1832. Tanaka 2011, 178–9.

This chapter argues that Japan was connected to the ocean's biological and geophysical processes in a manner best described as "terraqueous," for the ocean was both resource and infrastructure. The ocean – littoral and pelagic – constituted a space of historically significant human activities, with fisheries, whaling and shipping businesses that incorporated the sea into the archipelago's economic space. Fluctuations in currents and oceanic ecology were influential factors for economy and society not only in fishing villages and harbor towns, but even the most remote farming villages were enmeshed by increasingly sophisticated trade networks with the marine origins of their herring and seaweed fertilizers, whale oil pesticide, and whale string tools.[8] The Kuroshio current allocated nutrients to coastal fishing and whaling grounds, but it also defined the scope and limits of systematic shipping, policing, and exploration. Yet, despite an elevated risk of ship loss, some of Japan's most important shipping routes led along or even across the rapid current. The conditions of early modern maritime trade inspired technical solutions that enhanced the cost-efficiency of shipping, reducing construction, training, and operating costs, but often at the expense of navigational security.[9] With the opening of this offshore frontier for business and migration with the emergence of pelagic sailing and steam

[8] On whale produce markets and the impact of falling whale catch, see Arch 2018, 59–66, 101–3; Arch 2015, 104. Arne Kalland's study of Tokugawa period fishing villages describes the commercial mechanisms that expanded the scope of trade in marine produce far beyond the markets that fishermen could reach directly, see Kalland 1995, 198–210. Note that not all marine products are perishable, for example, dried seaweed, fertilizers, or tools produced from whale bones and strings.

[9] Arch 2023 (forthcoming), 7–8. *Early citation kindly granted by the author.*

propulsion that enabled sailing in defiance of seasonal wind patterns, access to formerly unreachable places gave unique impulses for the emergence of corporate capitalism.

Alison Bashford points out that the word "terraqueous," coming out of early modern descriptions of maritime globalization, today serves as a concept that foregrounds aquatic space as claimable territory, but also "to foreground the meeting of land and sea that has engaged so many historians of different periods and places, substantively, symbolically, and epistemologically: coastlines, beaches, islands, ships."[10] The term, which implies a dynamic relationship between land and sea, is gaining currency in the age of shifting coast lines, rising sea levels, and melting polar ice caps. But rather than limiting itself to the human experience of liminal and non-static coastal zones, the term can also describe the vast material connections between land-borne economies and their oceanic frontiers and infrastructures.

Some historians prefer to speak of "amphibious" economy and infrastructure, an idea that has gained currency since Peter Sloterdjik's remark that "human beings are no mono-elementary creatures"[11] in 2001. A biological term that entered the social sciences by way of security studies, "amphibiousness" is mainly used to describe hydraulic infrastructure, or, as Stefan Huebner recently did, to understand the way offshore structures create an "amphibious transformation" and

[10] Bashford 2017, 255, 261.

[11] Sloterdjik, cited in ten Bos 2009, 74.

environmental change in an industrialized ocean.[12] I think that the material connections between the Japanese islands and their archipelagic waters are best understood as a combination of geophysical, biological, and technological processes at work in the making of the archipelago's terraqueous metabolism. As this chapter argues, material exchange both ways across the sea surface were scaled over the early modern period by a quasi-industrial marine-agrarian nexus and expanded to the inland by commercial mechanisms. As Toshihiro Higuchi has argued, Japan's agricultural core only managed to overcome a soil nutrient crisis by using fish as fertilizers of various sorts that were shipped to the region from the archipelago's maritime fringes.[13] This expansion fueled economic growth and enabled, among other things, the emergence of Edo, the largest city in the early modern world.

The East Asian Monsoon Zone

At large, the Asia-Pacific region is subject to two major geophysical processes that regulate climate and ecology across a vast region in an interconnected manner: the East Asian Monsoon and the Kuroshio Current.[14] Especially Japan's southern and eastern shores, are dominated by rapid currents, winds, and seasonal storms that make the zone a much riskier environment for ocean travel than a contained sea. Though the semi-contained zones of the East Asian sea – the Sea of Japan as well as the East and South China Seas – were sites of thriving international trade networks

[12] Morita 2016, 117; Huebner 2021, 1.

[13] Higuchi 2015, 142.

[14] Webster 2007, 1–4.

that gave rise to increasingly complex forms of capitalist business practice, the oft-cited comparison with the Mediterranean as a cradle of early modern capitalism ignores the dominant geophysical processes that define the mode of maritime exchange in the region.[15]

It is widely accepted among climatologists that the constant southeasterly summer winds and the strong northerly winter winds dominant in Japan are part of the monsoon pattern that dominates the climate of East and Southeast Asia. Coupled with climatic events in the ocean, such as the interannual El Niño-Southern Oscillation (ENSO) or the decadal 'Large Meander' of the Kuroshio, as well as waves of seasonal typhoons, these processes make the Kuroshio region a hazardous and often unpredictable environment for marine economies and trade.[16] The East Asian Monsoon, a subsystem of the Australian-Asian Monsoon, is a wind system that fluctuates seasonally, pumping moisture from the Pacific onto the Asian continent in summer, and reverting its direction to create a dry climate in these regions during the winter months. The Monsoon system encompasses a vast area from Japan deep into the Chinese mainland, and from the southern foot of the Himalayas to East Africa. Fluctuations in the system, which extend as far as Java and other densely populated zones on the southern hemisphere, affect some 60% of the world's population today,

[15] See Schottenhammer ed. 2008.

[16] Wang and Schimel 2003, 3–9.

making for some of the most powerful climatological teleconnections in the earth system.[17]

Scientists concur today that the East Asian Monsoon is a 'coupled atmosphere-ocean-land system' that absorbs influences from a host of factors, such as varying sea surface temperatures, thermodynamics over the Tibetan Plateau, or the El Niño-Southern Oscillation (ENSO) cycle of the South Pacific.[18] Similarly, recent research has shown that the occurrence of super-typhoons as well as oscillations in the marine climate of the Kuroshio region are embedded in a global context of climatic phenomena such as the Pacific Decadal Oscillation that otherwise manifest themselves most clearly in the Americas and Southeast Asia.[19] Oceanic and atmospheric systems connect societies around the Pacific through energy and moisture transports in currents, storms, and seismic waves, a fact called to mind by generationally occurring transpacific tsunamis that time and again cause death and damage on both sides of the Pacific basin.[20] Similarly, the monsoon rains in early summer, known as *tsuyu* in Japan, or *meiyu* in Taiwan and south China, or the summer typhoons – *taifū* in Japanese and *taifeng* in Chinese – that extend over an increasingly

[17] Wang ed. 2007, xxxiiv–xxxiv.

[18] Wang and Schimel 2003, 3–9.

[19] Joh and Di Lorenzo 2019, 13558; Joh, Di Lorenzo, Siqueira, et al. 2021, 6247. Feng, Li, Li, et al. 2021, 10137.

[20] The most notorious transpacific Tsunamis occurred in 1700, in 1960, and in 2011. Jones 2014b *The Environment*, 121–142.

extended summer season, create shared experiences of weather and climate fluctuations over vast distances.

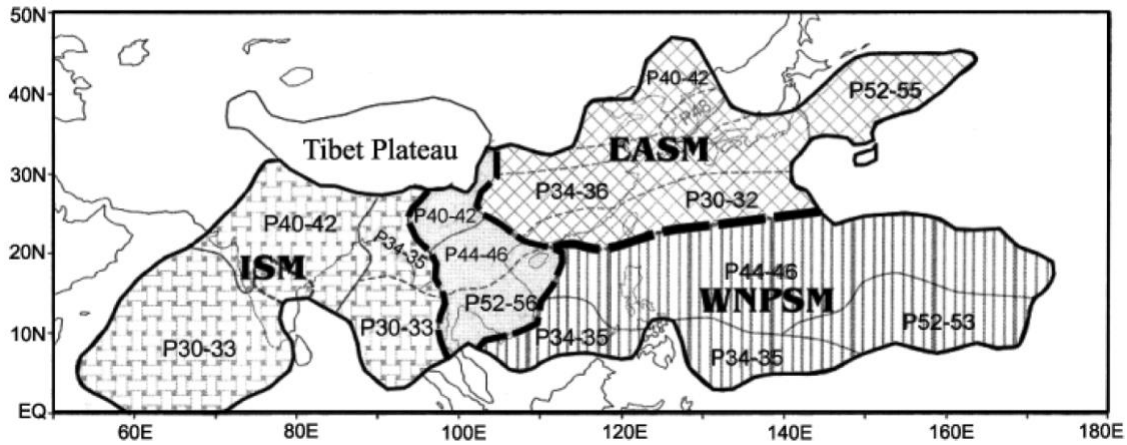

Fig 1.1) Geographical subdivision of the Asian Monsoon into and East Asian Summer Monsoon (EASM), a Western North Pacific Summeer Monsoon (WNPSM) and an Indian Summer Monsoon (ISM), in Ding and Chan 2005, 118.

Energy and Nutrient Transports

The Kuroshio current represents the most powerful marine energy and nutrient stream of the West Pacific. Emerging as the northward deflection of the North Equatorial Circulation off Luzon, the Kuroshio is a western boundary current comparable to the Gulf Stream in the Atlantic.[21] The heat energy it transports from the low latitudes to the North Pacific exerts a major influence not only on air temperatures, but also on atmospheric thermodynamics and, as an effect, on humidity transport and precipitation.[22] Fluctuations in the current have vastly different

[21] Talley et al. 2011, 305.

[22] Xu, Tokinaga, and Xie 2010, 4714.

climatic impacts on different regions within Japan, leading to locally varying effects on agriculture.[23] Currents are compact masses of water that differ from each other in temperature, density and salinity, therefore mixing just inertly. The Kuroshio's mean temperature differs from its surroundings by several degrees centigrade, making for a heat energy transmission to the atmosphere of over 125 watt per square meter even after passing Japan. This makes the Kuroshio region "one of the strongest global air-sea heat loss regions,"[24] with a massive impact on the regional climate.

The current is also a major nutrient stream, transporting elevated levels of reactive nitrates (NO_3) and phosphates (PO_4) from the tropical climes. Nitrates are chiefly accumulated in the ocean by the nitrogen-fixing bacterium *trichodesmium,* which proliferates in the tropics and subtropics, and by an influx from river inlets.[25] Since the invention of artificial fixation of atmospheric nitrogen in the early twentieth century, reactive nitrogen has accumulated excessively in the environment, with a detrimental impact on marine ecosystems and the global climate.[26] Nutrients accumulate naturally in the deep sea through the recycling of sunken organic matter near the ocean ground and are transported over vast distances by the global deep-sea

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[23] For example, the great meander which deviates the warm current to the south can nevertheless create a warmer climate in the Kantō region by shifting warm water puddles eastern Honshū. See: Sugimoto, Qiu, and Schneider 2021, 3571–89.

[24] Talley et al. 2011, 307.

[25] Voss et al. 2013, 1.

[26] Nitrous oxide (N_2O) is one of the most important non-CO_2 greenhouse gases, as Johan Rockström has pointed out, labeling the nitrogen cycle as beyond the 'planetary boundaries' of sustainability. Rockström, Steffen and Noone 2009, 474.

circulation.[27] The Kuroshio picks up these nutrients as they are upwelled from the deep sea in the Pacific. With its core around 500 meters below the surface, the current keeps most nutrients out of the reach of phytoplankton until it rises to more shallow layers as it climbs over underwater ridges or on the continental shelf, as it does near the Senkaku/Diaoyu islands, in the East China Sea, and in the vicinity of southern Honshu.[28] Having lost some of its nutrients in the shallow waters as it leaves the East China Sea, the current mingles with the deep Ryukyu current that replenishes high concentrations of nitrate.[29] By the time the current passes the Izu islands to continue onto the open Pacific as the 'Kuroshio Extension,' the Kuroshio proper is relatively depleted and regains nutrients from its confluence with the northerly Oyashio Current east of Honshu. The Oyashio, a cold but abundant current that descends from the arctic, at this point contributes a larger amount of nutrients to the convergence zone than the Kuroshio itself.[30] The confluence zone forms an especially bioproductive environment. In the English language, this zone is also known as the

[27] This global deep sea circulation, which begins with the sinking of surface waters in the North Atlantic to flow east of the Antarctic to divert one branch into the Indian, while another, major branch flows around Australian Continent to resurface in the Pacific. Voss et al. 2013, 2.

[28] Guo et al. 2013, 6403–4.

[29] Oceanographers have shown that the confluence of the deep Ryukyu current east of Okinawa contributes a significant quantity of unused nitrate to the Kuroshio which, having left the shallow East China Sea, has lost some of its original nutrient content. (Guo et al. 2013).

[30] Talley et al. 2011, 320–1; Guo et al. 2012, 2.

"Japan Ground" through works such as Herman Melville's Moby Dick.[31] (See introduction, fig. 0.1).

With speeds of up to 250 cm per second, the Kuroshio is an extraordinarily quick current that makes ocean travel a highly risky enterprise.[32] Along its path, the current first encounters the islands of the Bashi strait, a region home to the seafaring Tao people who, before national borders divided the sea, traveled back and forth between Taiwan and Luzon in the current and its local countercurrents that facilitate travel in the opposite direction.[33] As it passes over the Yilan ridge east of Taiwan, the surface flow accelerates to the speed of a light jog.[34] The upwelling near the Senkaku Islands attracted rich fish stocks and, starting in 1897, Japan's first industrial tuna fisheries under Koga Tatsujirō.[35] Half the way into the East China Sea, the Kuroshio splits into the northbound Tsushima Current that flows over the colder waters of the Japan Sea, and a main branch that crosses the Tokara Strait north of Kyushu to meander along the southern shores of the Japanese main islands. It separates the

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[31] Melville 2003 [1851], 459–63.

[32] Talley et al. 2011, 308.

[33] Taiwanese Anthropoplogist Huang Zhihui even speaks of an "East Taiwan Sea" sphere of interaction, Her theses are largely based on ethnographic observation, while historical records in support of such theses are, due to the extraneity of writing to the region – rather scarce. Huang, 2011, 7–24.

[34] Liu et al. 2012: 1197.

[35] Eldridge 2014, 36–7. Tuna was in fact much less prominent in Japanese cuisine before the 20th century. Nadin Heé has shown how tuna became "symbolic capital" for imperial Japan, when the fish was portrayed as the 'fish of victory,' the chief source of protein for a maritime empire. Heé 2019, 233.

Ryukyuan islands from the Japanese Satsuma province in the Tokara strait, marking the largest extent of the Ryukyu kingdom before the Japanese invasion of 1609.[36]

Accelerated by a subtropical gyre – forced into a clockwise rotation by the Coriolis force in the manner of a high-pressure area – the current meanders to the southern capes of Shikoku and the Kii Peninsula, where Japan's most prominent whaling businesses settled in the seventeenth century. Every decade or so, the Kuroshio changes its path over several hundred kilometers within a few weeks, forming a 'Large Meander' to the south, radically reshuffling fishing grounds across the region, and affecting precipitation and temperature in Japan.[37] Likewise, the Kuroshio Extension on the open Pacific is highly unstable, fluctuating widely on its eastbound path. Depending on weather and wind, the subtropical gyre can deflect branches of the Kuroshio so far south that they form a southern recirculation that is forced back to the Bonin Islands.[38] Surrounded by a dynamic oceanic topography, Japan is historically sunken into a rhythmically fluctuating environment.

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[36] The fluctuation of the Kuroshio is published daily by the Japanese weather office. < https://www.data.jma.go.jp/gmd/kaiyou/data/db/kaikyo/daily/current_HQ.html?areano=2 >. After its unification under the king of Chūzan in the fifteenth century, Shuri's sphere of influence expanded quickly and reached the island of Kogaja north of the Amami group as early as 1450. (Nelson 2006, 388–9).

[37] This last happened in 2004–05 and in 2017–18. Morioka et al. 2019, 17942. Changes in current patterns also affect the reproduction rate of fishes, as in the case of eel larvae adrift to find fresh water estuaries. Chang et al. 2019, 1.

[38] Segar and Segar 2012, 175–89; Qiu and Chen 2005, 2090–3. Talley et al. 2011, 308.

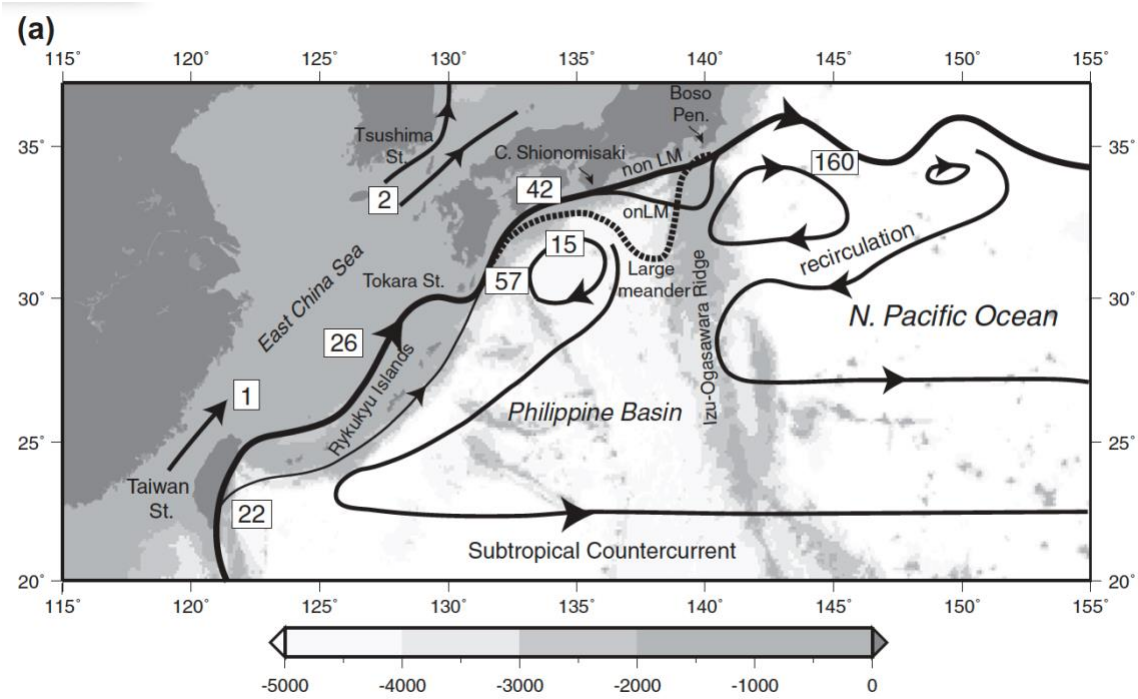

Fig. X) The main and lateral branches of the Kuroshio with gyres and countercurrents. In: Talley et al. 2011, 309.

Terraqueous Economy

All human activities are embedded in resource cycles that define the limitations of economic growth and demographic expansion. For agriculture, the availability of three essential substances is crucial: nitrates (N), potassium (K) and phosphates (P). These nutrients are being extracted from the soil in the form of crops, and replenished either through natural processes, by nightsoil recycling, or through active addition of organic or synthetic fertilizers from outside. Loss of nutrients due to erosion or exploitation leads to soil degradation and minimizes the marginal output per hectare. Conversely, growing agrarian output per hectare requires increasing the availability of high-quality fertilizers. As Japan's population grew over the early modern period,

so did the archipelago's nutrient base – partly through land reclamation and domestic expansion, but also by accumulating nutrients within the economic polity. In Toshihiro Higuchi's words, "the overall pool of nutrients in Japan constantly expanded with the inflow of nutrients from abroad."[39] The observation of Japan's metabolic connectedness to a maritime nutrient frontier ultimately undermines narratives of Japan's environmental exceptionalism in isolation.

The expansion of the archipelago's nutrient base increased Japan's reliance on phosphates and nitrates extracted from marine organisms. Though agricultural development varied regionally, the urban regions and their hinterlands, such as the Kinki region around Osaka as well as domains facing the Inland Sea, experienced significant agricultural commercialization over the early modern period that relied on the constant influx of commercial fertilizers.[40] The shift from local collecting of organic matter in forests to mix into the topsoil began with the lifting of seaweed to the fields, a trend best documented for Lake Biwa in the beginning of the early modern period.[41] The development of commercial fertilizer production from seaweed, fish and whale meal over increasing distances stood in direct connection with the intensification and commercialization of agrarian economy since the early seventeenth century. The most common types of fish manure were processed out of

[39] Higuchi 2015, 140. It is good to notice that thanks to the sophisticated network of nightsoil recycling, fertilizers helped accumulate nutrients within Japan just as much as seafood that entered the land borne nutrient cycle by way of a human intestine. See: Howell 2013.

[40] Crawcour 1989, 284–5.

[41] Sano 2015, 82–3.

sardines, either dried as '*hoshika,*' or as cakes of tried-out and crushed fish, called '*iwashi shimekasu.*' These sardines were initially fished near the Kantō plain of eastern Honshu.[42] Later, as the center of fish fertilizer production sifted to the northern island of Ezo as a result of expanding demand, herring meal or '*nishin shimekasu*' became the most widely available types of commercial fertilizers.[43] The shift from the Kuroshio to the abundant Oyashio Current was a response to the decline in sardine stocks in the vicinity of the agrarian core lands, which had been the chief supplier of marine manure until in the mid-eighteenth century.[44] In Ezo, herring fisheries soon grew into the most important branch of the economy, developing proto-capitalist institutions such as a contracting system and wage labor, as David Howell has shown.[45] By the mid-nineteenth century, 200,000 to 300,000 koku of dried herrings were shipped across the Japan Sea to out of Ezo, a number that would triple by the 1890s.[46] As Arch put it, "just as Western Europe (particularly England) leveraged their colonial landholdings to break through eighteenth-century ecological limits, adding the productivity from these 'ghost acres' to their per capita resource supply in the imperial center, Tokugawa Japan began to leverage their connections to the Pacific's marine environment to supplement scarce terrestrial resources."[47] The

[42] Higuchi 2015, 142–3.

[43] Howell 1995, 1–2, 38.

[44] Higuchi 2015, 143.

[45] Howell 1995, 1–2.

[46] Higuchi 2015, 144.

[47] Arch 2018, 81.

Early modern period thus saw an expansion of the marine fertilizer frontier from the agrarian core lands to the northern island of Ezo, making the Oyashio region an indispensable part of the archipelagic metabolism.

While the herring fertilizers were chiefly extracted from the northern frontier, the southern shores of Japan remained important fishing and whaling regions. As is discussed in more detail in chapter 4, whaling enterprises burgeoned along Japan's southern shores since the mid-seventeenth century, gradually moving closer to the current's abundant whale stocks. Whaling businesses relied on the availability of hundreds of men to chase whales in tens of boats at once, and hence involved entire village communities. Far from to the romanticized image of 'traditional' subsistence whaling, these enterprises were profit-oriented investment objects of significant scale and wage labor.[48] As Arch has argued, whale produce – strings, leather, bone or baleen – were traded far beyond the whaling regions. Whale oil fueled oil lamps in Edo, and whale guts were made into shamisen strings for the noble quarters of Miyako (Kyoto). in the farming business, the manufacture of tools like the cotton-beating bows relied on whale strings, and pesticides were produced out of whale oil.[49] Most importantly, however, bones and the less palatable parts of the whale's meat were ground into fertilizers traded to the archipelago's agrarian core lands.[50] The

[48] Arch 2018, 80.

[49] Arch 2018, 102–3.

[50] Holm 2020a *Living with the Gods*, 20–45. Holm shows that fertilizer remained one of the main produces of the whaling industry in the early twentieth century. Holm 2020b, 12–13.

wide circulation of these non-perishable marine products shows that growing commercial integration over the early modern period connected the land borne economy of Tokugawa Japan intimately to the ocean.

Risk and the East Asian Monsoon

If Japan's maritime industries figured as a nutrient transporter on shore and to the inland, then the coastal waters these industries plied figured as an extension of the agrarian economy. Likewise, the growing volume of maritime transportation integrated the coastal waters into the political space of early modern Japan. When Tokugawa Ieyasu 徳川家康 (1543–1616) decided to move the headquarters of his military regime to the village of Edo in 1603, he set in motion a major shift in the archipelago's economic geography. Within a few decades, the construction of Edo castle and the establishment of domainal residences grew the field camp into the largest capital of the early modern world, counting an estimated one million inhabitants in the early eighteenth century.[51] As the urban economy grew in the seventeenth century, the shipping industry became commercialized and expanded in scale.[52] A strong scholarly attachment to the land-borne highway network of early modern Japan – given the prominent place of highways in printed sources – has obscured the fact that maritime routes were of overwhelming importance for the

[51] Batten and Brown eds. 2015, 7.

[52] On the statistical developments of naval trade over the early modern period, refer to Cullen 2009 and 2010, as well as Uemura 1999.

prosperity of urban centers and for the archipelago's commercial and cultural integration.[53] The most important ones of these routes, the mercantile arteries of Edo and Osaka, led sailors through seas marked by strong currents and seasonal typhoons. The elevated risk did not deter sailors from shipping along the archipelago's Pacific routes, but it affected the way Japanese shipwrights operated and invested.

Unlike what terracentric administrative maps, or guide maps for land-borne travelers convey, most of the cargo transportation into and out of Edo occurred at sea, on densely traveled shipping lanes within view from the coast. Louis Cullen estimates that approximately 7,500 vessels entered Edo each year between the 1720s and the 1870s.[54] Vessels arriving from the western provinces with tax rice and commercial goods destined for the markets of Edo were ordered to undergo inspection at Shimoda and again at Uraga before entering Edo Bay. Goods coming in from northern Honshu were either shipped around the Bōsō Peninsula to meet the western routes in Shimoda, or they reached the city by way of an increasingly complex system of canals furrowed across the Kantō plain.[55] Traveled densely in the vicinity of the shore, the maritime highway along Honshu's southern coast was, together with the land-

[53] The broader fascination with the Japanese highway network is best expressed in Constantine Vaporis's works, which argues that travel along the highways was "necessary formation of a national identity." Vaporis 2012, 104.

[54] Cullen 2010, 59–102.

[55] Nakada 2001, 50. On the network of water transportation around Edo and the Kantō plain, see Namba 2010, 61–61.

borne highways Tōkaidō and Nakasendō, the essential artery connecting Eastern and Western Japan.

The sailing routes clung to the coasts, since the navigational methods were rudimentary. Mainly, Japanese sailors oriented themselves based on the shoreline's silhouette, or counting the time elapsed since the passage of a specific landmark. The technique of estimating one's position based on time, direction and speed of travel is called *dead-reckoning,* as opposed to the mathematical and astronomical methods practiced by the cosmopolitan crews that used to cruise East Asian waters in the sixteenth and seventeenth centuries. The loss of earlier long-distance navigational methods has often been described as an effect of the maritime prohibitions stipulated in the late 1630s by three shogunal edicts later described as *sakoku-rei* 鎖国令 or 'edicts of national seclusion.' [56] However, as Jakobina Arch has shown, legal restrictions on the construction of ocean-going vessels were not the main factor that led to the reconfiguration of navigational know-how. Rather, cheap shipbuilding practices and lack of training were the product of commercialization in the shipping business, a 'rational' decision that, despite a higher risk of a ship's loss, maximized profits for the ship owners. Wood scarcity made economization in ship construction particularly important. The *bezaisen* 弁財船, the most common model of junks on Japan's inter-city routes, was assembled from small and medium-sized parts and

[56] Ironically, the term *sakoku* or 'national seclusion' was only introduced to the Japanese language in 1801, through Shizuki Tadao's translation of Englebert Kaempfer's *History of Japan* of 1827. *Kokushi daijiten,* keyword 'sakoku,' in: Japan Knowledge.

could be built without the massive trunks needed for the keel, mast and beams in Western-style vessels. Not unlike the Chinese 'sandboats,' the *bezaisen* lay shallow in the water, an advantage for shipping in the silty bays of Honshu. They could be loaded quickly and handled by a crew with little training.[57] At sea, on the other side, the square-rigged vessels were unable to steer steeply into the wind, a grave disadvantage when caught in a current headed offshore.[58] Shipwrights embraced a rationality that prioritized profitability over safety, thus reducing the vessels' seaworthiness to the necessary minimum. The high frequency of shipwreck and drifting along Japanese coasts was therefore not the result of technological stagnation, but rather of long-distance operators' alacrity to optimize profitability, and of creativity in optimizing ship design for specific purposes.

[57] Arch 2023 (forthcoming). *Early citation kindly granted by the author.* A contemporary description of these Japanese vessels can be found in Engelbert Kaempfer's *History of Japan* published posthumously in 1727. (Kaempfer 1999 [1727], 253–5.) On the characteristics of early modern ship architecture, see Adachi 1995.

[58] Adachi 2002, 64.

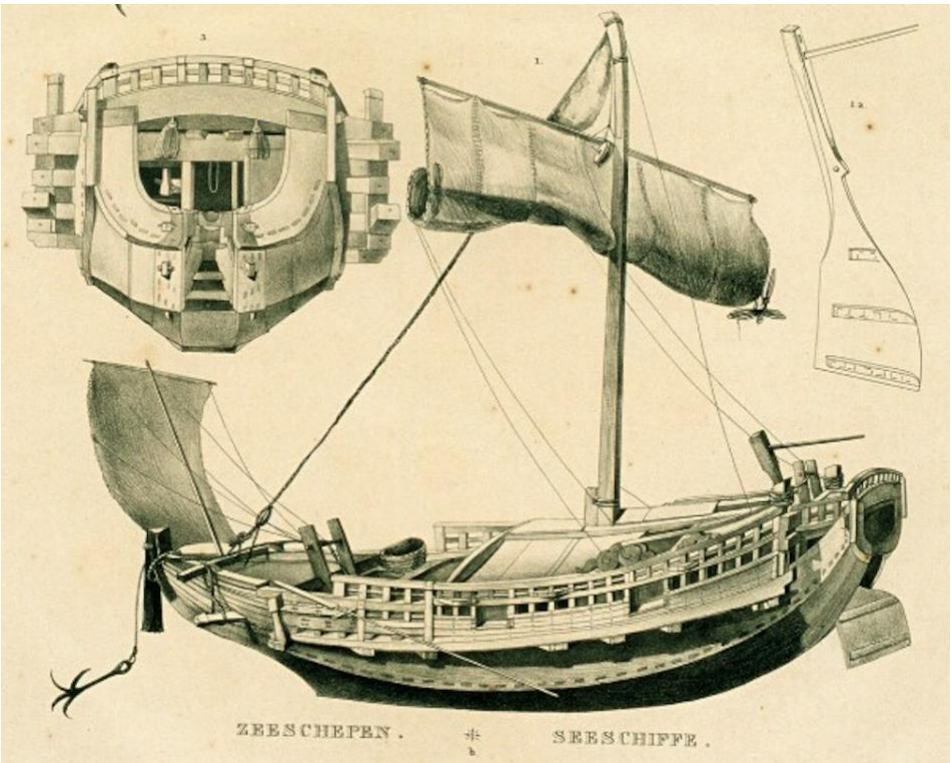

Fig. 1.2) Representation of a Japanese cargo vessel of the type "bezaisen" in Philipp Franz von Siebold's *Nippon: Archiv zur Beschreibung von Japan,* Leiden: Van der Hoek, 1832. Note the open stern and removable deck plates for swift loading, the square rigging, and the liftable rudder.

Despite the constant seasonal winds that prevail throughout the Kuroshio region, typhoons during the summer and strong northerly gales in the winter months make shipping along the current a far more risky enterprise than it would have been in a contained sea. Despite the risks currents and storms posed to sailors along Japan's southern shores, shipping routes often followed, led into, or even crossed the Kuroshio. The islands of Hachijō, Kojima and Aogashima, some 200 kilometers off Honshu's southeastern edge, for example, were customarily contacted in a seasonal rhythm. The current is particularly strong between Miyake and Hachijō, where it

passes over the Izu ridge with peak velocities of up to 150cm/s.[59] (See fig. 1.3) Boats set sail from Miyake, which was located north of the current at most times, and headed west as far as a rock called Inanba, where a constant whirl marked the entrance to the 'black rapids' (*kurose* 黒瀬), as the sailors called the dangerous whirls of the Kuroshio current. They thence steered hard south and let the current carry them into the vicinity of Hachijō. Accidents happened time and again, and sailors went missing along the eighty kilometers between Miyake and Hachijō. In 1644, even the shogunal envoy drowned in the floods.[60] Accordingly, it was crucial to sail with the seasonal rhythm of winds––north with the summer monsoon and south in fall before the northerly winter winds became too dangerous.[61] The access of central authorities to the island reduced to an annual monsoon rhythm, and the necessity of place-specific knowledge to contact these outposts of the Tokugawa realm created a special sort of autonomy for the island elites, as chapter two discusses in more detail.

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[59] Sarkisyan and Sündermann 2009, 195.

[60] Igawa 1973, 201.

[61] Early modern observers believed that the current's velocity varied seasonally with peak velocities observed in July and January, a fact that is, though, not confirmed by modern studies. (*Sangoku tsūran zusetsu,* 1785, p. 52–4, in: WUL, Acc. No. ハ 03-01547.) Hayashi Shihei decribes this seasonal rhythm as dictated by a seasonal fluctuation in the current that, however, cannot be attested scientifically (Kawai 1998, 535–6). Rather, the sailing pattern depended on monsoon-like seasonal winds in that part of the Pacific..

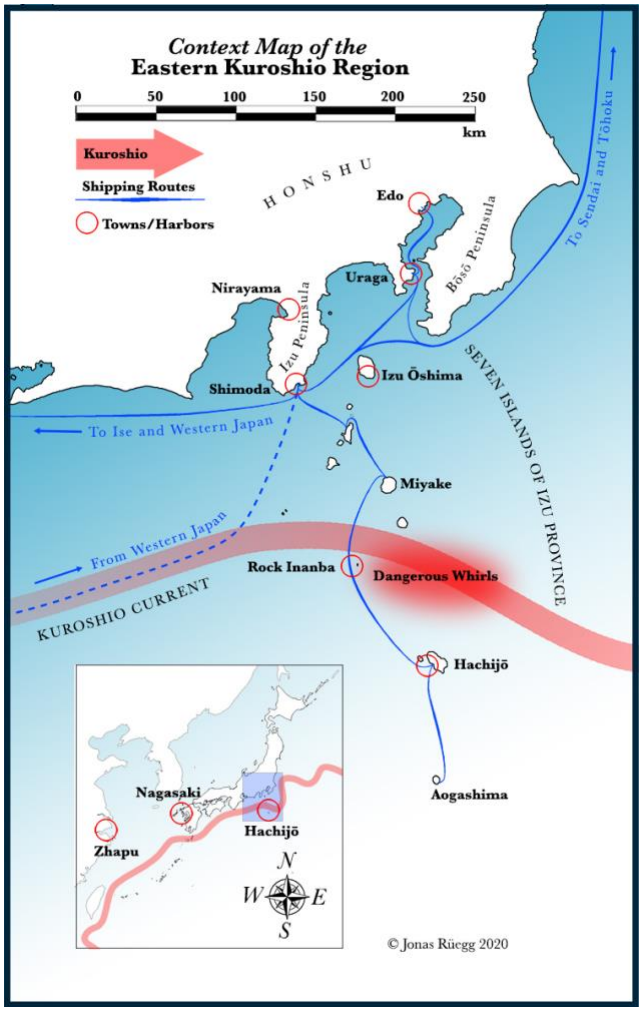

Fig. 1.3) Map of the eastern Kuroshio region with the Izu Islands an major shipping routes. The Kuroshio (red) is depicted in its most common, though frequently fluctuating flow pattern. The drift and whirls were deemed particularly dangerous east of the rock Inanba, where the current accelerates up to 150 cm/s as it climbs over the Izu underwater ridge. Author's design, 2020.

Kondō Tomizō 近藤富蔵 (1805–1887), a local historian in Hachijō, active in the mid-nineteenth century, grew interested in the surprising number of castaways that arrived on the island each winter and interviewed the sailors about their drift. Compiling a chart of sea routes from five harbors along the shipping route to western Japan, he remarked that the sailors often propelled their eastward journey by sailing in the current:

> The *River Kurose* is also called *Kuroshio.* The clashing waves and quick flows on the great sea are actually its rims. From Cape Tosa to Shiosaki in Kii, and unto the rock Zenisu, the sailors call it the *hidden tide*. I hear that from Cape Daiō in Shima Province, it flows 88 *ri* [343 *km*] offshore. (…) In summer and fall it is easy to sail; in winter and spring it is difficult. If, again, one sails south from Toba in Shima province, they say, it is extraordinarily easy to make way towards the east. In Tosa, they tell that this tide is one path of fresh water from river Ryūsa in India.[62]

According to Tomizō's investigations, sailors on the east-western route were familiar with the current and its accelerating feature for eastbound voyages. Contrasting graphical representations in maps, fishermen connected the phenomenon to a globally connected geography, based on the visibly changing water quality as one enters the current. (See fig. 1.3) Clearly, for those experienced mariners who regularly traveled into the current and even beyond view from the shore, the open ocean by no means represented the "cognitive blank"[63] that some used to cite so bluntly to explain Japan's alleged aversion from the sea.

Conclusion

This chapter has argued that early modern Japan was connected to the ocean and its nutrient-rich currents by way of its amphibious, or be it, terraqueous economy. The archipelago was terraqueous in two senses: first, the ocean constituted an

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[62] 黒瀬川, 又黒潮ト云. 大灘ノ逆浪急流モ, コノホトリノヨシ. 土佐国ノミサキヨリ, 紀伊国ノ塩ノ岬（又汐ノ御岬トモ書）ヲスギテ, 銭洲ニツキカクル潮汐ト行船者ハ伝エタリ. 志摩国大王崎ヨリ八十八里ノ沖ノ聞リ. (…) 夏秋船乗易ク, 冬春船乗ガタシ. 志摩国鳥羽ヨリ南ノ沖へ乗出シテ, 東スレバ海路甚易シト（文）. 土佐伝テ, 此シヲハ天竺ノ流砂川ヨリツ, ク一通ノ真水也ト云云." *Hachijō Jikki,* vol 1, p. 30 (Kondō 1964).

[63] Yonemoto 1999, 170.

indispensable part of the inter-island transport infrastructure, which extended beyond view from the shore and at times into or across the rapid Kuroshio current. Second, Japan's early modern economy was intimately tied to the ocean through a terraqueous metabolism. Marine industries extracted nitrates and phosphates from the sea in the form foodstuff, but also of seaweed, fish and whale fertilizers, which were injected into the land-borne nutrient circulation. As Toshihiro Higuchi put it, "the agricultural core sucked up the organic material while transferring the environmental costs of its production to the colonial frontier."[64] The gradual expansion of the fertilizer frontier from local forests and lakes, where organic matter was extracted to mix into the fields, to coastal waters, and ultimately, to fishing and whaling frontiers in the Kuroshio and Oyashio regions, represents an essential ingredient for the economic and demographic growth of the early modern Period. This growth would not have been possible were Japan confined to its limited terrestrial space.

[64] Higuchi 2015, 140.

CHAPTER TWO

Maritime Practice and Virtual Geography
The Oceanic Context of the Eastern Kuroshio Region

> By no means is it easy to sail from Japan to China, Korea, Ryūkyu, or Iki, Tsushima, Sado or Matsumae. However, the island of Hachijō is the hardest to reach of all these places. (…) The *Hayashio* is a current of roughly 2 *km* in width that swirls like a waterfall. The floods come in two or three rows, hitting waves backward, making a noise like thunder that freezes people's hearts and drains away their souls. The torrents of the *Kuroshio*, again, are as black as spilled ink. Hundreds of whirls are floating, and no one can help feeling dizzy when looking at their dance. (…) Whoever runs into this current will be driven off to America or so, and never come back.
>
> Furukawa Koshōken on voyages to Hachijō, 1797.[1]

On a windy morning in the winter of 1753, a large Chinese junk, visibly battered, floated off the shore of Ōkagō village on the island of Hachijō. (See fig. 1.3) Surprised by a storm in the East China Sea, the junk had lost its mast and rudder, floating helplessly in the current for twenty-two days until it was washed to this southernmost of the Izu islands, some 200 kilometers south of Japan's eastern edge. The islanders promptly lit a signal fire and dispatched a fleet of fishing boats to pull

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[1] "日本より渡る処， 中・華・朝鮮・琉球及壱岐・対馬・佐渡・松前かも安らずといへども八丈嶋をもて第一とす … 早潮ハ幅廿一丁ばかりにてその流レ瀧のごとく、潮の来るかた二だん三だんともなりて逆浪立あがり，その音雷の如く，聞人膽（きも）を冷し魂を消す，黒潮ハ海面墨をすかしごとく幾百ともなく渦ばかり流る々処見るめ怪しく是を見てめくるめかずといふ人なし … もし右の潮に行あたれハあ国へともなくおし流されて再ひ帰へる人なき" *Hachijō hikki,* 7, in: WUL, Acc. No. イ 04 00600 0148.

the junk to the shore before the rapid flow of the Kuroshio would drive it out onto the open ocean. As the protocol demanded, the captain and two mates were taken ashore until the value and quality of the freight had been inspected.[2] Wada Fujiemon 和田藤右衛門, a masterless samurai exiled on the island, was called in to interpret in Chinese script and demand rescue fees from the castaways payable in saké, rice and other edible cargo.[3] These demands were taken down as soon as captain Gao Shanhui, a tall man in noble robes, presented his authorization to trade in Japan. The massive vessel, counting a crew of seventy-one, it turned out, had operated a route between Southeast Asia and Zhapu near Shanghai, from where it was headed to trade in Nagasaki. Though the sailors had thrown several hundred bales of merchandise overboard to save the vessel through the storm, the junk still carried hundreds of crates of porcelain, medicine and foreign books destined for no less a customer than the shogunal household in Edo.[4] Since the island's only harbor was too narrow to shelter the gigantic freighter, crew and local magistrates rushed to carry the ship's valuable goods ashore before the next storm would tear the ropes into pieces and

[2] It was common practice with foreign castaways in Tokugawa Japan to take two people as hostages to ensure the crew's collaboration and avoid flight. Matsuura 2011, 119.

[3] Ōba 1980, 455.

[4] Ōba 1980, 455, 470. The *shogun* or 'generalissimo' of the house Tokugawa in Edo (Tokyo) directly controlled around one-third of the archipelago's agrarian lands. In contrast to the over 250 other domains, these lands were not subordinated to a daimyo, but directly to the shogun. These land holdings including large parts of eastern Japan's Kanto plain, as well as the seven islands of Izu.

drive the battered junk out onto the open Pacific.[5] Unlike domestic castaways, foreigners that landed in distress had to be repatriated by way of formal diplomatic channels. Particular caution was demanded if the cargo at stake belonged to a higher authority, making each transaction a delicate and potentially consequential matter. Until the authorities in Shimoda on the Japanese main island across the rapid current could be contacted, the magistrates knew they would have to feed the stranded castaways for at least four more months before currents and winds would allow it to contact the shogunal representative on the Izu Peninsula.[6]

Though a foreign vessel of this size was a rare sight so far from the international *entrepôts* of western Japan, the islanders acted swiftly and according to an exacting protocol that had become established through uncountable incidents of drifting and repatriation.[7] The high profile of the freight and the foreign origin of the drifters demanded caution on the part of the local magistrates who had been reprimanded for illegitimate appropriation before. Huts were set up at Maesaki bay

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[5] Given the high profile of the merchandise involves, the events around the drifting of captain Gao Shanhui's Chinese junk are exceptionally well documented. This account is based on the contemporary records published by Ōba Osamu as *Hōreki sannen Hachijōjima hyōchaku nankinbune shiryō* (Ōba 1980), as well as renderings in the early modern island chronicle *Kaitō fudoki* and Furukawa Koshōken's report *Hachijō hikki.* (*Kakitō Fudoki*, in: WUL, Acc. No.: ハレ 04 01249; *Hachijō hikki,* in: WUL, Acc. No. イ 04 00600 0148.)

[6] Ōba 1980: 457.

[7] Under the law of the Tokugawa, international trade had been limited to a few official channels including a trading post in Korea, an entrepot in the Ryukyus, and the shogunal harbor of Nagasaki. Despite lively smuggling activities, chiefly under the auspices of local rulers along Japan's western coasts, foreign vessels were a rare sight in eastern Japan. (Hellyer 2005).

for the Chinese castaways, and Captain Gao Shanhui, together with fourteen of his sailors, was put under the protection of Chōrakuji temple in Nakanogō village.[8] Once accommodated at Chōrakuji, the castaways were astonished to learn that the temple, which had sheltered many a Chinese castaway over the years, cherished a heritage it traced back to its founder Shūkan 宗感 who had himself come from China as a castaway in the late fifteenth century.[9] At this last outpost of Japanese civilization on the rim of the open Pacific, the Kuroshio current, a highway of drifting cargo and castaways, had engraved a sense of cultural kinship with the ancient cultures of the continent in the island's spiritual landscape.

This chapter argues that the local perspective of Hachijō on maritime practice and oceanic geography challenges dominant narratives of early modern Japan's alleged insular isolation. Once the home base of seafarers that roamed all coasts of East and Southeast Asia, under the maritime prohibitions of the Tokugawa shogunate Japan's regular navigation routes had withdrawn to a narrow ribbon of seas along the coasts of each province, where people engaged in intensive economic activities. The apparent introversion under the maritime prohibitions of the 1630s has led many to think that Japan was averse to the ocean per se and therefore culturally and technologically unprepared when it found itself surrounded by surging international traffic in the nineteenth century. Vernacular maritime practice and popular

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[8] Ōba 1980, 456.

[9] *Kaitō Fudoki,* vol. 1, p. 25–6, in: WUL, Acc. No.: ハ 04 01249.

geographical imagination in the outskirts of the Tokugawa world, however, reveal major discrepancies between the intellectual conceptions of the sea as propagated by scholars and polemicists in written word, and the environment as understood by those that lived with and on the sea. Experience-based navigational know-how and the spiritual imaginary inseparably entangled with it connected coastal and insular localities with a global context, constructed through ancestry, religious practice, and informal diplomacy. Such local perspectives have received little attention compared to the grand theories of the armchair travelers and urban intellectuals portrayed in chapter three. Their reconsideration, however, reveals Japan's maritime rims as intimately connected with the oceanic world throughout a period otherwise described as a retreat on shore.

Hidden behind the land-centric versions of geography engraved in a multitude of maps, travel guides, and other print publications that circulated in early modern Japan, a vernacular discourse on maritime geography evolved among those communities that lived and worked at sea. Such local conversations remain far less visible in the archives today. This circumstance is not so much due to active marginalization as to the fact that knowledge of the sea was a well-guarded secret among the seafaring communities. The sources at the heart of this chapter are fragments captured by literate visitors – mostly exiled samurai – that add to the incomplete picture of maritime practice in early modern Japan. They reveal that the

"ocean fears"[10] some historians recognize in terra-centric maps were by no means a culturally programmed complex that affected the Japanese at large. What Yasuo Endō calls Japan's "dead interest in the Pacific,"[11] apparent, for example, in the eighteenth-century geographer Nishikawa Joken's conviction that "Japan is surrounded by an impregnable sea,"[12] by no means stands representative for a general aversion from the sea. If the sea was merely a blue shade that coated the coastlines on maps drawn by urbanites and other landlubbers, for those who traveled and worked at sea, the ocean, its winds and its currents connected each coastal sea to a greater geographical context.

In Japan, practical and academic knowledge of the ocean remained largely segregated until the founding of centralized naval institutions in the mid-nineteenth century. Naval projects in the 1850s and 60s, such as Nakahama Manjirō's whaling voyages aboard the *Kimizawa Number One*, or the Pacific crossing of the *Kanrin Maru,* brought together fishermen, cargo sailors and navigators trained at the naval academy in Nagasaki.[14] The rapid pace at which Japan reconfigured maritime knowledge in the process of institutional centralization is part of the reason why local

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[10] Yonemoto 1999, 175–6.

[11] Ibid., 29.

[12] *Nihon suido kō,* publ. 1720, cited in Endō 2007, 30.

[14] Rüegg 2021, 1–2. The steamboat *Kanrin Maru*'s voyage to San Francisco in 1860 was chiefly staffed with sailors from the island of Shiwaku in the Seto Inland Sea, whereas Manjirō's voyage relied on fishermen from the Izu Peninsula. Likewise, all settlers sent to colonize the Bonin Islands in 1862 were natives of Hachijō, underlining the relevance of locality in the mobilization of knowledge and skills in the formative period of modern institutions.

conceptions of the ocean remain largely invisible in scholarship today. Shipping guilds that cultivated place-specific, practical knowledge became incorporated into a shogunal navy that operated throughout the archipelago and even expanded to a newly-opened overseas colony. The testimonies captured on the eve of this reconfiguration of knowledge, status, and local identity allow a glimpse at the vernacular geographies of an oceanic outpost that understood itself as embedded in a greater oceanic world.

Maritime Knowledge and Social Status

A liminal space between the human realm and the mythical world of distant islands steeped in legend, Hachijō and its outliers Aogashima and Kojima represented a maritime frontier region where governmental control faded. Since the fall of the Hōjō clan at Odawara in 1590, the whole Izu archipelago had come under direct rule of the Tokugawa family and thus became part of the shogunal lands of eastern Japan. These lands were subject to direct control by shogunal officials rather than hereditary vassals that acted as largely autonomous statehoods. The shogunal state with the Senior Council as its effective government was represented in the regions by a shogunal intendant or a *daikan* (代官) to whom the village headmen reported.[15] Shogunal administration relied on a large and complex apparatus of bureaucracy that was never static. Over the seventeenth century, the Egawa family of Nirayama,

[15] Hachijō-chō kyōiku iinkai ed. 1973, 148.

Tokugawa loyalists from the very start, were also nominated for the office of the Shimoda *daikan,* expanding their power in Izu and Musashi provinces.[16] In this function, the Egawa family administered the islands of Izu through a dispatched clerk of the rank of a *tedai* 手代.[17] The administrative marginalization of the outlying islands increased over the seventeenth and eighteenth centuries, allowing for a greater extent of autonomy on the side of the island's elite. The position of the shogunal envoy was abolished in 1726. Thereafter, the positions of local magistrate (*chi yakunin* 地役人) and shintō priest (*kan'nushi* 神主) represented the daikan of Shimoda in the locality, and during tax missions to Edo. These offices circulated among the representatives of village headmen (*nanushi* 名主).[18] Until the end of the Edo period, each *daikan* of Shimoda only paid the island one visit upon investiture in a generational event.[19] Except for this time, the local magistrates entrusted to enforce the law locally enjoyed a vast amount of autonomy, as long as tax duties were delivered on time.

Sailing to Hachijō across the rapid Kuroshio current was extraordinarily demanding and at times dangerous even for experienced sailors. In 1796, the shogunal official Mikawaguchi Taichū 三河口輝昌 visited Hachijō and spent several

[16] Nakada 2001, 81–3, 215.

[17] Nakada 2001, 81–3. On the administrative positions, see: Igawa 1973, 139–50.

[18] Hachijō-chō kyōiku iinkai 1973, 146–7; 157–60.

[19] Hachijō-chō kyōiku iinkai 1973, 141

months conducting research into customs, language and society of the secluded island. Upon Mikawaguchi's return, the renowned geographer Furukawa Koshōken 古川古松軒 (1726–1807) interviewed the explorer, and summarized his findings in a concise guidebook titled *Brush Notes on Hachijō.*[20] (See Fig. 2.1) Furukawa reported that

> even if [the sailors] examine the wind and find the weather is fine, it happens often that boats are hit over by large waves. When the wind is not good and they cannot decide to dispatch a vessel within a day, and there is no favorable wind from the sea, it is necessary to wait for several days until the weather turns clement … Whoever runs into this current will be driven off to America or so, and never come back.[21]

The current's constant eastward flow was a drain into the unknown that fascinated many landlubbers at Furukawa's time. Leading out onto an open ocean that would only become known more widely as the 'Pacific' (*taiheiyō* 太平洋) some half a century after Furukawa's writing, the Kuroshio connected the Izu archipelago to the distant rims of a shared oceanic space.

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[20] University of the Ryukyus Library Catalogue 2022, Acc. No. HW660. Also see: Fujita 1911, 861–2.

[21] "吹風にて日和もよしといふ日にも大浪船を打超事ハ度々之，風よからざれバ一日の中に差船心えなき処に海よりの吟風にあらされバ幾日も日和をまつ事之，… もし右の潮に行あたれハあ国へともなくおし流されて再ひ帰へる人なき処 …" *Hachijō hikki,* 7. in: WUL, Acc. No. イ 04 00600 0148.

Fig. 2.1) Graphical depiction of the Kuroshio and "Hayashio" Currents (*l.*) north of Hachijō (*r.*), with the shipping route from Miyake in the Izu Islands. From a manuscript copy of Furukawa Koshōken's *Brush Notes of Hachijō*. *Hachijōjima Hikki*, p. 4. In: RYU, Acc. No.: HW660.

Practical know-how of traveling in the current translated into political power for local captains and was not shared with outsiders. "The islanders," wrote Kondō Tomizō, the historian active in Hachijō around 1850, "treat information like the distance and direction of the maritime route to the shogunate with the deepest secrecy, and only

say it is around 300 *ri* [1,170 *km*] away."[22] Tomizō was the son of a shogunal official from Edo who, at age 23, was convicted of murder and banished to the island. Working as a scribe like many educated prisoners on the island, Tomizō dedicated several decades to the compiling of his massive work *True Records of Hachijō* (*Hachijō jikki* 八丈実記), an encyclopedia of the insular microcosm.[23] His was a unique opportunity to study culture and environment of a place that, like the island of Ezo (Hokkaido) in the north, "was distant at sea several tens of miles from the imperial lands, yet became subjected and civilized."[24] It became a long journey in search for bits and pieces of information from the secretive islanders on which he based his version of Hachijō's history and geography. Drawing on a surprising breadth of contemporary materials, Tomizō pointed out that while geographical maps represented coasts quite accurately, they fail to account for the importance of navigational instructions:

> I have earlier sought old records and accounts, removed the errors, and wrote the present text. However, while the shores and shipping routes of Musashi, Sagami, Izu, Suruga, Awa and Shimousa provinces are shown in detail [in the *Map of the Seven Islands of Izu*], regarding the maritime path from Ōshima to Mikura, I drew on the secret map of the Sasamoto family, the captain-officials of Hachijō. I tested it over many years, interrogating sailors from

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[22] "公儀ヘノ汐路ノ計度カクノ如キヲ島人ハ深ク秘シテ、只三百里程ト而已（のみ）イエリ" (*Hachijō Jikki*, vol. 1, p. 31, in: Kondō 1964.) Both of these calculations are gross overstatements of the real distance, but they express the island's perceived remoteness from greater Japan. The real distance as the crow files from Edo to Hachijō is approximately 280 km.

[23] Kobayashi 1964, 1.

[24] "距皇国南北之海上数十里， 而服王化者， 有蝦夷与八丈而已." (*Hachijō Jikki*, vol. 1, p. 5, in: Kondō 1964.)

> Niishima and Miyake, as well as skilled seafarers from various provinces. Based on the afterword of the *Nanpan Nikki*, I thus compiled a corrected map.[25]

Tomizō managed to glance at a secret map one way or another, but largely, he had to build his work on casual interviews with travelers. In general, the islanders treated any information related to the nature of their sea with secrecy, even vis-à-vis the long-term resident.

The experience necessary to read the vagaries of the ocean represented an advantage for local elites vis-à-vis the shogunate's extraneous administration. The most important administrative office in Hachijō, that of the local magistrate, rotated and distributed the authority among the village headmen (*nanushi*) of the five villages of Hachijō. Thus island affairs were negotiated at a local level. However, no business with the outside world could be conducted, no correspondence delivered, if not through the hands of the official captains.[26] The circulation of official and private boats was guarded by the coastal authority (*hama yaku* 浜役), an office that was staffed with representatives of the landowning families of Hachijō. This institution was responsible for recording the circulation of private and public vessels and for navigational security along the shores.

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[25] "曩（さき）ニ旧記伝説ノタダシキヲ探リ，謬リヲ去リテ，コレガ記ヲ著ストイヘドモ，猶又クハシフスルニ武相豆駿房総等ノ海岸並ニ水路ハ， 潮路之記アリトモ， 七島全図ノタダシキニ拠リ，大島ヨリ御蔵島迄ノ海上ハ，八丈島官船司笹本氏ノ秘図ヲ基トシ，定ムルニ新島三宅島等ノ舟人，又諸国船術ノ巧者ニ究問スルコト数歳，方程極度ハ南汎日記ノ後序ニシタガヒ，即ハチ改正ノ図ヲ製ス．" (*Hachijō Jikki*, vol. 1, p. 11, in: Kondō 1964).

[26] *Hachijō Hikki*, p. 7, in: in: WUL, Acc. No. イ 04 00600 0148.

Given the high skills required to travel across the current and the legal restrictions on traffic around the penal colony, the office of the captain (*o-fune azukari yaku* お船預り役) became the most prestigious position among the magistrates of Hachijō.[27] The office of the two official-captains came with nominal samurai privileges and the threefold salary of a common soldier. The only authorized channel for trade with the outside world, the shogunal service vessel (*go-yō sen* 御用船) represented the island's economic lifeline. Hachijō serving as a penal island, no transportation, even to a neighboring island, could be carried out by private, that is, non-licensed ships. Equally, to suppress any attempts to escape, it was forbidden for traders from outside to engage in trade with the prisoner islands.[28] On their annual turn, the captains took orders from the islanders and delivered foodstuffs, medicine and books from Japan proper. Just like the outsourced administration of the island, the official vessels were licensed, but not owned by the shogunate. As the only shogunate-owned boat, a prisoner transport approached the shores of Hachijō twice a year, dropping off between five and nineteen convicts at a time to remain exiled in the - seemingly - most secluded place of Japan. The number of privately owned fishing boats active in the immediate vicinity of the island grew over the eighteenth and nineteenth centuries. The number of official vessels that connected Hachijō to

[27] Hachijō-chō kyōiku iinkai 1973, 149.

[28] Tokyo-to ed. 1964, 147.

Shimoda and Edo on an annual turn had been limited to two since at least 1619.[29] While inter-island traffic was strictly guarded, the enforcement of shogunal regulations lay mostly in the hands of local representatives rather than dispatched magistrates, a situation that led to conflicts between local and metropolitan interests.

Cargo Economy

Despite Hachijō's geographical remoteness from Japan's major harbors and trade routes, it happened frequently that ships from Japan's western provinces – or even from foreign countries – reached the island in distress. Despite fragmentary records and probably a significant number of unreported landings, 199 incidents are known for the period between 1474 and 1865, with 300 sailors arriving on 23 vessels in the peak year of 1850 alone. The seasonally returning wave of castaways and cargo – some 70% of all incidents happened in the 11th and 12th month – turned into an institutionalized branch of the local economy.[30] Especially boats carrying foodstuffs intended for the markets of the eastern capital of Edo provided relief for the arid island's population. Once sailors were rescued ashore, they were compelled to use their remaining merchandise in exchange for repatriation or ship repairs and tools lost along the way. Left without a choice, sailors and shipwrights had to sell their

[29] Igawa 1973, 143-4. Their number was increased to three in 1830, though without increasing the total volume of cargo capacity.

[30] Accidents that left sailors adrift along the Kuroshio were particularly frequent in winter when the current was strong and the winds blew southward. Igawa 1973, 205–7.

freight for prices that were as low as one-ninetieth of market prices in Edo, conventionally in exchange for a symbolic payment in local silk cloth.[31] The routine of rescue, repair, and repatriation developed into a highly profitable business for the islanders and a local elite of island magistrates (*shima yakunin* 島役人) and official seafarers (*o-fune azukari yaku* 御船預役) who managed the proceedings in their own right.[32]

With traffic volumes growing across the region as the city of Edo sprawled, it happened more often that castaways or drifting cargo were washed ashore in remote villages along the Kuroshio. Records of domestic castaways washed to Hachijō indicate that some traders from the western provinces consciously sailed within the current to use its eastward propulsion.[33] Like the fisherfolk of northeastern Japan who routinely sailed far beyond view from shore in search for skipjack tuna, seafarers of the Kuroshio region had a dynamic understanding of the sea's movements.[34] Those familiar with weather and geography along the Kuroshio knew to handle winds currents, and countercurrents in their common pattern, as the volume of traffic along the Kuroshio suggests.[35] Yet, it happened time and again that unexpected winter gales

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[31] Tokyo-to ed. 1964, 157.

[32] Hachijō-chō kyōiku iinkai 1973, 149–51.

[33] *Hachijō Jikki,* vol 1, p. 30; also see chapter 1, in: Kondō 1964.

[34] In the spring of 1847, the American whale ship *Franklin,* while cruising the Oyashio current 240 *km* east of Honshu found itself surrounded by "twenty or thirty fishing boats floating on the sea like leaves," in search for skipjack tuna. (*Nakahama Manjirō den*, 96–103).

[35] Yoshino 1979, 161–69.

and violent typhoons damaged the boats and forced them out on the open ocean. By far most incidents happened in the winter months when the island was isolated.[36] As a result, appropriation of drifting cargo became an institutionalized custom among coastal communities, while certain artefacts recovered from the current became venerated in temples and shrines across the region.

The undeniably high frequency of drifting incidents, however, inspired some crucial interventions on the part of the shogunate, which in 1799, following the creation of a protected bay on Izu Ōshima island by an earthquake, opened a rescuing harbor for drifters missing the tip of the Izu peninsula.[37] On the western coast of the Izu peninsula, so much cargo drifted ashore that regulations were made ruling that cargo discoveries had to be reported on public panels and remain displayed for six months before the goods were cleared. If the owner was found, the finder obtained one twentieth of the cargo's value, or one tenth, if the cargo was recovered from below the surface. If no owner could be identified, the entire value of the cargo was granted to the finder.[38] In secluded villages, this regulation was often disregarded by local officials (*ura-yakunin* 浦役人) who shared an interest with the population in keeping matters local and discrete. There are records of several instances in which

[36] Igawa 1973, 205–7.

[37] Nakada 2001, 50.

[38] Nakada 2001, 53–5.

irregularities were discovered by higher authorities and led to disciplinary punishment of local officials.[39]

The system of castaway repatriation was particularly developed in Hachijō, where local officials regularly commandeered cargo in exchange for the aid provided to surviving castaways. Thereby, the origin of the drifting cargo gained political significance. To suppress appropriation of tax rice owned by higher authorities and other high-handed behavior on the part of Hachijō officials, customary rules became established regarding the handling of castaways. When a boat from Satsuma province loaded with the domain's tax rice landed in Hachijō in distress in 1675, the islanders compelled the crew to accept a deal and trade the ship's load for local silk cloth, at a vastly exaggerated rate. If 4 m^2 of silk cloth could buy 20 *kg* of rice in Edo, the islanders demanded 1.8 *t* of rice from the Satsuma boat.[40] Six months later, a boat form Osaka drifted to Hachijō. From the Ōsaka boat, the islanders 'bought' salt at 2520 *l* for 1/10th of a golden *ryō*,[41] and in the next year, they 'accepted' rice from a ship from Izumi province for 1/4th *ryō* per 504 *l*, as well as fifty barrels of sake for five

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[39] Nakada 2001, 53–5.

[40] 1101 *tawara/hyō* of rice correspond to 1101 x 72 *l*.=79,272 *l*. of rice. Cloth was measured in *tan* (0.32 *m* x 12.5 *m* = 4 m^2), the equivalent of the quantity needed for one adult kimono. On the market price of *Yellow Hachijō* in Edo, an author exiled to Hachijō wrote: "they trade one *tan* of silk cloth for a few *shō* of rice, or one *hyō* for three to four *tan* of silk, depending on the market price at that time. (或ハ飛紬一反に付米何升又壱表ニハ紬三反四反とその時の相場およそ極りありて交易するなり)" *Yatake no nezamekusa*, p. 12, in: NDL, Acc. No. 特 1-3428.

[41] The gold *ryō* was one of the basic currency units, weighing approximately 18 grams in gold. (Kaempfer 1999 [1727], 445.)

ryō. When a ship with 1030 bales of rice landed just a few weeks later, the local authorities noticed that they were dealing with a load bound for shogunal storehouses in Mino province. The cargo belonging to no lesser authority than the shogunate, rather than a remote *daimyo,* the local magistrates, acting as administrators of shogunal lands themselves, were cautious not to commit a *faux pas*. They sent out a delegation to the main islands to authorize the trade in advance. As a result, they exchanged the rice for a more modest, if still exaggerated rate of 4 m^2 of cloth per 720 *l,* only two-fifths the price paid to the aforementioned Satsuma vessel.[42] Since metal currencies were rarely used on the island until the late 19th century, the abusive character of this barter trade is hard to grasp at a glance, but comparison with Edo market prices gives a sense of the distortion. Trade with castaways happened under a certain degree of coercion, but clearly, the local magistrates were aware of the potential consequences if powerful ship owners should become enraged by their practices.

In 1774, a new regulation on the dealing with castaways made clear that:

> if a vessel with shogunal tax rice (*jōmai* 城米) lands, (…) the load shall be taken ashore and must be guarded day and night by workers and the shipwrecked captain and crew. They shall cautiously lock up the goods and the circumstances of the shipwreck shall be written down (…). Two crew members shall assist the local magistrate with recording the incident and reporting it to the incumbent *daikan* to ask for instructions.[43]

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[42] The above prices are calculated based on Tokyo-to ed. 1964, 157–8.

[43] "八丈島へ御城米並御用之品積船漂着之節は(…)荷物取揚ケ昼夜番人人足並漂着之船頭水主附置、取上候品々大切ニ相囲ひ、漂着之様子口書取レ之(…)水主之内一両人島役人差添一件書物持参、支配之御代官所へ訴出、差図を請" cit. in: Tokyo-to ed. 1964, 160.

If a boat sank after the merchandise was brought ashore, one tenth of its load migrated into the possession of the island's administration. If the ship could be saved, it was one twelfth of the merchandise, and if a vessel sank in the harbor after the crew was rescued, what could be the recovered belonged to the island. In the best case for the islanders, a boat would be stranded without a surviving crew, so that both boat and merchandise belonged to the island.[44] By stipulating explicit rules, the shogunate tied the local magistrates more closely to its trusted representative, the shogunal intendant of Shimoda on the Izu peninsula.

Yet, pirating cargo from non-Tokugawa owners, too, could pose a risk. In 1804, the officials under local magistrate Kikuchi Sanai 菊池左内 decided to confiscate part of the load of a stranded vessel owned by lord Uesugi 上杉 a daimyo of Dewa province, to distribute it among the hungry population. Both local magistrate Kikuchi and his aid Sakunojō, a landlord of Sueyoshi village, were arrested and died under unclear circumstances. Posthumously, and in respect of their attributed status as magistrates, they were given the common verdict for samurai perpetrators, to be exiled on an – even more – distant island, and their families were expropriated. Other members of landowning families were forced to pay a penalty.[45]

This purge, directed collectively at the island's ruling elite, suggests that the local magistrates had assumed that their redistributing rice from stranded ships

[44] Igawa 1973, 208–9.

[45] Tokyo-to ed. 1964, 161–2.

would be tolerated by the higher authorities, if noted at all. Luke Robert explains the separation of political space in Tokugawa Japan as divided in an *omote* (outward) and *ura* (inward) reality. In the Tokugawa state, which consisted of different regional entities with considerable autonomy, it was, according to Roberts, essential to *perform* compliance with shogunal authority towards the outside, even if shogunal law was interpreted autonomously and flexibly within a domain.[46] This characteristic of the Tokugawa system disappears in histories exclusively built on metropolitan records. While Hachijō was part of the shogunal lands, its peripheral situation put the local magistrates into a similar situation as the lord of a minor fief far from Edo. As long as the shogunal authority was respected through the act of timely tax delivery, corvee labor, and formal respect, pragmatic deviations in the interest of political stabilization could remain absent from the official reports. Since the origin and ownership of drifting vessels determined the appropriate level of restraint, the number of unreported incidents is hard to determine. For example, records are missing between the 1740s and the 1760s, the years when the worst famines in the island's history occurred.[47]

Shogunal regulations were held high when it came to repatriating captain Gao Shanhui 高山耀 (*life dates n.k.*) and his seventy Chinese sailors from the Chinese junk that drifted in late 1753, introduced at the beginning of this chapter. Since the

[46] Roberts 2012.

[47] Tokto-to ed. 1964, 159.

Tokugawa shogunate maintained no formal relations with the Qing dynasty of China, it had become a standard procedure to repatriate people on the trade route Nagasaki-Zhapu on private trading boats, a major logistic and bureaucratic task.[48] Four months after captain Gao's crew had come ashore, the winds finally allowed for an envoy to be dispatched to the *daikan*, who again forwarded the case to the Senior Council in Edo. With the shogun's personal approval, the latter ordered to relocate the castaways to Shimoda for further investigations. Those instructions reached Hachijō in the fifth month, together with eleven vessels carrying a load of rice, millet and soy sauce to redeem the islanders for their expenses. After a stay of another month in the harbor of Shimoda, mostly aboard the ships, the crew was sent to Nagasaki on the sea route, where they were allowed to sell their remaining cargo and return to China.[49]

Cargo Cults and the Identity of a Society of Drifters

Religious practices underline that the Kuroshio brought both blessings and curse to coastal communities. The ocean represented an entryway for divine power that took and gave as it pleased. Edible cargo came as a relief in times of famine, and mysterious artefacts recovered from the floods became venerated as divine gifts in both Buddhist temples and local shrines.[50] At least four times, smallpox epidemics were triggered by infected drifters in Hachijō, and isolation by the current delayed rescue when

[48] Liu 2000, 410.

[49] Ōba 1980, 455–7.

[50] Dangi 1991, 126.

famines stroke.[51] Other accounts, again, have it that some of the most essential crops were owed to the current, such as sweet potatoes first brought to the region on a drifting boat from Satsuma province in 1766.[52] The vagaries of the ocean connected localities over vast distances according to unpredictable rhythms and embedded them into a virtual geography administrative maps fail to represent.

Around 1850, Kondō Tomizō of Hachijō interviewed a sailor on the dangers of the sea, and was warned of eerie spells:

> A man called Hisagorō from Suzaki in Izu province tells that a sea god lives in the vicinity of Hashima in Izu province that drives sailors to insanity while they are troubled by wind and waves. They call it the Red Whale, lord of Sagami … This god deceives people: when they mention a mountain, it appears as a mountain, when they say island, it appears as an island. Whatever they say, be it driftwood or floating cargo, it transforms itself according to people's speech. For that reason, when sailors get lost on the vast ocean, even if they spot a mountain, they are careful not to name it.[53]

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[51] Tsushima 2013, 205. An official chronicle from 1964 lists 25 deadly famines in less than a century between 1690 and 1768. Tokyo-to ed. 1964, 172–5. The Meiwa famine, which lasted for three years from 1766–68, even reduced the island's population by as much as 26.5% to 4,946. Igawa 1973, 173.

[52] Miyata 1991, 21–2.

[53] "伊豆国洲崎ノ舟人，久五郎トイフ者ノ話シニ，伊豆国初島ノ近辺ニ海神アリテ，難風逆浪ノオリフシハ人ヲ狂カス，コレヲ相摸ノ主，赤クジラト呼フ … 廻船二乗レル者共見アヤマリテ，山ト云ヘハ忽チニ山ト変シ，洲トイヘハ洲ト変ス，又ハ流木荷物何ナリトモ，人ノ言語ニシタカフテ，名ヅクル品物二変作ス，是故二舟人大洋二漂流シテ，方位ヲ失フ時ハ，山ヲ見レトモ容易ニイヅレノ山ト名ヲ呼ザルヲ，ヨキ心ガケトスト云，余問フテ云ク，然ラハ其怪物二誑ラカサルルトキハ，以何力其惑ヲ解ン，答テ云，其真偽ヲ知ルニ伝アリ，妖怪ノ変作ハ物ノ四方二浪タタス，山洲器財ハ必ス方面二波タッテ以テ，怪ト実トヲ知ルヘシト．" *Hachijō Jikki*, vol. 1, pp. 29–30, in: Kondō 1964.

The islanders of Izu and those that traveled there found themselves on the rim of the human realm, facing a space inhabited by spirits, and mythical creatures.[54] As the encyclopedia *Wakan sansai zue* of 1712 confirmed, the islands imagined southeast of Japan included the land of cannibals, the land of immortals, and the land *Rasetsu* far in the south, where it is said that "there are women and if men go there, they never return."[55] In the virtual geography of early modern Japan, the open ocean was a liminal notion between the familiar and the mythical.

As the stories of perfidious sea gods living in the Kuroshio's floods show, the constant influx of cargo and castaways had left a profound imprint on the spiritual landscape of the Kuroshio region. Objects recovered from the floods derived their divine power from their presumed origin in the land *Tenjiku* 天竺, a concept referring to India, the origin of the Buddhist teachings. A wooden statue of the 'barbarian *Rakan*,' a Buddha figurine with a foreign-looking countenance rescued from the floods around 1700, is venerated in Hachijō.[56] (See fig. 2.2) Similarly, drifting statues brought by the current are venerated at shrines in Atami, Ajiro, Omaesaki and other places along the coast, and are sometimes displayed in rituals celebrating Buddha Miroku 弥勒仏, a cult centered on the promised coming of Buddha on a ship from the

[54] *Wakan Sanzai Zue,* in: Terashima 1986, vol. 3, pp. 331–322, 335, 402.

[55] "羅刹国　有女人男行則不帰." (Tokyo National Museum 2003, 83), a map from the 16th century. *Wakan Sansai zue,* vol. 14, pp. 29–31, in: NDL, Acc. No. 031.2-Te194w-s.

[56] Miyata 1991, 126.

divine realm of *Tenjiku.*[57] As Kondō Tomizō of Hachijō wrote in the nineteenth century, the sailors believed that the 'black tide' originated from a river Ryūsa in *Tenjiku.*[58] Through objects that had traveled in the current, islanders and coastal communities of the Kuroshio Region connected themselves to a greater spiritual geography beyond the limits of human travel.

Fig. 2.2) The 'Barbarian *Rakan*,' a Buddhist figurine probably carved in southern China's Guangdong Province, recovered from the current at Hachijō around 1700. In: Dangi 1991, 126.

[57] Miyata 1991, 10, 14. According to Yanagita Kunio, the great anthropologist of the early 20th century, this cult is related to the deity *Nirō* of the Yaeyeama islands, today the westernmost extremity of Japan, a spirit that descends from the paradise '*Nirai-Kanai*' on a boat. Ibid. 14.

[58] *Hachijō jikki,* vol. 1, p. 30, in: Kondō 1964.

The islanders of Hachijō cherished a heritage derived from Chinese drifters in particular. An inscription at Chōrakuji temple, where captain Gao and his men of the Chinese junk that reached Hachijō in 1753 had awaited repatriation for half a year, acknowledges cultural kinship with the islanders: "This place," captain Gao had his men engrave on a gate built from the remains of their ship, "is no inferior to the [sacred district of] Putuo" – where the sailors had sacrificed prior to their drifting – "the master of ceremony, an enlightened teacher, descends in the sixth generation from the previous dynasty of our country, the Great Ming … the intimate kindness of this countryman is true friendship among compatriots!"[59] As a representative of China, captain Gao was asked to comfort the souls of the hundreds of unfortunate castaways that over the centuries had ended their days on the island. Three hundred eight men of a Chinese crew of four hundred, it was told, had remained on the island after their gigantic junk was stranded in 1392, and over the centuries after the golden age of China's maritime exploration had come to a close, hundreds more drifted in the current.[60] (See table 2.1). "Their graves are in all the villages," remembered an old islander in an anthology of 1819, "and when people go to the mountains, they pay respects to them, since they are often troubled and haunted by their ghosts. When they told the Chinese castaway Gao Shanhui of Nanjing, he worshipped the ghosts and

[59] "故国之人情意綢繆, 実有同郷之誼." *Kaitō fudoki*, vol. 1, pp. 26–8, in: WUL, Acc. No.: ル 04 01249.

[60] *En'ō kōgo*, in: Takahashi 2012 [1819].

appeased them. Now, there is no more suffering."[61] Far out on the eastern sea, captain Gao's crew had reached an island that embraced a cultural heritage derived from drifters and cargo that over the centuries left a profound imprint on the spiritual and historical identity of its inhabitants.

Table 2.1) Major International Drifting Events in Hachijō.

Year	Event / Sources
1392	Chinese, approx. 400 sailors landed, 308 survived the famine of the next year and remained in Hachijō. Among others monk Shūkan 宗感, the founder of Chōrakuji temple. (Hachijō-chō kyōiku iinkai 1973, 8; Asanuma 1973, 130-2.)
1492–1500	Chinese, 200-300 people on board. *En'ō kōgo,* p. 88. (Takahashi 2012 [1819]). According to *Mukashi no Itojimabanashi* (Takahashi 1802, 132), Chōrakuji hermitage becomes a temple.
1547	Chinese, castaways hosted by monk Shūkan 宗閑 at Chōrakuji. According to *Hachijō tōshi* (Hachijō-chō ed. 1973), the monk Shūkan arrived on this boat.
1644	Chinese, three vessels at once, out of which one failed to land. (Asanuma 1973, 207.)
1753	Chinese ("Nanjing"), 71 sailors repatriated via Nagasaski. (Ōba 1980).
1765	Chinese ("Yunnan"), Shipwrecked. (*Hachijō Hikki,* p. 15, in: WUL, Acc. No. イ 04 00600 0148).
Pre-1782	Western. Reported about the Ogasawara islands. (*Hachijō Hikki*: 18, in: WUL, Acc. No. イ 04 00600 0148).
1790	Chinese, landed for water (and trade?) and left again. (Asanuma 1973, 136; Igawa 1973, 208).
Pre-1797	"From a Christian country." Brought three Kannon-like statues, no further details known. (*Hachijō Hikki*: 15, in: WUL, Acc. No. イ 04 00600 0148).
1863	(Mikurajima) American, Coolie transporter Hong Kong–San Francisco with 23 crew members and 400 Chinese coolies on board. (Miyata 1991, 212).

[61] "其墓所村々にあり，其山に入る時は祟りをなし，村民悩み煩ふ事時々なり，此由を漂流の南京人高山輝に語りければ，其神霊を祭り鎮めて，今其患更になし" cited in Asanuma 1973, 132.

The islanders of Hachijō indeed traced their Chinese heritage beyond the oldest records of castaway landings. As Yamaguchi Gorōsaemon 山口五郎左衛門, a samurai exiled to Hachijō wrote in his *Waking up in Hachijō*, an introduction to local customs printed and sold in Edo 1848, the islanders believed that their island was first settled by Xu Fu's legendary expedition with five hundred men and five hundred women at the order of the ancient Chinese Emperor Qin Shi Huangdi in the third century BC to find the elixir of immortality. "Having reached the bay of Kumano in Japan without finding the elixir," Yamaguchi retells, the envoy "feared about the consequences and dared not return to China, but remained in Kumano. He brought the women to what is now Hachijō, and dropped the men on an isle eighteen miles south from there, now known as Aogashima… Men and women lived separately on the two islands without ever forgetting their native land … One day, Lord Chinsei Hachirō Tametomo[62] came and enlightened the islands. He divided the men in two groups and distributed them, and thus he did with the women, teaching both communities the benefits of farming and fishing. Truly, it is an achievement of Lord Tametomo's noble virtue that this place was made a part of the Izu islands."[63] By the early nineteenth century, both

[62] Minmoto no Tametomo, a warrior hero century popularized in literary fiction since the 17th century. Defeated in a rebellion against the Taira clan in power at the time, Tametomo was exiled to the Izu islands in the mid-12th century. (Bakin 1986).

[63] "徐福からふじて彼所まで来たれども終に不死の薬をとり得ざれハふかく後難を怕れてももろこしへも帰られず，その身ハやがて熊野にとどまり，したがひ来たりし，女の童を今の八丈島に捨おき， また男の童をじゃこの島より南の方十八里のあなたなる今の青ヶ島といへる所に捨られしが… 男女両島わかれ故国の好をわすれず … 古鎮西八郎為朝公此島に渡らせ給ふ時男

local sayings and literary construction had the islands embedded in both an oceanic space marking the limits of the human sphere. The mythical world of ancient Chinese legends propagated in publications such as Yamaguchi's book further inspired the exotifying fantasies of Edoites and other landlubbers.

Under the influence of the geopolitical debates discussed in more detail in Chapter 3 that since Hayashi Shihei's *Glance at Three Countries* of 1785 directed the fancy of intellectuals and commoners to the Pacific as a realm of discovery and colonial opportunity, Hachijō became a place in-between that connected Japan to the mysterious world of the Pacific. Fascinated by Furukawa's rendering of trips to this last Japanese outpost on the open sea, bestselling author Kyokutei "Takizawa" Bakin 滝沢馬琴 (1767–1848) of Edo––he copied Furukawa's booklet full-length in his own handwriting––chose Hachijō as the stage of his epic novel *Wondrous Tales of the Crescent Moon* (*Chinsetsu yumihari tsuki* 椿説弓張月) that blurred history and legend, thus embedding Hachijō in the virtual geography of the reading public as Japan's exoticized southern frontier.[64] The graphic novel published in 29 volumes between

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女の島時等を教化して男の島人をわかちてここわかつし、また女子を分て男の島へつかわし、双方工作漁猟の便りよく決して海神のたたりもなく， 伊豆七頭の内に加え後の世に益なることまだまだ為朝公の御武徳の残るところなり" *Yatake no nezamegusa*, pp. 3–4, in: NDL, Acc. No. 特 1-3428.

[64] Miyata 1994, 24–7. The *Wondrous Tales of the Crescent Moon* were published in 29 volumes between 1807 and 1811. Bakin's manuscript copy of Furukawa Koshōken's *Hachijō Hikki* dated 1805 is held at Waseda University Library, Furukawa's original of 1797 at the NDL. (*Hachijō Hikki*, in: NDL, Acc. No. 特 7-462; *Hachijō Hikki*, in: WUL, Acc. No. イ 04 00600 0148).

1807 and 1811, like the popular account rendered above, celebrated the deeds of Minamoto no Tametomo, the hero exiled to the Izu islands after his party's defeat at war in the 12th century. Based on bits of historical facts, Bakin spun Tametomo's life into a tale of discovery, conquest, and heroism. When Tametomo came to Miyake island and asked local fisherfolk about the world beyond the current, they responded: "It is told that some one hundred miles from here lay the island of women [Hachijō] and the island of devils [Aogashima], but since nobody has ever been there, we do not know this for sure."[65] Tametomo, however, sets sail and within just one night, reaches the island of women, an isolated colony of amazons. Tametomo stumbles over a number of straw sandals the women keep on the shore for their husbands' return. In awe from the god of the sea, they meet only once a year, when the winds allow to sail from the island of men even farther out on the sea. Having lost the art of writing and enthralled by superstitions, the amazons are miraculously bestowed the ability to speak Japanese when the flamboyant hero arrives, since the goddess Amaterasu has decided that the island ought henceforth to be a part of Japan.[66]

Having reunited and illuminated the islanders, Tametomo swore to fight the evil god of smallpox that haunted the islands. This god revealed itself in the appearance of an old castaway drifted off course:

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[65] "これより海上百里ばかり隔て, 女護島・鬼が島など呼るゝいとおどろおどろしき嶋山ありとは聞伝たれど, 其処へ渡りたるものあらねば、慥にありとは申さぬなり." *Chinsetsu yumihari tsuki*, cited in Miyata 1991, 24–6.

[66] Bakin 1986.

> In the straw wrappings of rice bales, waving a red banner, floated an old man some one foot and a half tall, transparent like steam, dancing up and down in the waves … the ghost had been sent to the bay of Naniwa [Ōsaka], but it had drifted off course in the current of the great ocean.[67]

Bakin wrote up a world of divine powers and exotic wonders around the life of an historical swordsman, blurring facts and fantasy in the manner of China's early modern novels. But more than pure entertainment for paying urbanites, Bakin's work reflects the Japanese public's growing interest in the Pacific as a space of adventure and discovery at the boundary of the human realm. In the public imaginary of Japan's urban readership, the ocean was turning into a realm of adventurous opportunity. At the entrance to the mythical Pacific World, Hachijō was both exotified, and politicized among those concerned with the geopolitical transformations hailing from afar.

The Surging Tide of Pacific Traffic

By the turn of the nineteenth century, Asian castaways were not the only foreigners anymore that came ashore in Hachijō. On his trip to Hachijō in 1796, Mikawaguchi Terumasa learned that in previous years, foreigners from Christian countries had steered to the islands to tank fresh water. As Furukawa Koshōken recounts:

> Necessarily every twenty to thirty years, a foreign ship drifts to the island, most often to tank water. Even though they don't understand [the foreigners'] language, the islanders apprehend [their intent] and give them water. In return, [the foreigners] give them cotton cloth with patterns; then they wait for wind and sail back. There are three dolls they say they received one year from a barbarian vessel. Those [dolls] are very skillfully carved. One

[67] "米俵の蓋に、赤き幣を建て、身丈僅一尺四五寸もあらんとおぼしく、いとからびたる翁、その上に乗りて、浪のまにまに流れよる … 浪速の浦に送り遣られて大洋に漂流し." *Chinsetsu yumihari tsuki*, cited in Miyata 1991, 24–6.

> among the three is in the shape of a woman holding a child, looking as if it had just been born. It could be understood as a *kannon.* They are about 7 *sun* [approx. 21 cm] in length. Since pagodite or peach stone is very precious if carved well, this must be a great treasure. One can imagine that its value in rice, must be more than one *koku*. Someone well-versed examined it to present it to the Lord of Mito, but they concluded that it must be the idol of the Jesus sect called 'Deus.' The one that brought this and left must have been a ship from a country of the Jesus sect. It happens often that one can see all of them hoisting their sails to the south of Hachijō.[68]

As the inhabitants of Hachijō noted, by the close of the 18th century, traffic in the Pacific was intensifying. Despite Japan's rejecting stance towards new trade offers from Western governments, some foreign vessels approached Hachijō freely and without leaving traces in the official records. If a ship was not stranded in the stricter sense, there were no castaways to repatriate and thus all involved parties avoided conflict by refraining to contact outside authorities. Before the political and economic reforms of the Kansei era (1798–1801), a period of anxiety about the increasing presence of Russian vessels approaching by way of the Sea of Okhotsk, such irregularities may have represented a less urgent matter. Around the turn to the nineteenth century, however, Japan found itself amidst a shifting geopolitical situation. The Russian vessels that appeared first in the northern frontier of Ezo

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[68] "嶋へハ二、三十年の間に必異国の船流れせなる事あり、きハめて水を足（たし）に、言語通せざれと嶋人も心得水を与れバ絵もめんの類迄この返礼をなし、風まちて帰る之、あるとしの蛮船よりくれたといふ人形三ツあり、あレも蝋石（ろうせき）にて細工の手際なる事、生まるが如し、三ツの中に夫人の形にて小児を抱き、観音にてもあらんかと覚しき、長サ七寸ばかりなるあり、蝋石も桃花石（とうかせき）といふ上品にて作に彫刻しても重宝なるべき候に、しかに思、米にて石を価に遣りて持かへり候ひしか後に更ありて、水戸君へ進せ候に是を目利せし人ありて、耶蘇宗の念し仏テイウスといふもの之といふ、是を与へて帰りしは耶蘇宗国の船にてもありや、すべて八丈嶋より南に大船の帆かけを見る事度々この事之といふ" *Hachijō Hikki,* p. 15, in: WUL, Acc. No. イ 04 00600 0148.

(Hokkaido), and later in the harbor of Nagasaki, inspired some, like Hayashi Shihei to polemically call for stronger maritime defense, while others, like Matsudaira Sadanobu 松平定信 (1758–1829) or, later, Aizawa Seishisai 会沢正志斎 (1782–1863), held up Confucian social ideals as slogans for reforms within.[69] Accordingly, the shogunate changed its attitude towards Hachijō and the outlying islands of Izu.

It is well-known that encounters with Russian explorers in the borderlands of Ezo and the Sea of Okhotsk towards the end of the eighteenth century triggered political reform. Many of the explorers dispatched to establish new trade relations with the shogunate, however, surrounded all of Japan, consciously conducting research into the maritime currents believed to accelerate travel from Japan's economic centers to Russia and North America. Several expeditions, including James King's (1779; *life dates:* 1750–1784) and William Robert Broughton's (1796; *life dates:* 1762–1821) have reportedly explored the region and were most likely discovered by Japanese coastal guards.[70] Russian explorer Adam Johann von Krusenstern (1770–1846), who examined the Kuroshio near Hachijō in 1804 remarked that "it would be interesting to know what direction the currents [take], because a perfect knowledge

[69] Hayashi Shihei's book *Kaikoku Heidan* published in 1791 stands representative for emerging calls for stronger maritime defense along the Japanese coast in the late eighteenth and early nineteenth century, as will be discussed in chapter 3. (*Kaikoku Heidan,* in: Lederer 2003)

[70] Kawai 1997, 200–13.

of the currents in each season infinitely facilitates the navigation between Kamchatka and Japan."[71]

Just in the year of Krusenstern's exploration, a conflict escalated in Hachijō over a stranded boat's cargo confiscated by the local magistrate. The shogunate established an example arresting two exponents of the local elite, expropriating their families. By that time, casual foreign landings represented an open secret, as the accounts in Furukawa Koshōken's *Brush Notes on Hachijō* illustrate. In the following year 1805, forty cannons and thirty-three halberds were sent to Hachijō to reinforce the maritime outpost, just months ahead of the first "Law on Water and Fuel Provisions" (*Shinsui kyūyo rei* 薪水給与令) of 1806.[72] The growing anxiety about security threats from the sea materialized in the southern islands several days' sail off the Japanese capital.

Conclusion

For the coastal communities of Eastern Japan, there has never been an end to the "maritime age." As this chapter has shown, the historiographical debates that keep reiterating the idea of early modern Japan as a land-borne, insular culture underestimate the practical experience of those who lived and worked at sea. From the local perspective of Hachijō, the currents surging across the Japanese archipelago

[71] Kawai 1998, 548–9; cit. on p. 552.

[72] Hachijō-cho ed. 1973, 211. *Kokushi daijiten*, keyword "Shinsui kyūyo rei," in: JK. This law is not to be confused with the „Shinsui kyūyo rei" of 1842, which was issued in response to the first Opium War in China.

were both a factor in the development of local institutions and cultural identities, and a pathway that connected the administratively isolated penal colony to a greater virtual geography.[73] As with Epeli Hau'ofa's critique of terracentric biases that belittle Pacific islands, it is pivotal to include the maritime space into the vision of Japan as a terraqueous zone, exposed on all sides to international contact and exchange.[74]

For a long time, an exceptionalist myth held that the Japanese islands, allegedly poor in natural resources, developed a harmonious rapport with the natural environment and developed a unique culture disconnected from the outside world.[75] The episodes discussed in this chapter offer a different picture. They illustrate how currents carrying people, artefacts and foodstuffs created historically specific connections with distant places. The seas along the archipelago's coasts were a densely plied economic space that faded into the vaguely understood space of the

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[73] The interest in reproducing the idea of national seclusion, though under relativizations, is particularly strong among conservative Japanese historians seeking to understand Japanese institutions in comparison to the Euro-American norm. (Matsukata 2017).

[74] Hau'ofa 1994, 153.

[75] Attempts to explain the 'national character' of the Japanese culminated with Watsuji Tetsurō's *Climate and Culture* in the 1930s, but essentialist representations experienced a comeback during the bubble economy of the 1980s, when high economic growth invited the return of old nationalist conceptions. (Watsuji 1961). These conceptions were deconstructed piece by piece, once Ronald Toby and others had undermined the *Sakoku* or *National Seclusion* paradigm for Japan under the Tokugawa. More recently, works by Robert Hellyer have revealed Japan's commercial entanglement across allegedly hermetic borders by pointing at regional trade entanglement beyond the archipelago. (Hellyer 2005, 83–110; Hellyer 2009; Hellyer 2013, 391–413).

oceanic world. As reports of encounters with whale ships off northeastern Japan, or rare records of castaways in Hachijō indicate, some experienced sailors routinely sailed far beyond view of the shore. By the close of the eighteenth century, Western explorations added to the international encounters in the region, as contemporary observers of Hachijō recorded. Especially a series of drifting events of Chinese vessels, engraved in the local identity over centuries, made the ocean an integral part of ritual customs, virtual geographies, and institutional landscapes.

Given the secrecy with which maritime know-how was treated among the community, these local perspectives on the ocean stand in the shade of more visible, urban cultures of geographical imagination. Beyond a current that formed a natural boundary for most outsiders, Hachijō and its minor neighbors Kojima and Aogashima were embedded in a greater virtual geography that connected the islands with the culturally irradiating realms of China and India, and with the mythical realm of the open ocean. Along the eastward drain of the current, the continent was the origin of past arrivals that had blended into the island's own cultural identity, and the ocean, a mythical realm with isles of immortals, cannibals, and other mythical creatures, a place of no return. In their maritime seclusion, reinforced legally due to the islands' function as a penal colony, Hachijō islanders affirmed their cultural and geographical identity through cultural kinship and informal diplomacy with continental drifters, and through the veneration of sacred objects recovered from the current.

Much work has been done to challenge the paradigm of national seclusion, especially so by scholars with a local focus on Japan's western domains facing the East China Sea and the Sea of Japan. It has become evident that the very suppression of

direct trade by the stability-oriented Tokugawa shogunate led to vivid smuggling activities, sometimes under the auspices of local vassals to the Tokugawa shogunate.[76] Hachijō's record of castaway repatriation shows that formal and informal international encounters were by no means limited to the coasts facing the Asian continent. The constant influx of domestic and international drifters in fact led to the creation of formalized mechanisms of bureaucratic reaction. The high level of experience and place-specific know-how cultivated within the community, necessary to cross the current, represented a strategical advantage for the local authorities of Hachijō in negotiating a vast scope of autonomy.

As chapter 3 discusses in more detail, by the turn of the 19th century, geopolitical debates among urban intellectuals sparked a growing interest in Hachijō as a gateway to the rapidly transforming Pacific World. Starting in the 1860s, Hachijō provided the settlers for the Bonin Islands, and it became the first nod in a network of business, labor and know-how that enmeshed island colonies throughout the frontier in the Meiji period. In other words, in the nineteenth century, Hachijō turned from an imagined gateway to the oceanic realm into a logistical transit nod between the metropole and its pelagic empire.[77]

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[76] Most prominently, Robert Hellyer's work on state-sponsored smuggling across the East China Sea, as well as his subsequent work on the pervasive dimension of early modern Japan's international commercial entanglement are representative of this change of paradigm. (Hellyer 2009; Hellyer 2005).

[77] I have discussed this first Japanese colonial venture to the Pacific in more detail elsewhere. Rüegg 2017.

CHAPTER THREE

The Invention of Japan's Pacific

> East of Japan is the vast and boundless ocean, the largest in the world, where all land ends.
>
> Nishikawa Joken, *Nihon suido kō,* 1720.[1]
>
> As we investigate the conditions in foreign countries, it must be noted that these countries are located on the same, one globe, and that many countries on this globe are undergoing tumultuous change. Commonly, the globe is divided into the four parts of Asia, Europe, Africa and America, [but] ... in recent years, we have come to subsume the islands of the Great Pacific as *Australy,* making it five continents.
>
> Watanabe Kazan, *Gaikoku Jijōsho,* late 1830s.[2]

According to the Sino-Japanese encyclopedia *Wakan Sansai Zue,* published in 1712 by the physician Terashima Ryōan 寺島良安 (*b.* 1654) in Osaka, the seas east and south of Japan were covered in islands of all sorts, home to strange peoples and eerie creatures. Only rarely did it happen that drifting sailors returned from these strange lands to report about the island of women, or, farther to the east, the land of immortals. Less fortunate drifters asea fell into the hands of the *Shakuhakō* who enslave strangers and sell them to the neighboring islands, or worse, they could fall

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[1] "日本之東溟海遠闊世界第一之處而, 地勢相絶." *Nihon sudio kō*, p. 7, in: Waseda Kotenseki Database, Acc. No.: イ 04_00775.

[2] "外国之事情を捜索仕候處外国之儀は一地球中ニ相抱り候事ニ付一地球諸国変革より荒々奉申上候, 右一地球を四分仕, 亜細亜, 欧羅巴, 亜弗利加, 亜墨利加と定候 ... 近来南北亜墨利加を一州と仕, 大平海諸島を取集メ是を烏烏斯答剌利と称し, 五大洲と致候." *Gaikoku Jijōsho*, p. 1, in: EGAN, Acc. No. 33 外国事情書.

into the hands of the *Kinbu*, a tribe that pins strangers on bamboo skewers, roasting them alive.[3] The vernacular imaginary that placed Japan amidst a sea of sinister and exoticized islands has provided ample evidence for arguments about early modern Japan's transfigured conceptions of the outside world, or flat out, its ignorance about geography. This "cognitive blank of ocean space,"[4] Marcia Yonemoto argues, was filled with "ocean fears and fantasies [that] allowed the Japanese to engage with the idea of an overseas 'elsewhere.'"[5] Allegedly, Japan suffered from a deeply entrenched cultural aversion to maritime exploration and overseas trade.

This chapter problematizes such culturalist conclusions and argues that Japanese conceptions of the Pacific as an oceanic entity were manyfold and they developed diverging meanings over the course of the early modern period. Unlike European views of the Pacific, modelled after the Atlantic, inspired by the act of crossing, and centered on the rims that confine it, Japanese imaginations represented an archipelagic view of the ocean, or be it, a malleable extension of Japan's own archipelagic realm. An oceanic view of Japan itself gained currency through debates that since the late eighteenth century called for a geopolitical reorientation towards the archipelago's maritime environs. In the process, complementary concepts were coined that expressed different takes on Japan's situation among a rapidly transforming Pacific World. If *taiyō* described the "Vast Ocean" outside Japan's inter-

[3] *Wakan Sansai Zue* vol. 14, pp. 22, 29, 31, in: NDL, Acc. No. 031.2-Te194w-s.
[4] Yonemoto 1999, 170.
[5] Ibid.

island seas, the more specific "Southern Sea" *nankai* became the recipient of uninhabited but theoretically Japanese islands to the south, based on their alleged vicinity to the Nankai-dō region of western Japan. Over the course of a century, the boundaries of Japan's Pacific expanded in the imagination of explorers and armchair travelers from Izu province to the Bonin Islands, from the Kuriles to Kamchatka, and finally, via the Philippines to the shores of Australia. Unlike Europe's Atlantic world that was created by the very act of crossing, Japan's Pacific emerged from the depths of the ocean as a sea of islands that gradually altered the definition of Japan proper.

Over the latter half of the Tokugawa period, Japanese intellectuals redefined the Japanese geo-body through the construction of meta-geographical vessels for the archipelago's oceanic environs. For the Thai historian Tongchai Winichakul, who first coined the "geo-body" in his *Siam Mapped,* the term "describes the operations of the technology of territoriality which created nationhood spatially." The technologies at work in propagating a specific view of space and spatial belonging are cartographic categorization, communication and spatial enforcement.[6] The creation of a national geo-body culminated in the late nineteenth century through media such as standardized school maps, but the categories at work had been in the making since the turn of the nineteenth century. The process of geographical information collection and combination, as well as the propagation of specific conceptual projections was carried out on the ground through cutting-edge land measuring projects such as Inō

[6] Thongchai 1994, 16.

Tadataka's 伊能忠敬 (1745–1818) map of Japan. The global circulation of graphical and textual maps connected these projects to a global geographical discourse, enabling, for example, the compilation of "the most advanced world map published anywhere in 1810,"[7] in Kären Wigen's words, by Takahashi Kageyasu 高橋景保 (1785–1829). Conversely, Japanese intelligence about the geography of Sakhalin, the Bonin Islands and other places visited by Japanese explorers under the Tokugawa was sought after by scholars in Europe. As a result, Japanese geographers created distinct visions of oceanic geography that stood in a dialogue with Western explorations, yet propagated distinct Japanese conceptualizations of the Pacific.

Although Japanese views of the Pacific are fundamentally distinct from to the rim-centric view of voyaging empires, the concepts its thinkers drew up were by no means less colonial in nature. The word *taiheikai,* introduced by Takahashi's world map of 1810 to translate the "Pacific," remained confined to the abstract concept of an ocean circumscribed by unreachable shores.[8] The idea of a "South Sea" or *nan'yō,* by contrast, gained currency as the projection of a Japanese sphere of influence since the 1820s, culminating in the colonial practice of the modern period. Shiga Shigetaka's illustrious *Recent Developments in the South Sea,* cited in the introduction, was the product of a government-sponsored expedition to the South Pacific in 1887. Shiga's expansionist polemic outlined the maximal expanse of an archipelagic continent spanning from Hawai'i to Southeast Asia, encompassing Australia and the

[7] Wigen 2021, 341.
[8] Endō 2007, 35.

islands of the Pacific. "Our Japan," Shiga wrote, "is towering above the Pacific, as it overlooks the islands of the South Sea on its sunny side."[9] Shiga's use of "Pacific" (*taiheiyō*) and "South Sea" (*nan'yō*) in one phrase illustrates the unravelling of two diverging conceptions of the ocean as either a void space enclosed by continental rims, or as an archipelagic continent in-between, an extension of archipelagic Japan itself.

In the following, I discuss how the production of geographical information through maritime exploration, cartographic innovation and geopolitical discourses affected the construction of these concepts. It is important to note that throughout the early modern period, Japanese scholars were multilaterally engaged in a global geographical discourse. At a time when vast parts of the Pacific were yet to be charted, Japanese maps, made transferable to outsiders by coordinates, consistent scales, and increasingly coherent conventions of graphical representation, represented powerful sources of objective information that entered the global body of geographical information. As the career of Hayashi Shihei's *Glance at Three Countries* of 1785 illustrates, textual discussions of Pacific geography were also sought after by western scholars who translated their obscure idiom and fed the findings of Japanese explorations into the Western geographical discourse. As a result, the drafting of Japan's oceanic geographies became an international conversation that reflected geopolitical transformations in the North Pacific.

[9] Shiga 1887, 11.

Shifting notions of the ocean, the continent, and Japan's place in-between are apparent in vernacular and scholarly geographies. Three instances are essential for this analysis: first, the exploration of the Bonin or "Ogasawara" Islands by a shogunal expedition in 1675 underlines that decades after the so-called edicts of national seclusion (1633–39), the navigational know-how was granted to inventory a small but fertile island some 1,000 kilometers into the vast Pacific. Second, I discuss the spread of expansionist ideas pertaining to the Pacific among both intellectuals and the broader readership in the early nineteenth century. Third, the global circulation of Japanese geographical knowledge through works such as Hayashi Shihei's, or Mamiya Rinzō's 間宮林蔵 (1775–1844) and Inō Tadataka's maps of Sakhalin and the Amur Delta, shows how Japanese geographical discourses were incorporated into a global geographical discourse. Contrary to the die-hard narrative of early modern Japan's sudden awakening to the arrival of black ships "out of this Pacific Ocean about which the Japanese knew almost nothing,"[10] it becomes clear that early modern debates on the archipelago's place in its maritime context occupied a prominent place in both academic and vernacular projections. Accordingly, the process in which "the Pacific" emerged in the Japanese imaginary was as much an incorporation of western concepts as it was the propagation of a genuinely Japanese perspective.

[10] Endō 2007, 23.

Regional Perspectives and Multiple Pacifics

It should not come as a surprise that the image of the Pacific geo-body first appears on Asian maps. Matteo Ricci's iconic map of the world, first printed in China in 1584 and widely reproduced in Japan in subsequent decades, first placed the entire Pacific between the Eurasian and American continents, granting the ocean a prominent place in his portrayal of the world.[11] In so doing, Ricci docked onto important conventions of Chinese mapmaking. Unlike his European predecessor Gerardus Mercator (1512–94) fifteen years earlier, the Jesuit centered his massive six-part map on East Asia rather than on the Atlantic world. Though Ricci introduced the radically new organizing principles of continents and coordinates, as well as a long list of novel toponyms, some of the meta-geographical concepts he applied were familiar to his Chinese audience.[12] Eurasia was surrounded by a "lesser" and a "larger" Western Sea (小西海, 大西海), located in the Arabian Sea and west of Europe, as well as a "lesser" and a "larger" Eastern Sea (小東海, 大東海) off Japan, and along the American west coast respectively.[13] All of these toponyms were centered on specific, coastal regions. Though the idea of the *Pacific,* coined by Ferdinand Magellan around 1520, is apparent in the designation *Ninghai* (寧海) or "peaceful sea" for a region west of Chile,

[11] In Japan, the 1602 edition of Ricci's map, used in Jesuit schools in Japan by 1605, gave rise to an entire genre of *Bankoku sōzu* maps that, hung vertically with east at the top, were centered on Japan and the Pacific. In modified and updated editions, this type of maps remained common into the nineteenth century. Unno 1994, 404–10.

[12] The 1584 version of Ricci's world map is lost, but seven subsequent editions by 1608 propagated Ricci's novel representation of the world in China and its neighboring countries. On the innovative aspects of Matteo Ricci's *mappa mundi* in the Chinese context, see Elman 2009, 29–34.

[13] Endō 2007, 28. Endō renders these as "near" and "far" Eastern Sea.

this toponym, as well, refers to a specific sub-region within an ocean that seems, otherwise, unconnected.[14] Though the Pacific emerged on Asian maps as a mere graphical convenience, its function in shifting the cartographic focus to the east was readily appropriated by those Japanese cartographers that sought to emancipate their Archipelago from the continent in the eighteenth century.

Fig. 3.1) Matteo Ricci's map of the world with the Pacific at its center. This version of 1602 was used, reproduced and modified in Japan throughout the early modern period. (*Kunyu wanguo quantu*, in: University of Minnesota Library, Acc. No.: 1602 xRi.)

The archipelagic conception of Japan was essentially a reinterpretation of earlier cartographic traditions. The Sinocentric and Buddhist cosmologies prevalent in medieval and early modern Japan resembled the archipelagic worldview of European antiquity in that they located the continental land mass of China and India at the center of one world ocean, surrounded by a number of peripheral islands and

[14] *Kunyu wanguo quantu*, in: University of Minnesota Library, Acc. No.: 1602 xRi.

archipelagos such as Japan. (See fig. 3.1; fig. 3.2) As John Gillis has argued, this wasn't all that different for Europeans in the Atlantic: Waters that had been obstacles now gave unprecedented access. Before the fifteenth century, the Ocean led nowhere; in the next centuries people would see it led everywhere."[15] The discovery of the West Indian "archipelago" emancipated Europe from its marginal position in the *Orbis Terrarum* and instead shifted the continental peninsula to the center of a maritime world. The model of three continents of the old world was gradually undermined when the designation of continent was first applied to the Americas in the course of the sixteenth century.[16] In other words, oceans are for the aquatic realm what continents represent for the terrestrial world. In this, both are projected as macroscopic "metageographies" that express historically specific relations between continental and insular places.

[15] Gillis 2007, 22.
[16] Lewis and Wigen 1997, 24–5.

Fig. 3.2) Map of the Buddhist world Jambudvīpa with the Indian subcontinent in the south, China in the east and Mount Sumeru, surrounded by nine rivers, at the center of the universe. Japan is represented by the archipelago in the northeast, Europe constitutes an archipelagic outskirt in the northeast. (*Nansenbushū bankoku shōka no zu*, dated 1710, in: University of Tsukuba Library, Acc. No.: 不 040-348.)

Multipolar or "polycentric" approaches to global history as they emerged over the past decade or so, have explored methods to incorporate regionally distinct perspectives on the creation of the Pacific as a framework of trade, migration, and

colonial exploitation.[17] The Pacific was not simply a 'Spanish Lake,' as O.H.K. Spate still claimed in the 1970s.[18] Macroscopic views of a contoured Pacific basin were specific to the gaze and agenda of voyaging empires, and by no means a universally valid model. The Pacific in its entirety – *Taiheiyō,* as the Japanese called it by the mid-nineteenth century – remained an intellectual construct for most of the early modern period, but overseas integration manifested itself locally along regional and trans-regional trade networks. Hamashita Takeshi's model of interlinked seas or trading zones stretching from the sea of Okhotsk to Southeast Asia and Australia is a useful framework to think about trans-regional integration.[19] Along these networks, Pacific integration began in the ocean's western sphere and expanded to the insular middle driven by Chinese demand in the late eighteenth century, as Robert Hellyer has shown.[20] In Hawai'i, a kingdom deeply affected by introduced disease, ecological decline and ideological disruptions in the context of long-distance trade, reconfigured its indigenous geographies with the kingdom's perceived leadership at the center of an oceanic sphere of influence. King Kalākaua's (1836–1891) vision of the Pacific as a framework for indigenous alliances culminated in his suggested alliance with Japan in 1881, and the attempt to establish a Pan-Pacific federation in 1887.[21] In practice,

[17] One example is Perez Garcia and De Sousa's edited volume centered on Chinese and Japanese conceptions of global history, or Armitage and Bashford's *Oceanic Histories.* (Perez Garcia and De Sousa, eds. 2018; Armitage and Bashford 2014.)
[18] Spate 1979.
[19] Hamashita 2001, 335–6.
[20] Hellyer 2013, 391.
[21] Cook 2018, 126–7; Gonschor 2013, 163–4; Gonschor 2019, 88–9.

multiple Pacific Worlds came about in a multipolar network that developed different meanings in different regional contexts.[22]

Pacific Engagement and the Paradigm of National Seclusion

Japanese history has long been told through the framework of "national seclusion" or *sakoku*, based on the Tokugawa shogunate's strategy of restrictive and highly selective diplomatic interaction between the 1630s and the 1850s. This paradigm has been problematized based on redefinitions of diplomatic and commercial engagement, but also based on observations of global intellectual connections. Given the significance of indirect commercial and political engagement, Hellyer asks: "How do we examine the history of the Pacific before 1850 and still effectively incorporate the 'non-voyaging' agendas and trajectories of specifically East Asian states?"[23] It is important to remember that this "non-voyaging agenda" was by no means a consistent theme in the history of East Asian states. Even after the age of large-scale, state funded expeditions to South Asia and Africa under admiral Zheng He 鄭和 had come to a close in the early fifteenth century, Chinese merchants maintained mostly illegal trading networks throughout Southeast Asia.[24] Japan-based seafarers, mostly referred to as *wakō* pirates, throve in collaboration with Iberian and Fujian traders, and contributed to the emergence of the Manila trade. Though the age of Japanese

[22] In Matt Matsuda's words, "Pacific worlds are not synonymous with just one declared and defined "Pacific," but with multiple seas, cultures, and peoples, and especially the overlapping transits between them." Matsuda 2012, 2.
[23] Hellyer 2016, 301.
[24] Zurndorfer 2018, 39–40.

piracy in East and Southeast Asia came to a close with Toyotomi Hideyoshi's 豊臣秀吉 (1537–1598) law against piracy of 1588, the Japanese and their proxies remained a prominent presence in long-distance trade with Southeast Asia.[25] By 1604, the "Vermillion Seal" system had created state-approved monopolies for trade with East and Southeast Asia.[26] As Adam Clulow shows, even after the shogunate had cracked down on Japanese international business in 1635 with a ban on international travel, the shogunate continued to deploy its foreign trading partners as proxies to serve its strategic interest in East and Southeast Asia.[27]

But also eastward facing, Japanese leaders engaged with the new cartographic reality that located them *vis à vis* a distant but not unreachable New World. Even before he had accomplished his unification of Japan, Tokugawa Ieyasu (1542–1616), pursued a proactive role in trans-Pacific engagement, aiming to establish a trade route to New Spain (Mexico) operated by Japanese crews and vessels to compete the Spanish "Manila Galleons," which had been circulating to Acapulco since the 1560s.[28] Joshua Batts' recent dissertation argues that Japan's entry into trans-Pacific commerce and diplomacy, the first bilateral relationship across the Pacific in history, made Spain's intra-colonial trade the object of an inter-imperial competition.[29] In

[25] Tremml-Werner, 2015, 20; 78.
[26] Clulow, Adam. The Company and the Shogun : The Dutch Encounter with Tokugawa Japan. New York: Columbia University Press, 2014, 143.
[27] Clulow 2014, 194–5. Also see: Clulow 2009, 72–94.
[28] Matsuda 1969, 64–8. After Andrés de Urdaneta first successfully crossed the Pacific eastwards in 1565 – avoiding the prevailing easterly winds in the lower latitudes – the so-called Manila Galleons connected the Spanish holdings in the Philippines to Acapulco in Mexico. See Spate 1979, 104–6.
[29] Batts 2017, 22.

1607, the Japanese-built vessel *San Buena Ventura* crossed to New Spain under the English-born pilot William Adams (1564–1620), known in Japan as Miura Anjin (三浦按針) or "pilot of Miura."[30] Later, in 1610, the *San Buena Ventura* crossed again to New Spain on a diplomatic mission to the court of Spain. A few years later, in 1613, the *Keichō* embassy to Rome, sponsored by Date Masamune of Sendai, crossed to Acapulco on the Japanese-built *San Juan Batista,* and, by way of it, repatriated the Spanish explorer and ambassador to Japan, Sebastian Vizcaíno (1548–1628), who had spent over a year in Japan on his search for the Isles of Silver and Gold.[31] Japan's eventual discontinuation of exchange with New Spain and the Spanish Philippines in 1625 was, according to Batts, a reaction to Spanish efforts to lock the Japanese out of trans-Pacific relations.[32] Though Japanese expeditions were crossing the Pacific for just a brief period, the navigators in its service were, at one point at the forefront in the project of long-distance exploration.

One episode that illustrates Japan's lasting authority in Pacific exploration is the quest for the Isles of Silver and Gold, places that lived in the space between wishful imagination and geographic knowledge. (See fig. 3.3) Most probably rooted in the legends spread by Marco Polo's accounts of the gilded land Cipangu, the islands became embedded in the Japanese virtual geography of the eastern ocean.[33] Even Abraham Ortelius, on his seminal map of the Pacific Ocean of 1589, featured the Isle

[30] Walker 2015, 98.
[31] Tremml-Werner 2015, 206–7.
[32] Batts 2017, 22.
[33] Endō 2007, 27.

of Silver as a northern twin to Japan.[34] Not only the shogunate, but also the northeastern Mito domain launched three attempts in vain to find the islands to the east of Honshu.[35] Several foreign expeditions were dispatched as well since the late sixteenth century, first the Spanish explorer Pedro Unamuno in 1587 and, more prominently, Sebastian Vizcaino in 1611–12.[36] Even though Vizcaino, upon his return to Spain, reported that "there are no such islands in the whole world,"[37] explorations were continued unsuccessfully under the Dutch until the mid-eighteenth century.[38] Engelbert Kaempfer, a German physician stationed in Nagasaki in the service of the Dutch VOC from 1690 to 1693, believed that the Japanese had long incorporated the islands into their realm and jealously concealed their location:

> [The Islands of Silver and Gold] lie further off to the East, or E. N. E. of the Coasts of Osiu, at least at 150 Miles distance, but as the Japanese pretend, belong to their Empire. They have given them very high sounded Names, the smaller, more Northern and more remote from Japan, being call'd Ginsima, the Silver Island, the larger, and nearer, Kinsima, the Gold Island. They keep their state and situation very secret from all Foreigners, chiefly the Europeans, for as much as their rich Names have already tempted them to go in quest thereof.[39]

Despite their political introspection at the century's close, the secrecy with which the Japanese treated geographical information kept up a credible appearance of a keeper of secret geographical knowledge.

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[34] Oka 2016, 20–3.
[35] Matsuo 2014, 71.
[36] Kawai 1998, 524. Other expeditions include João da Gama (1589–90), Álvaro de Mendaña (1567–69 and 1595– 96), Pedro Fernándes de Queirós (1605– 6), Mathijs Quast and Abel Tasman 1639, Maarten de Vries 1643, and Vitus Bering 1741. See: Spate 1979, 107–8; Padrón 2020, 19; Kawai 1997, 66–7; 191–2. On the Isle of Gold, see Kobata 1943. This island can also be found on many early modern Japanese maps of the Pacific.
[37] Spate 1979, 108.
[38] *Dai Nippon Shiryō,* part 12, vol. 12, p. 15. Spate 1979, 106.
[39] *The History of Japan* by Engelbert Kaempfer, pp. 68–9, in: GET, Acc. No. 85-B2486.

Fig. 3.3) A 17th century portolan Chart featuring isle of silver on the right and the isle of gold in the bottom right corner. In: Tokyo National Museum 2003, 93.

The Expedition to the Bonin Islands, 1675

Kaempfer had been misled on the incorporation of the Isles of Silver and Gold, but his suspicion that the Japanese were actively exploring the ocean for unknown islands was not far-fetched. As Kaempfer knew, the shogunate had dispatched an expedition to the Bonin Islands just a decade and a half before his stay in Japan – a fact that reflects how the shogunate, despite the abolition of international shipping routes, maintained an active role in the exploration of its maritime environs. I have decided to dedicate several pages to this expedition, since this still-poorly researched episode has major implications for the historical understanding of Japan's situation in the Pacific, and *vis à vis* competing maritime empires. As Scott Kramer writes, "The mere

suggestion that the Tokugawa bureaucracy issued an order to locate and explore a Pacific archipelago during Japan's so-called period of national seclusion from 1635 to 1853 (sakoku) should raise a historian's eyebrow."[40] The cardinal sources I use to recount the expedition are scattered across local and private archives and haven't been discussed in this constellation before. Just as much as the islands' exploration and mapping give proof of technical ability, their subsequent prominence in the vernacular imaginary of the Pacific sheds a new light on the origins of Japan's subsequent infatuation with the islands of the "South Sea."

The "discovery" of the Bonin Islands in 1670 at the hands of a crew of drifters from western Japan was the result of a navigational accident of a common pattern.[41] The winds were steady and the sea clement off the coast of Ise province when captain Kan'emon 勘右衛門 (*d.* 1670) and his crew of eleven hoisted their sails for Edo on a winter day in 1670. For a fee of 380 silver *monme*, they were to ship a cargo of fresh tangerines from Miyazaki in Kii to the Eastern Capital.[42] With the propulsion of the Kuroshio, it was said, some experienced seafarers traveled the 190 kilometers from Ise to the checkpoint in Shimoda in only a day and a night, reaching Uraga at the entrance to Edo bay soon thereafter.[43] Off the coast of Tōtōmi province, however,

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[40] Kramer and Kurihara Kramer 2019, 61–2.

[41] The usefulness of the word "discovery" is limited as it is inherently ethnocentric. The Bonin Islands were first "discovered" by the Spaniard Bernardo de la Torre in on Oct. 2nd, 1543, as Bernhard Welsch contends. (Welsch 2004.) Tanaka Hiroyuki is not reluctant to mention that this discovery did not include a landing and Kan'emon's landing in 1670 was accordingly the first legitimate exploration. (Tanaka 1983, 236.)

[42] *Ashūsen Munin Jima hyōryū ki,* in: Yamashita 1992 vol. 1, pp. 195–6.

[43] Nakada 2001, 50.

Kan'emon's ship was caught in a storm and was driven out on the open sea. After two months adrift, the men rescued themselves to an uncharted island. The surviving crew repaired their vessel roughly and readily, and after some fifty days on the uninhabited isle, found themselves ready to sail north. After two months of island hopping, the crew reached Suzaki in Izu Province, where they were interviewed by the shogunal magistrate. The uninhabited islands the crew had discovered were recorded as *Munin Jima* (無人嶋) or "No-Man's-Land," an alternative reading of the generic term for "uninhabited island" *mujintō*.[44] Once the sailors had been acquitted of breaching the ban on overseas travel, the men sold their boat and returned home on land.[45] Their reports of uninhabited islands to the south of Japan, however, occupied the shogunal authorities over the subsequent years.

In 1674, three shogunal officials reached out to Suetsugu Heizō Shigetomo 末次平蔵茂朝 (1633–1676?) a Nagasaki shipping magnate in the fourth generation. The shogunate requested Suetsugu to provide tools and expertise for an expedition to the newly discovered islands in the south. Suetsugu's grandfather Heizō Masanao 末次平蔵政直 (†1630) had replaced his predecessor Murayama Tōan 村山等安 (1566?–1619) as the Nagasaki Magistrate in 1619, suing him for breaching the ban

[44] *Munin Jima no kakitsuki*, in: Author's private collection, in: APC, no Acc. No. Like Kaempfer's *bunesima*, the place name Bonin—commonly used in Western languages—is derived from the premodern Japanese name Munin Jima (No-Man's-Land). Kaempfer 1727, 68–9.

[45] *Ashūsen Munin Jima hyōryū ki,* in: Yamashita 1992 vol. 1, pp. 195–6. Also see Ishii (ed.) 1900, 27–33, and *Nanshinsaku to Ogasawara guntō,* in: NDL, Acc. No.: 348-386, pp. 66–71. Suzaki, (written as 洲崎 *Suzaki* here) refers to 須崎 the harbor of Suzaki in Shimoda on the Izu peninsula. Though the islands may have been visited by travelers and castaways before, this is the first known castaway report from the Bonin islands. See Matsuo 2014, 60; and Tanaka 1983, 235.

on Christianity. In the powerful position of the Nagasaki Magistrate, Suetsugu expanded his influence on trade with Taiwan, where he positioned his business as a fierce opponent to the Dutch VOC.[46] The Suetsugu family remained in office even after the maritime prohibitions had stripped Japanese seafarers of immediate overseas engagement. Yet, the family remained in office and maintained access to international trade networks by way of foreign partners. This position also represented access to international navigational expertise. In 1669, the shogunal finance department had ordered Suetsugu to build a large Chinese-style junk in order to facilitate tax rice shipping to Edo.[47] The junk was large enough to travel on the southern route from Nagasaki to Edo along the Kuroshio, going around Kyushu and Shikoku and avoiding the strong tidal currents of the narrow Inland Sea straits, thereby significantly increasing the speed of transportation. The first junk was commanded to inspect the coast of northeastern Japan in 1671, before the shogunate appointed it to a regular connection between Kyushu, Osaka and Edo to transport tax rice. The authorities were so satisfied with the vessel's performance that they ordered a second model at a size of 43 meters in length and 10 meters in width.[48] This junk, named *Fukokuju* 富

[46] To gain shogunal support for his fight for influence in Taiwan, Masanao even staged an embassy of Taiwanese aboriginals to Edo, though his project failed to elicit a shogunal expedition to Taiwan. Clulow 2014, 222–8.
[47] *Muninjima*, p. 4–10, in: Nagasaki Museum of History and Culture, Acc. No. へ 13 334.
[48] Matsuo 2014, 62-8.

国寿, the officials decided, should be dispatched to inventory the newly discovered islands to the south.[49]

As Jakobina Arch has pointed out, navigational knowledge is in constant transformation and adaptation to changing circumstances. Three decades after the abolition of Japanese-operated trading routes to Southeast Asia, shipowners prioritized cheap construction materials and easy operability by men with little academic training.[50] While cargo trade volumes grew significantly across the archipelago, it had become a difficult task to find a ship and navigator apt to sail into unknown climes far off the familiar shores. The administration of a bureaucratic state had pinned down former sea rovers on shore, and the once-adventurous navigators became transport entrepreneurs on the maritime highways along the archipelago's coasts. Along the Kuroshio in Mikawa, Kii and Tosa provinces, the whaling business expanded fast, while in other regions, former pirates became coopted as retainers in charge of policing and shipping at the order of state authorities.[51] Sailors were specializing in methods of navigation that relied on familiarity with specific places, winds and currents. Nevertheless, Suetsugu Heizō readily provided vessel and expertise, and in the summer of 1674, the *Fukokuju* hoisted her sails for the uninhabited islands in the south.[52]

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[49] This vessel, the *Fukokuju,* was so large and outlandish in its appearance that its arrival drew masses of spectators to the harbors. See: Kramer and Kurihara Kramer 2019, 62–4. Tanaka 1997, 7.
[50] Arch 2023, 1–3. *Early citation kindly granted by the author.*
[51] Amino 1995, 255–7.
[52] Kramer and Kurihara Kramer 2019, 60–76.

Suetsugu Heizō's choice for a captain fell on Shimaya Ichizaemon Mitate 嶋谷市左衛門見立 (1606–1690), a shipwright and navigator sixty years of age, who, among other things, had served in the battle of Shimabara in 1638.[53] Before the abolition of the *Vermillion Seal Ship* system in 1633, Shimaya had sailed to Siam twice under a Japanese and a Dutch captain, gaining the necessary experience of navigating beyond sight from the shore.[54] His son Ichizaemon Sadashige 嶋谷市左衛門貞定重 had celebrated his father's expertise by authoring two textbooks on navigation, in which he explained the use of quadrants and magnets to determine latitude and direction. Rooted in both Iberian and Dutch traditions, Shimaya's style of navigation was eclectic, a fact he underlined with his ostentatious use of European terminology.[55] At the same time, locally specific sailing experience was deemed decisive for the mission's success: ten sailors were selected from the islands of Ōshima, Niishima, Miyakejima and Kōzushima, familiar with the region's sea and winds.[56] Yet, once the expedition had left the coastal waters, unfamiliar winds and currents first threw the *Fukokuju* back to Ise.[57] Only the second attempt in the fourth month of the following year succeeded, and Ichizaemon reached the Bonin Islands twenty days after leaving Japanese waters.[58] Even decades after the last Pacific

[53] Kramer and Kurihara Kramer 2019, 63.
[54] Matsuo 2014, 53.
[55] Akioka 1963, 21–4; Akioka 1965, 46–7. On Shimaya's surveying methods, see: Suzuki and Tanabe 2011, 52.
[56] Urakawa 2010, 106–7.
[57] Kramer and Kurihara Kramer 2019, 64.
[58] Urakawa 2010, 106–7. The correspondence between shogunal officials and Suetsugu Heizō regarding the use of the Chinese-style junk for the mission is included in a hand-copied

crossings, the Japanese proved able to locate and inventory a minute island in the vast Pacific.

Mapping No-Man's-Land

I have spent much time in search for the records of Shimaya's expedition before I accidentally met with the historian Tanaka Hiroyuki at the Japanese Society of Naval History. Tanaka invited me to his Tokyo home in 2016, where he presented me with a worn-out envelope that featured in cursive squiggles: *Map and Description of Munin Jima.* What the envelope contained was a worm-eaten piece of yellowed paper and a booklet with thirty pages of prose. Tanaka agreed to take the fragile map, which he had purchased from an antiquarian at Tokyo's Jimbō-chō district several years before, to the restoration lab at Tokyo University's Historiographical Institute, where I was conducting research at the time. Senior restorer Takashima Akihiko immediately put aside the Hideyoshi manuscript he had been working on to delve into the recovery of this puzzling piece of paper. The repaired map with which he presented me just a few days later proved to be one of only three known hand-drawn copies of what the explorer apparently presented to Shogun Ietsuna 徳川家綱 (1641–1680) in 1675. (See fig. 3.4) The text has, to my knowledge, not been found elsewhere.

compendium of primary sources by Watanabe Kurasuke. *Muninjima*, p. 11–12, in: NMHC, Acc. No. へ 13 334; *Munin Jima no Kakitsuki*, in: APC, no Acc. No.

Fig. 3.4) Shimaya Ichizaemon's detailed map of the Ogasawara Islands, 1675, or copy thereof. *Muninjima no ezu*, in: APC, no Acc. No.

As the *Map and Description of Munin Jima* reveal, Shimaya's mapping of the Bonin Islands employed the eclectic cartographic toolset of navigators in Shimaya's generation. I realized that from the set of maps I found in Tanaka's collection, a third, contextualizing map was missing. This third map, which has been reproduced in 1963 by Akioka Takejirō 秋岡武次郎 (1895–1975) but not located since, was a portolan chart in the style of the early modern navigational charts used in the Mediterranean. (See fig. 3.5) Drawn as a set of a context chart for long-distance navigation, and a detail map that facilitates orientation within the group of islands, Shimaya's maps were accompanied by a narrative map – a text outlining distances, sailing routes and topographic features. These three elements combined the differing standards of European-style portolan charts, East Asian visual elements, and narrative geography. Just like the navigational methods he used, the maps Shimaya drew are representatives of the creolized East Asian seafaring culture that formed in the early seventeenth century.

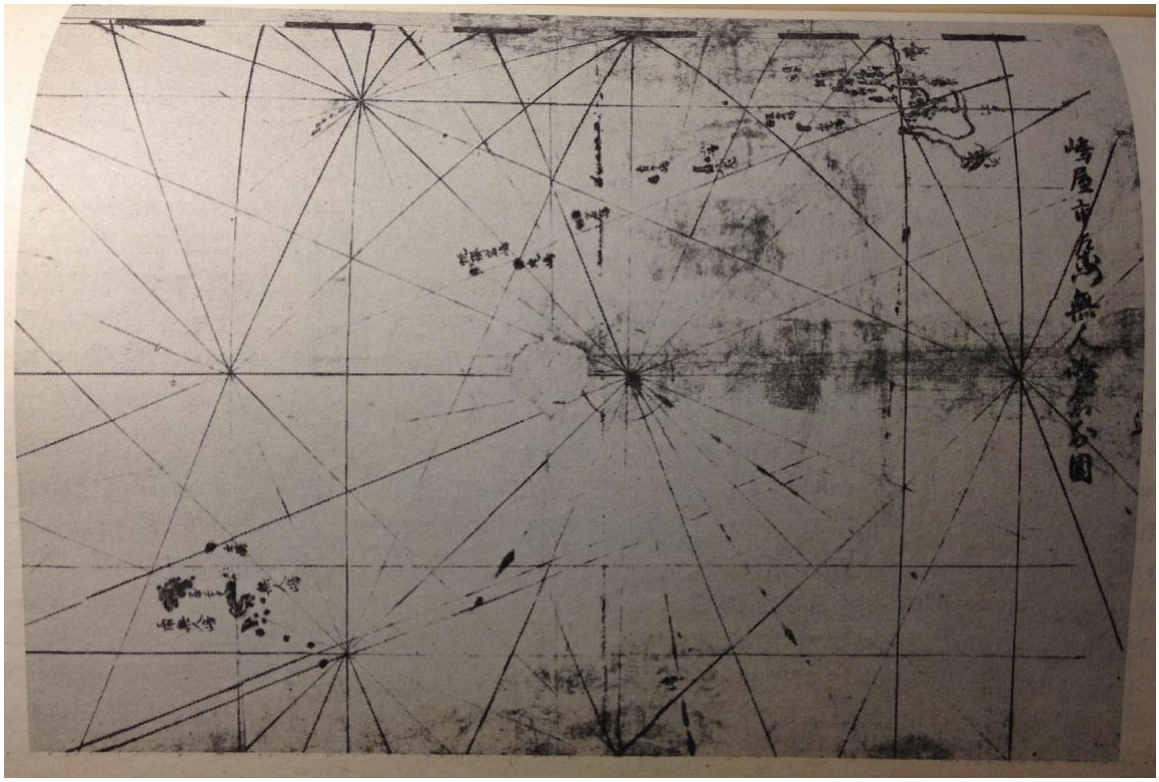

Fig. 3.5) Ichizaemon's Context Map with the Bonin Islands in the bottom left, Edo Bay and the Bōsō Peninsula in the top right corners. Reproduced from: Akioka 1967, 107.

Shimaya's maps function in combination with one another. Unlike the characteristically road-centric maps that circulated in great numbers among the broader readership in early modern Japan, portolan charts were essentially sea-centric. Developed around the Mediterranean in the late Middle Ages, portolan charts were brought to East Asia by the Portuguese in the sixteenth century. The portolan chart showed the islands in a broader context and embedded them in the grid of international navigation by means of standard auxiliaries such as loxodromes – straight lines that run from points of navigational interest to specific stars and off to

the poles – thus giving a clear idea of the island's location.[59] Like European charts, sea-centric maps in Japan also enlarged places of particular interest or waters difficult to navigate, such as the islands around the harbor of Canton, while representing the punctual distances between the harbors at a more or less consistent scale.[60] This is also the purpose of the detail map, which overemphasizes bays and inlets to capture the characteristics of the shore line, thereby deflating the island proper to a skinny crescent. (See fig. 3.4) Drawings of mountain silhouettes depict the coast line as seen from the sea, while the inland, of little use to navigation, is left blank. The coasts are populated by rocks, shoals, and, in one instance, indications of water depth. Though both maps produce essentially different appearances of the places they depict, their graphical priorities make them a part of a complementary navigational toolset.

In order to accommodate all of the islands on one sheet, the maritime space between the two main groups was contracted, with the note that "there are approximately twenty Japanese miles [78 kilometers] between them."[61] The context map, the detail map, and the narrative map were connected by landmarks along the route covered by the expedition that were compressed in one corner. In absence of

[59] Akioka 1963, 10. The map collector Akioka Takejirō (1895–1975) discussed this context map in a publication dating to 1963, when it was part of a private collection. Unfortunately, the current whereabouts of this privately owned map are not known, so that we have to rely on the low-quality reproduction in Akioka. (Akioka 1967, 107, 109–112).

[60] Historian Peter Shapinsky discusses one of the most famous examples of Japanese-made portolan charts of greater East Asia, the Kadoya chart of ca. 1630 (Shapinsky 2016, 16–19).

[61] Interestingly, in many of the bays the black coastline meanders between the areas labeled "plain" (平地) or "white sand" (白砂) and the mountains rising behind them. This may indicate that the bays were filled with soil that was, perhaps, not considered dry or stable enough for construction yet (*Munin Jima no ezu*, in: Author's Private Collection, no Acc. No.)

coordinates, a system Japanese geographers only embraced about a century later, this line of rocks and islands connects the Bonin Islands to Hachijō, the southernmost of Japan's Izu Islands. Creating a greater context came at the expense of scale. But scale was not a criterion for the usability of this detail map. Rather, the map was meant as an aid for orientation at sight within the archipelago, in combination with the narrative map and the greater portolan chart for context and navigational aid.

The mapping of the Bonin Islands stands in the globalized cartographic tradition of the early seventeenth century. As opposed to vernacular geographies, Shimaya's detail map is strictly empirical in that it exclusively describes and names islands visited by the expedition, according to visual characteristics. Thus, the Bonin Islands became isolated from the numerous vernacular versions of Pacific geography.[62] Exceptional at the time of their creation, the Shimaya maps illustrate the malleable nature of cartographic conventions in early modern East Asia. Among the increasingly shore-centric representations of space in the mid- and late Tokugawa period, the maps stand out as unique products of an unparalleled act of long-distance exploration.

[62] In *Munin Jima no ezu*, the main island Chichijima (Eng. Peel Island) was labeled as "Large Island" (*Ōshima* 大島), in contrast to "Small Island" (*Kojima* 小島 [Minamijima])) and "Island on the Open Sea" (*Okishima* 沖嶋 [Hahajima]). The islands Torishima, Nishijima, and Sumisu Shima, which Ichizaemon observed on his way south, are rendered as "Round Island" (Maru Shima 丸嶋), "Straw Island" (Kaya Shima かや嶋), and "Rock Island" (Iwa Shima 岩嶋) (*Munin Jima no kakitsuki,* in: Author's private collection, no Acc. No; *Muninjima no ezu*, in: Author's Private Collection, no Acc. No.).

Abandoning No-Man's-Land

Upon his return, Shimaya reported to Shogun Ietsuna that he "discovered an island larger than the province of Sado"[63] some three hundred Japanese miles (1,170 kilometers) from Hachijō. His gross overestimate of the islands' dimensions – Sado is some 36 times larger than the main island in the Bonins – resonates with the enthusiastic tone of his report: "The soil is unexpectedly fertile and there are no inhabitants ... large trees are numerous and fish abundant; there are a great many kinds. Since these are not afraid of humans, [my men] caught them by hand!"[64] Though an explicit intent to colonize the islands remains unspoken in Shimaya's report, his meticulous descriptions of flat and arable zones, and his assessment of fresh water quality and wood resources indicates that this consideration was on the table. Along with a list of perishable produce the explorers identified, Shimaya presented the shogun with an assortment of wood types, minerals, shells and live birds to represent the variety of largely unknown flora and fauna found in the Bonin Islands. "In addition," he observed, "there are many more trees, but no [others] that we know."[65] Though he presented his findings in the bureaucratic style of a shogunal servant, Shimaya was clearly inclined to further pursue his Pacific explorations.

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[63] "見出シ頃日帰候由, 八丈島より三百里計も有之由, 広サハ佐渡之嶋より広ク候." *Munin Jima no kakitsuki*, p. 4, in: Author's private collection, no Acc. No.

[64] "土地殊外能, 人間不住 ... 大木多くク, 魚多ク, 色々ノ魚有, 鳥も有. 魚鳥人におぢす, 手とらいに致し由."
Munin Jima no kakitsuki, p. 5, in: Author's private collection, no Acc. No.

[65] "此外之木共大分御座候得共見知りたる木無御座候."
Munin Jima no kakitsuki, p. 14, in: Author's private collection, no Acc. No.

The shogunate, however, decided otherwise. A politically motivated investigation on suspicion of smuggling against Suetsugu Heizō in the same year led to the destruction of the merchant-bureaucrat's shipping empire. In 1675, evidence surfaced that an assistant of Heizō's, Kageyama Kudayu 陰山九太夫 (†1675) had purchased a Chinese-built junk and deployed two Chinese captains on an illicit trade route to Cambodia. A large-scale investigation involving four hundred officials dispatched from Edo early in the next year found that the junk, fitted out with double walls, had carried maps, swords, and other weapons to Taiwan, in support of the Zheng clan's war against the Qing empire. The assistant, who pleaded guilty, was crucified and Suetsugu Heizō's entire family was expropriated and exiled to the island of Iki.[66]

This incident evolved in a greater geopolitical context. Although the discovery of a substantial arsenal on Suetsugu property underlines the potential threat the merchant could have posed to domestic stability, recent scholarship has come to see the removal of the Suetsugu in the context of a changing geopolitical environment in East Asia. With its powerful position that reached far beyond Nagasaki, the Suetsugu family had acted as a diplomatic mediator between Japan and its strategic partners overseas: Timothy Romans argues that the Suetsugu's international trading and lending network had turned into a "domain" that encompassed diplomatic and commercial relations to China, Korea, Taiwan and various colonial and indigenous

[66] Toyama 1988, 149-51; Hang 2016, 129–30.

states in Southeast Asia.[67] Most importantly, the Suetsugu maintained a close alliance with the Zheng Clan of Taiwan, a remainder of the fallen Ming dynasty that held out against the Qing dynasty in Taiwan until 1683.[68] As Xing Hang has shown, this informal alliance had presumably involved breaches of the bans on overseas engagement on earlier occasions, but with the decline of Zheng power since the 1660s, direct engagement with the rebel state turned into a geopolitical liability for Japan. This and the decline of silver output from Japanese mines led to a strategic concentration on essential goals in Tokugawa foreign policy. The removal of Suetsugu thus meant to cut ties to Taiwan and to avoid a potential war with the Qing empire.[69]

In this context, colonizing a remote Pacific archipelago would have run counter to the conservative Tokugawa strategy of power cohesion. Any retainer entrusted with the remote outpost could have posed a challenge to Tokugawa hegemony. Recognized to be neither the mythical island of silver and gold, nor an immediate extension of the Japanese archipelago, the Bonin Islands fell out of interest among Japanese authorities. The junk *Fukokuju* was confiscated and remained in shogunal service for thirteen years, but with the passing of Shimaya's generation, the theoretical knowledge of long-distance navigation—and with it the techniques of

[67] Romans 2018, 508.
[68] Hang 2016, 129–30.
[69] Romans 2018, 508–10; Hang 2016, 120–5. Another reason why the shogunate decided to cut down international trade and engagement is the fact that by the 1670s, however, most silver mines in Japan were nearing exhaustion. (Hang 2015, 112.) Throughout the late seventeenth century, wealth in precious metals represented the backbone of Tokugawa foreign policies, as the shogunate offered its diplomatic partners trade privileges in exchange for mercenary or proxy services and offshore policing.

astronomical mapmaking—sank into oblivion.[70] Tellingly, the islands Shimaya had described remained nameless and continued to be referred to as *Munin Jima* (無人嶋) or "No-Man's-Land," illustrating the authorities' lack of interest in further colonization. Shimaya's description of "No-Man's-Land," however, circulated widely and for almost two centuries figured as a cardinal source for geographers in Japan and abroad.[71]

Subsequent Attempts to Explore the Bonin Islands

As an effect of Shimaya's survey, the Bonin Islands came to occupy a disproportionately prominent role in Japan's imagination of the Pacific over the subsequent two centuries. Between 1719 and 1722, Shogun Yoshimune 徳川吉宗 (1684–1751) again ordered to prepare an expedition to the Bonin Islands.[72] The island magistrate of Niijima in the Izu Islands reported to Edo that he had interviewed a certain commoner named Chōhei who was sixty-six at the time, about details of the Shimaya expedition. Chōhei was one of ten Izu islanders who had accompanied Ichizaemon's expedition and were therefore familiar with both the technical exigencies of an expedition and the luring resources found in the Bonin Islands.[73]

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[70] Akioka 1963, 21–24.
[71] *Nanshinsaku to Ogasawara guntō*, p. 72, in: NDL, acc. no. 348-386.
[72] Tsuji 1995, 16; also see *Nanshinsaku to Ogasawara guntō*, p. 72, in: NDL, acc. no. 348-386.
[73] This text has come down to the present as a nineteenth-century handwritten copy with the remark that, after its compilation in 1719, the report was resubmitted by the authorities in Niishima in 1793 to Uraga and to Edo in 1800 (in Urakawa 2010, 108–109). This suggests that official interest in the Bonin Islands flared up during the Kansei era (1789–1800), when new theses such as Hayashi Shihei's works sparked controversy on Japan's position in the Pacific. Also see *Nanshinsaku to Ogasawara guntō*, p. 72–4, in: NDL, acc. no. 348-386.

However, subsequent reports from Hachijō indicated that no sailors could be recruited for such a daunting expedition into the open ocean, and the project was formally abandoned in 1728.[74] Another expedition to the Bonin Islands was attempted at the order of the shogunate in 1773, when the officials Hattori Genroku 服部源六 and Yamashita Yosō 山下與惣 departed from Hachijō with a crew of 32, just to be blown to a desolate "bird island."[75] It was not until 1861 that Japanese expeditions would next succeed in reaching the remote archipelago.

The idea of colonizing an uninhabited island in the south also elicited the interest of private enterprise. In 1728, a masterless samurai by the name of Ogasawara Sadatō 小笠原貞任 (*d.* 1730) who asked for permission to develop the islands, based on a fabricated proof of hereditary claims. Probably inspired by his father Chōkei 小笠原長啓 (*life dates n.k.*) who had first made the same claim in 1702, Sadatō was bold enough to claim that no lesser than Tokugawa Ieyasu had acknowledged his ancestor Sadayori's 小笠原貞頼 residence in the islands between 1593 and 1626, a claim that, evidently ahistorical, was rejected by the shogunate. Regardless, Ogasawara Sadatō soon obtained permission from an Osaka official and set out around 1730. Unfortunately, he never returned from this trip.[76] To make matters worse, his expedition was deemed an act of subversion among higher levels

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[74] Tsuji 1995, 17.
[75] *Nanshinsaku to Ogasawara guntō*, p. 74, in: NDL, acc. no. 348-386.
[76] Yamashita ed. 1992, 194. *Nanshinsaku to Ogasawara guntō*, p. 73, in: NDL, acc. no. 348-386. Ogasawara Sadatō's story is also summarized in the manner of a historical fact in Tōjō Kindai's 1843 map, *Izu shichitō zenzu,* indicating the wide circulation of his narrative.

in the administration. Ogasawara's family was stripped of their samurai status—accompanied by an official declaration that they had no legal claims to "No-Man's-Land."[77] Ironically, it was this tragical episode that gave the uninhabited islands their Japanese proper name "Ogasawara Islands" and that later provided the matter for historical fabrications to back subsequent territorial claims.

The Pacific in the Japanocentric World Order

Even in absence of successful expeditions over the subsequent two centuries, the Pacific, and specifically the Bonin Islands, attracted major interest among Japanese geographers and political economists. For Nishikawa Joken, writing in the early eighteenth century, the insurmountable ocean was the guarantor of Japan's unique position among the countries of the world – as he put it, "at the eastern top of the world, where the sun shines first."[78] The sea served Nishikawa's agenda of emancipating Japan from the continent and its traditions. His notorious claim that "Japan has the best possible natural barrier against invasion from foreign countries .... Japan is surrounded by an impregnable sea,"[79] however, was undermined half a century later by repeated Russian approaches on Japanese territory through the Sea of Okhotsk.

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[77] *Nanshinsaku to Ogasawara guntō*, p. 65, in: NDL, acc. no. 348-386.
[78] Sakakibara 2019, 121.
[79] "日本国の要害は万国に勝れる者なり...日本の地は大国に近しと雖も、灘海を隔てて而して相遠きが如し." *Nihon suido kō*, pp. 25–6, in: WUL, Acc. No.: イ 04_00775. Translation borrowed from Endō 2007, 30.

Japan's intellectual emancipation from the Chinese past was a greater intellectual trend that necessitated a radical reorientation, historically and geographically, within the Asia Pacific. With the emergence of *kokugaku* nativism in the mid-century, and its expansion under the impact of Motoori Norinaga's 本居宣長 (1730–1801) *Kojikiden* in the 1780s, a new linguistic and epistemological toolset was crafted for Japan's intellectual emancipation from the Chinese past.[80] The practice of textual exegesis on ancient Japanese sources inspired *kokugaku* scholars to seek moral and ideological compasses in the native mythology instead. This new school of thought assumed the spiritual unity of Japan – not status belonging, regional identity, or feudal retainership – as the defining factor of an all-encompassing community.[81] This ideological unification of Japan reframed the perception of the archipelago as a national entity that encompasses its internal political and cultural divisions.

The drawing of a Japanocentric World Order, as is best illustrated by Hayashi Shihei's map of Japan and its environs, was an attempt at reconfiguring the principles of the Tokugawa world order with a shifting geopolitical environment. Against earlier conventions, Hayashi positioned Japan not east of China, as an appendix to the Asian continent, but at the center of an archipelagic sea of islands that extended from the Ryukyus in the Southwest over Ezo and the Kuriles to Kamchatka in the North, and from the Amur Delta and Korea in the Northwest to the Bonin Islands in the Southeast. (See fig. 3.6) The provocative effect of Hayashi's publication was programmed in the

[80] Burns 2003, 9.
[81] Burns 2003, 2.

book's title *A Glance at Three Countries*: Hayashi played on the common meaning of "three countries" as referring to India, the origin of Buddhism, China, the home of Confucius, and Japan, the disciple of each's grandiose past, as in the Buddhist maps of Jambūdvīpa.[82] (See fig. 3.2) Instead, Hayashi gave an extensive ethnographic introduction to the three countries that constituted Japan's immediate sphere of interest: Ezo, Korea and Ryukyu. The uninhabited Bonin Islands, about as large as Ryukyu in Hayashi's imagination, represented an empty, unclaimed territory out on the Pacific that graphically balanced this Japanocentric view of the Asia-Pacific.

[82] The deliberate contrasting of a Japanocentric worldview to the Buddhist cosmology is, incidentally, a tool already applied by Nishikawa Joken to propagate Japanocentrism or shinkoku shisō 神国思想. (Sakakibara 2018, 109–124.)

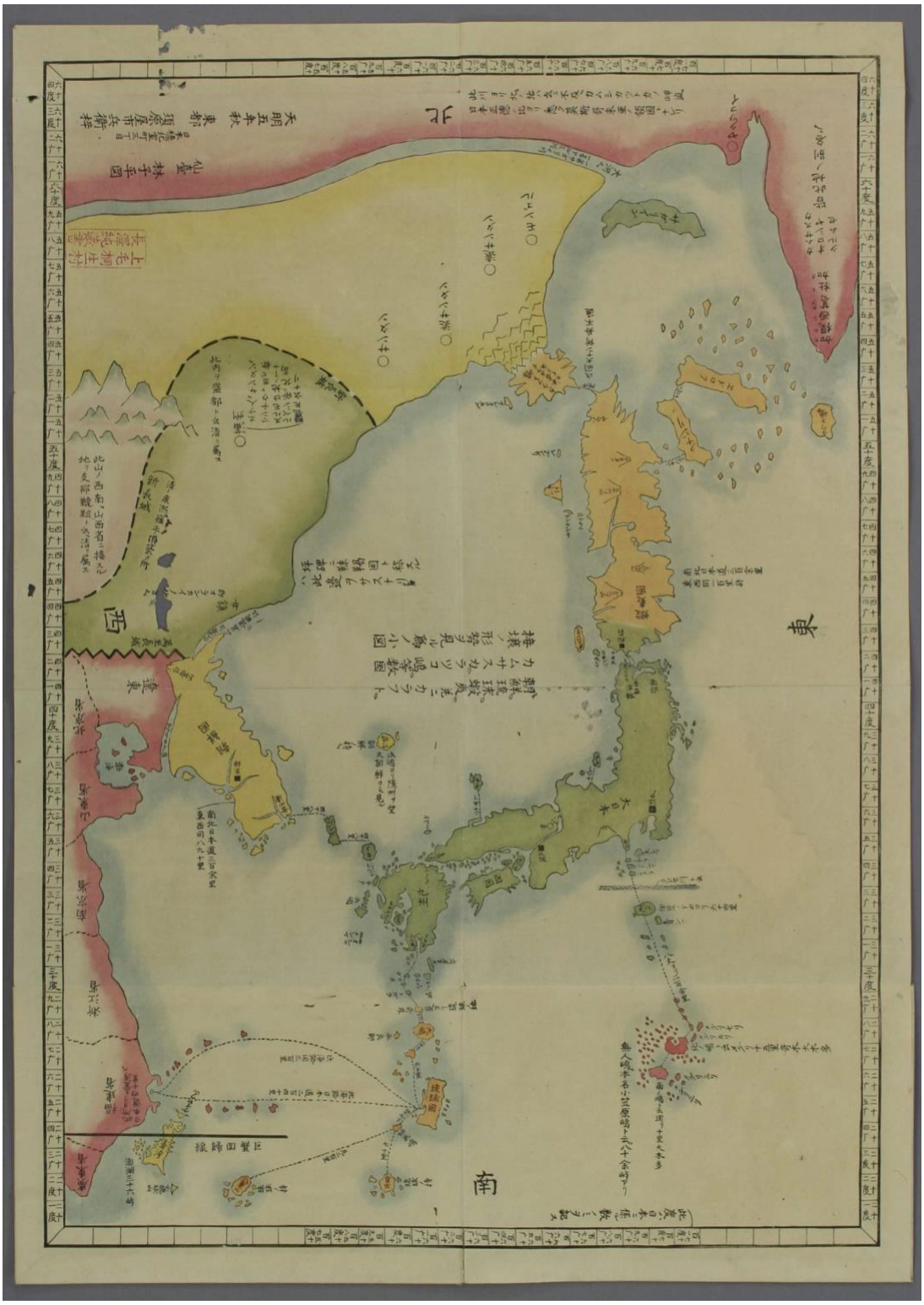

Fig. 3.6) Hayashi Shihei's map of Japan and its neighboring countries, with the Bonin Islands in the southeastern corner. *Sangoku tsūran zusetzu,* vol. 4, "Muninjima no zu," in: WUL, Acc. No. ル 03-01547.

Hayashi's widely circulating treatises on geography and naval strategy are illustrative of the ramifications this change of paradigms unfolded in the realm of economy and security policy. Best known for his multi-volume *Illustrated Glance at Three Countries,* published in 1785, as well as his *Discourse on Naval Defense* published in 1788–91, the independent intellectual's views were provocative in that they debunked established conceptions of Japanese geography and by way of it, challenged the ruling principles of international policy.[83] As he disclosed, "I think to myself that from Nihonbashi in Edo, there is a borderless path to China and Holland."[84] Seemingly stating the obvious, Hayashi hit a sensible tension that concerned the highest levels of government. Regardless of his low status, Hayashi's most iconic and in hindsight most provocative work *A Glance at Three Countries* of 1785 gained the petty retainer of Sendai domain an audience with no lesser than Senior Councilor Matsudaira Sadanobu, with whom he also discussed his view on naval defense.[85]

Hayashi was summoned to Edo in 1792 in retaliation for his decision to publish his extensive discourse on the technicalities and theories of naval defense, just months after the promulgation of Japan's most severe censorship strike to that time (*kansei igaku no kin* or "bans on heterodoxy"). Banned for propagating "strange and unorthodox opinions" and maps "contrary to geography," the print blocks and

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[83] Toby 2016, 24–7.
[84] „竊（ひそか）ニ思フニ江戸日本橋ヨリ唐土及ヒ阿蘭陀迄モ境目ナキ水路ナリ." *Kaikoku Heidan*, Hayashi 2003, 122.
[85] Lederer 2003, 62.

unsold copies of *A Glance at Three Countries* were destroyed.[86] Hayashi succumbed a short time later to a an old affliction while under house arrest in Edo.[87] Yet, by the time of his prosecution, Hayashi's books had circulated widely and despite the destruction of print blocks by shogunal censors, numerous copies printed and in manuscript, continued to circulate.[88] The impact of his work far beyond the Japanese readership discussed further down shows that the obstinate scholar's thoughts stand representative of a greater geopolitical reorientation that in conversation with a shifting geopolitical context.

Archipelagic Expansionism

According to Hayashi, developing the Bonin Islands would not only have bolstered national security, but also served national economic purposes. As a naval strategist, Hayashi was primarily concerned with ensuring that this outpost to the Southeast would not fall into foreign hands. At the same time, his vision marks a changing attitude towards the idea of growth, beyond the tenets of classical *kokueki* mercantilism. Unlike punctual improvements to agrarian productivity as they were being tackled throughout Japan at the time, the incorporation of the Bonin Islands was to add an overseas province to Japan:

> All of the ten [major] islands have bays and plains where people can live. They can grow the five grains, and since the climate is warm, exotic things can also be cultivated. Therefore, we should secretly relocate people to this island in order to let them grow trees and build

[86] Lederer 2003, 62; Toby 2016, 24–7.
[87] Lederer 2003, 65–6.
[88] Toby 2016, 24–27. Toby counts twice as many copies than the original run, manuscripted after censors destroyed the printing blocks and unsold copies.

> villages and engage in fishery and forestry. Once we will have established a productive new province, we will create a regular sailing connection and sail there three times a year to collect the products. The cost for the construction of ships will be compensated with one voyage.[89]

In Hayashi's vision, Japan thus found itself at the center of a world order that combined static civilizational hierarchies with a dynamic geopolitical environment.

Hayashi's plans to increase the prosperity of Japan by adding to its territory did not come about in isolation, but they stand in representation of a shift of paradigms in economic thought and political practice. As Tanaka Hiroyuki finds, Senior Councilor Tanuma Okitsugu 田沼意次 (1719–1788; *in office* 1772–86), a reformist leader interested in the expansion of Japan's naval capabilities, had unsuccessfully attempted to dispatch an expedition to the Bonin Islands shortly before the appearance of *A Glance at Three Countries*, but under his more conservative rival and successor Matsudaira Sadanobu (*in office* 1787–93), this and other projects of Tanuma's were halted or reversed.[90] Yet, among intellectual circles, Hayashi's representation of the Pacific as a space of expansion unfolded major ramifications.

The political economist Honda Toshiaki 本多利明 (1744-1821), in direct or indirect reaction to Hayashi, identified overseas expansion as essential for Japan's

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[89] "都テ此十嶋は湊アリ, 平地アリ, 人居住スベシ. 五穀植ベシ, 且暖気ノ辺地ナル故, 珍異ノ物ヲ産スル也. 是ニ因テ竊ニ工夫スレバ此嶋へ人ヲ蒔テ樹芸ヲ為, 村落ヲ建立シテ山海ノ業ヲ起シ一州ノ産物国ヲ仕立テ後, 此嶋渡海ノ常船ヲ造テ歳三渡海シテ産物ヲ収ムベシ. 船ヲ造ル費ハ一渡海ニテ償フベシ" (*Sangoku tsūran zusetsu*, vol. 1, pp. 53–54, in: WUL, acc. No. ル 03-01547.)

[90] Tanaka 1997, 68–69. *Kodansha Encyclopedia of Japan,* keyword "Matsudaira Sadanobu," in: JK. As Donald Keene wrote, Tanuma even hired Dutch shipwrights and trained Japanese crews on European vessels, much in accordance with Hayashi's agenda. Shortly before his dismissal, Tanuma even considered relocating 70,000 outcastes to Ezo as a base stock for further colonization projects. (Keene 1954, 101–2, 119.)

future prosperity, and envisioned the country's archipelagic environs at large as a settler frontier. As he elaborates in his *Secret Plan of Government* of 1798, islands close to Japan such as the Kuriles and the Bonins should be incorporated at first, and later, Japanese expansion should reach as far as Kamchatka, the Aleutians and even North America. For Honda, as well, the northern territories, especially the island of Sakhalin, were important bulwarks against Russia's Siberian advance. Once Japan would have established itself as a maritime empire, its capital should be relocated to Kamchatka, given the peninsula's central location among the boreal archipelago.[91] Control over this northern frontier should be achieved by coopting native populations: "by helping the natives and giving them everything they desire, we will inspire a feeling of affection and obedience in them, like the love of children for their parents." [92] Contrary to the ruling policy that commanded performative ethnic distinction in speak, dress, and hairstyle, Honda found the ethnic separation between the Japanese territory of Matsumae and the "Country of Ezo" (*Ezo koku*) in the north an obstacle to colonization, contending that the Ainu are of the same race as the Japanese.[93] This reflected a pragmatic take on a process that was already under way: the commercial expansion into Ainu territory was increasingly accompanied by systematic governmental exploration. Since the 1780s, the shogunate had dispatched

[91] Keene 1954, 105–6.
[92] *A Secret Plan of Government,* transl. in Keene 1954, 180.
[93] Keene 1954, 117. The performative aspect of this ethnic distinction is best illustrated by the *umiam* ritual held annually at Matsumae Castle, for which Ainu representatives had to grow beards and dress in "traditional" clothes. The performance of otherness was orchestrated by the Japanese domain to justify its position within the polity as suzerain over the northern barbarians. See: Howell 2005, 119–25.

expeditions as far north as Iturup Island, and Honda himself traveled to the north several times, perhaps as far as Kamchatka in 1784.[94] Ultimately, the confiscation of Matsumae domain and Edo's assumption of administrative control over northern relations in 1799 underlined that the northern frontier had become a focal issue in Tokugawa *realpolitik.*

The construction of a maritime sphere of influence at the turn of the nineteenth century inspired even bolder expansionist plans. Satō Nobuhiro's *Secret Plan of Unification* (*Kondō hisaku*), a grand strategy for political reorganization of the realm written in 1823, responded to Honda's *Secret Plan of Government,* as it pivoted towards the southern islands as Japan's primary frontier. Satō's theories of political economy (*keizai*) exerted significant influence on growth-oriented economic policies in Satsuma domain – chiefly in the establishment of a cash-crop monoculture in the semi-colonial dominions of Amami and Ryukyu – were radical and stood under the influence of his teacher Hirata Atsutane's 平田篤胤 (1776–1843) *kokugaku* thought.[95] In sharp contrast to his economic advising, Satō's *Secret Plan of Government* represents the probably most audacious scenario for expansion via the Bonin and the Mariana Islands to the Philippines and eventually to the Asian continent. Unlike Honda, Satō advocated for settler colonialism on previously uninhabited islands as a way to embolden Japan before an attack on Spanish holdings in the Philippines, Manchuria and China. As Satō knew, "the general method of subjecting other

[94] Keene 1954, 93.
[95] Marcon 2014, 268; *Kodansha Encyclopedia of Japan*, keyword "Satō Nobuhiro," in: JK.

countries is to begin with those places that are weak and easy to seize."[96] The "New Philippines," as he called the uninhabited islands of the Pacific, should be gradually populated by "strong soldiers" from Shikoku:

> We shall dispatch some 6-7,000 troops on more than a hundred large and small vessels to colonize the uninhabited islands of the southern sea (*nankai*) and to collect their produce to ship to our country. We shall protect these islands and gradually expand to the south, opening a great number of islands one by one. We will increase the population with people from Japan and promote local development. Once we have made them all prefectures of our Imperial Nation, and strengthened the prosperity of the state, our country will arise in great strength. If we succeed in implementing this strategy, ... we have practically succeeded already in subjugating Manchuria and China![97]

Satō's fantasies that made Japan the metropole of an archipelagic empire predicted a pattern of expansion that materialized in the twentieth century. As one editor put it at the height of ultranationalism: "Nobuhiro owned deep insight into the forces moving the realm and understood the future responsibility of the Yamato race."[98] In reality, the armchair traveler's construction of Japan's Pacific was conjured out of thin air and based on a simple cartographic shift of focus. The Japanocentric world view marginalized the continent and concomitantly brought the maritime space onto the map.

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[96] "凡ソ他邦ヲ経略スルノ法ハ弱クシテ取リ易キ處ヨリ始ルヲ道トス" *Kondō Hisaku,* p. 13, in: National Diet Library, acc. No. 569-361.

[97] "又大小軍船百餘艘, 軍卒六七千人ヲ出シテ, 南海ノ無人島ヲ開キ物産ヲ採テ, 之ヲ本国ニ輸（おく）リ, 且其諸島ヲ守リ益々南略シテ漸々数多ノ島ヲ拓キ, 本邦ヨリ人ヲ植テ盛ニ物産ヲ興サシメ, 悉ク皇国ノ郡県トナシテ, 以テ国家ノ富ヲ増シ次第ニ国家ノ威勢ヲ強大ニスベシ. 若シ能ク此策ヲ用ルトキハ … 満清ヲ統平スルノ能事足リヌ." *Kondō Hisaku,* pp. 66–7, in: National Diet Library, acc. No. 569-361.

[98] "佐藤信淵翁は宇内の大勢を達観し、将来の大和民族の責任と経略とを思念し" *Kondō Hisaku,* p. 4, in: National Diet Library, acc. No. 569-361.

Satō's work also illustrates the unraveling of different concepts to designate different zones within Japan's Pacific: if the uninhabited Bonin Islands, which Satō placed straight south from western Japan's Nankai-dō region, were placed in the southern sea *nankai,* the more distant and previously inhabited islands were subsumed into the "thousands of miles of the South Sea (*nan'yō*) [that] will enter the map of our Empire!"[99] The malleability of this "South Sea" proved useful for later expansionists such as Shiga Shigetaka who, in the late nineteenth century, expanded the term to encompass the island Pacific in its practical entirety, including Hawai'i, Australia, and New Zealand. Japan's Pacific was rolled out on the virtual map as a hypothetical sea of islands waiting to be incorporated.

The Pacific in the Popular Imaginary

Satō's breakneck plans for world power did not come about in isolation. As the emergence of Japan's Pacific in popular fiction since the early nineteenth century illustrates, the islands of the *southern sea* had become exoticized and eroticized in the imaginary of a broader public. Takizawa Bakin's (1767–1848) best-selling novel *Wondrous Tales of the Crescent Moon* (*Chinsetsu yumihari tsuki*), published in thirty volumes between 1807 and 1811, tells of adventure and conquest in the maritime frontier. In the novel, the shining hero Minamoto no Tametomo, a battle-proven warrior from the 12th century, is banned to the island of Ōshima in eastern Japan,

[99] "開拓セバ数年ノ間ニ南洋数千里ノ地悉ク版図ニ入ルベシ." *Kondō Hisaku,* p. 110, in: National Diet Library, acc. No. 569-361.

where he tirelessly enlightens the fisherfolks with his wisdom and strength. One day, he observes birds flying from beyond the Kuroshio, a rapid current the fisherfolks would not dare to cross. Tametomo, however, sets sail and within just one night, reaches the island of women, an isolated colony of amazons. On the shore, Tametomo comes upon a number of straw sandals the women keep on the shore for their husbands' return. In awe from the god of the sea, they meet only once a year, when the winds allow to sail from the southerly island of men. Having lost the art of writing and enthralled by superstitions, the amazons are miraculously bestowed the ability to speak Japanese when the flamboyant hero arrives, since the goddess Amaterasu has decided that the island ought henceforth to be a part of Japan. Tametomo exclaimed:

> "Even though a path is yet to be opened to this place, this [miracle] must be the revelation that this island is a part of Japan. How auspicious, how auspicious!" Then he bowed deeply in the direction of Ise and then to the outside. His fellows were seized by emotions and wettened their sleeves.[100]

Having conquered the island of women, Tametomo impregnates the chief amazon before he sets out to conquer the southern island of men. He brings along the chief amazon to the isle to leave her under her father's protection. Tametomo then returns to his licit wife on the Izu island of Ōshima, whose sons he had also fathered out of benevolence to help educate the islanders.[101] Bakin's *Wondrous Tales of the Crescent*

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[100] "その路いまだ夢開けねど, ここも日本の内なれバこそ, かゝる示現ハあるならめ. 頼もし頼もしとて. 遥に伊勢のかたを拝み給へハ, 外面に扣たる. 従者等も洩聞て, 感涙袂をぬらしけり" *Chinsetsu Yumikari Tsuki,* vol. 2, episode 1, p. 23, in: SJUL, Acc. No.: 913.56||TA||2-1.

[101] A modern Japanese edition of *Wondrous Tale of the Crescent Moon* by Yamada Norio can be found in: Takizawa 1986.

Moon was an immediate success and it delivered the erotic and exotified motifs for subsequent literary and artistic representations of the Pacific. Bakin again picked up the eerie oceanic world in his 1825 account of a mysterious foreign princess that landed in eastern Japan in a "hollow boat" – a story, David Howell finds, he based on circulating accounts of an incident dating to 1803.[102] His writings reflect a growing curiosity about the Pacific, its travelers and inhabitants, relating them to a fantasy world rooted in the Japanese past.

Japanese Concepts in the Making of Global Geography

As a geographical reorientation was unfolding at vernacular and intellectual levels in Japan, new cartographic tools embedded the archipelago in a global geographical context. Since the late eighteenth century, maps circulated that took coordinates, consistent scale, and an emphasis on topographic shapes, rather than traffic routes, political hierarchies, or experienced travel as the chief principles of graphical organization. (See fig. 3.7) This let Japan and its environs appear in new, characteristic shapes and created the uniquely recognizable geo-body of the Japanese Islands. Perhaps most importantly, the prominent land surveys of the northern frontier by Mamiya Rinzō and Inō Tadataka both tackled about fifteen years after Hayashi's map, omitted the ethnographic information that had defined the virtual border between Japan and the northern frontier of Ezo. As Brett Walker puts it,

[102] Howell 2023 (forthcoming). *Early citation kindly granted by the author.*

Mamiya "emptied" Sakhalin of its population, and, by shifting away from an ethnic definition of space, made the islands legible and available for development at the hands of distant rulers in Edo.[103] By the turn of the nineteenth century, Japanese geographers also emancipated themselves from the ethnically defined space of "Japan" confined to the provinces of the *ritsuryō* state as defined in the eight century.[104] The emergence of modern cartographic standards enabled the transfer of data and concepts from Japanese maps to European geographical discourses.

Fig. 3.7) Inō Tadataka's scientific detail map of Edo Bay and the Izu and Bōsō Peninsulas, triangulated on Mount Fuji, Compiled between 1804 and 1821. *Bu sō zu bōsō kaibō no zu,* in: WUL, Acc. No. ハ 11 02571.

[103] Walker 2007, 311.
[104] *Kodansha Encyclopedia of Japan,* keywords "ritsuryō system" and "kokugun system," in: JK.

Transferability and Empiricism

Like the sea-centric charts of the seventeenth century, the modern methods of surveying and mapmaking evolved in a global context over the late eighteenth century. The emergence of coordinates first on Mori Kōan's 森幸安 *Detail Map of Japan* of 1754, and later, Nagakubo Sekisui's 長久保赤水 (1717–1801) *Revised Road Map of Japan* of 1775, attributed each location to a specific position relative to a global grid, locating the archipelago in a specific section on earth.[105] (See fig. 3.8) Though spherical coordinates were known in Japan since the reception of Matteo Ricci's (1552–1610) iconic world map in the early 1600s, Mori's map, however, rather represents the earliest application of a consistent grid to a map of the Japanese geo-body. In practice, Mori's map resembled the Chinese square-grid maps of the Yuan Dynasty (13th–14th c.) as it ignored the globe's curvature. A quarter-century later, Nagakubo made it clear that his grid lines represented latitudes, at intervals of one degree. Longitudes, on the other side, remained vague, and accordingly, curvature was again ignored. It was not until Inō Tadataka's massive surveys conducted in 1800–16 that both longitudes – zeroed on the imperial capital – and latitudes were determined and represented with high accuracy.[106] Though all of these maps maintain a Japanese style in focus and graphical representation, they stand apart from

[105] *Nihon yochi rotei zenzu*, in: WUL, Acc. No. ル 11 00705.

[106] The Inō map of Japan consists of 214 large-scale (1:36,000) maps that were completed by his team and presented to the shogun in 1821, three years after Inō's death. Suzuki 2016, 130. Frumer 2018, 97.

earlier cartographic products in that they are reproduceable, scalable and combinable. This made it possible to configure them accurately with the European body of cartographic knowledge.

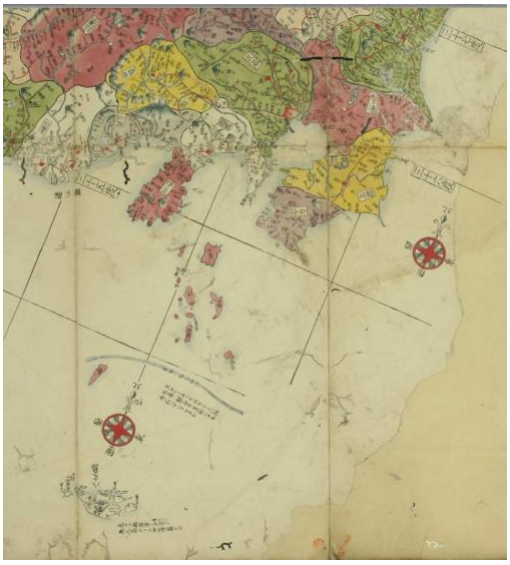

Fig. 3.8) Nagakubo Sekisui's map of Japan with parallel coordinates. Reprint from 1791 of the 1775 original map. The detail map displays the representation of the Kuroshio current as a black ribbon north of Hachijō, the current's first appearance in a graphical map. *Nihon yochi rotei zenzu,* in: Waseda Kotenseki Database, Acc. No. ル 11 00705.

These maps not only carried extraordinarily accurate information, but they represented territories that were not, or only poorly charted by European explorers. With Mamiya Rinzō's expeditions to Sakhalin and the Amur Delta in 1808–09, the shogunate first obtained confirmation that Sakhalin was an island. This question had been hotly debated among European explorers since François De La Pérouse (1741–1788). Sakhalin was believed by some to be a Siberian peninsula into the nineteenth

century.[107] In 1826, Philipp Franz von Siebold (1796–1866), a physician in the service of the Dutch VOC, learned from Mogami Tokunai 最上徳内 (1755–1836) that Sakhalin was indeed an island, in an engaged conversation that prompted the Japanese mathematician to lend seven maps of Ezo, Sakhalin and Kamchatka to the German scholar. When Siebold met two days later with the shogunal astronomer Takahashi Kageyasu, who had supervised Inō's survey projects, Siebold exchanged European books and various maps as well as novel measuring instruments in exchange for copies of the Mamiya and Inō Maps.[108] The transfer of these most accurate maps of Japan's northern frontiers into the hands of a foreigner – and Siebold's successful shipment of those materials to Europe – became the object of a major scandal in 1829 known as *Siebold Incident* that led to the removal and imprisonment of several senior geographers and interpreters involved in the affair.[109]

The Discovery of the Black Current

In Europe, Japanese cartographic materials played a central role in the representation of the northeastern Pacific. Years before the highly precise maps Siebold received from the hands of senior officials, Hayashi Shihei's printed treatises, as well as Nagakubo Sekisui's map had reached Europe within few years from their publication and circulated widely. After its reproduction in Adam Johann von Krusenstern's Atlas

[107] Walker 2007, 292–3.
[108] Plutschow, Herbert. *Philipp Franz Von Siebold and the Opening of Japan: A Re-Evaluation*. Folkestone: Brill, 2007, 12–3; 18.
[109] Takahashi died in 1729 as a consequence of harsh treatment during his arrest. Plutschow 2007, 21.

of the Pacific in 1827 Nagakubo's map remained the standard representation of the Japanese islands into the 1850s.[110] (See fig. 3.9) Krusenstern, who had surveyed the southern coasts of Japan after his mission to Nagasaki in 1804, took a particular interest in one detail of Nagakubo's map: for the first time, a black ribbon represented the Kuroshio as a black current that ran to the east between Honshu and the Island of Hachijō.[111] Krusenstern had also identified Hayashi Shihei as the cardinal source on the phenomenon *River Kurose or Kuroshio.* Accordingly, Hayashi's – erroneous – description of the current's alleged seasonal fluctuation were paired with Krusenstern's empirical observations and later propagated in his publications. Krusenstern remarked that "it would be interesting to know what direction the currents [take], because a perfect knowledge of the currents in each season infinitely facilitates the navigation between Kamchatka and Japan."[112]

[110] Kobayashi and Narumi 2018,12.
[111] Kawai 1997, 150, 204–13.
[112] Kawai 1998, 548–9; cit. on p. 552; Kawai 1997, 204–13.

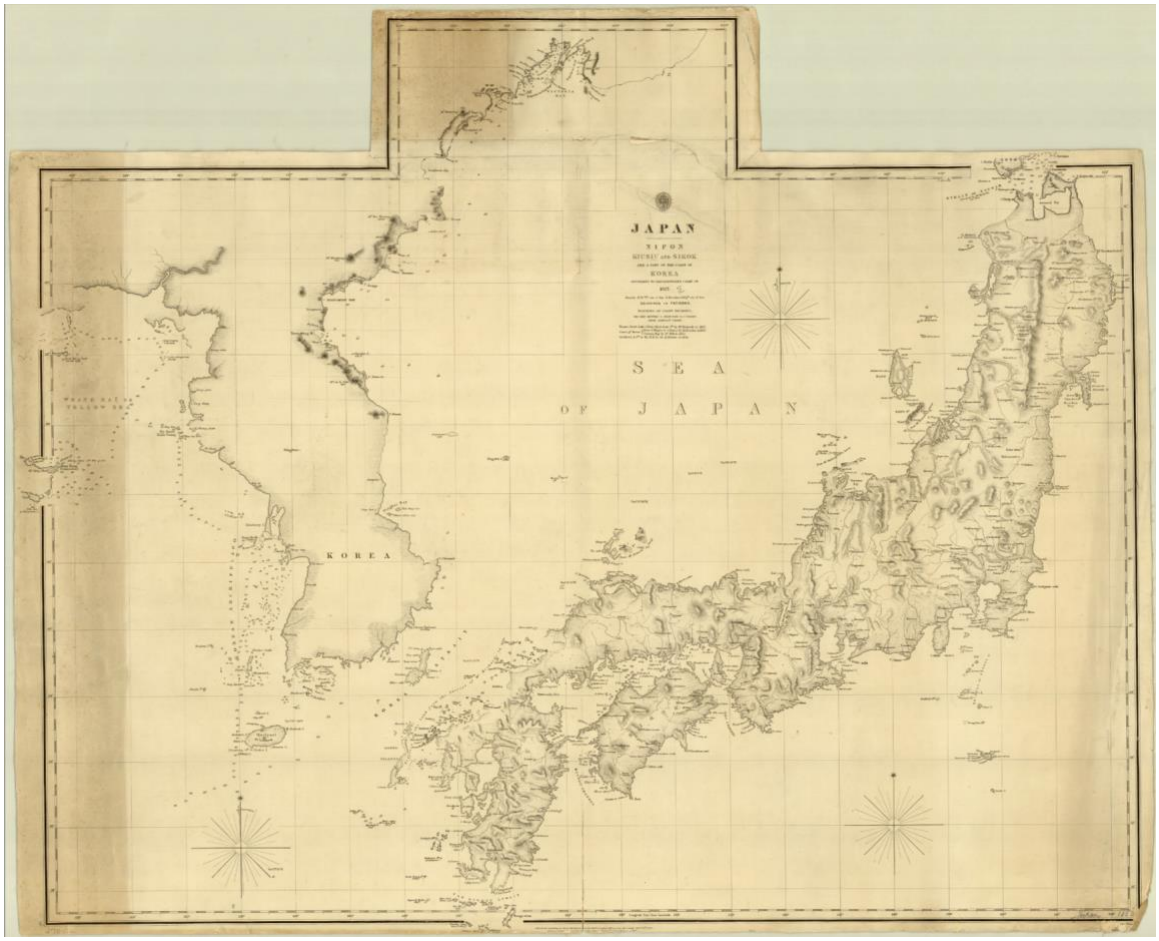

Fig. 3.9) Map of Japan printed by the British Hydrographic Office, based on Krusenstern's 1827 reproduction of Nagakubo Sekisui's map of Japan. (*Japan, Nipon, Kiusiu and Sikok and a part of the coast of Korea, according to Krusenstern's chart of 1827*, in: UWML, Acc. No.: AGSL RARE 470 A-1855.)

Physicist Kawai Hideo traced down early observations of the Kuroshio current through dozens of historical records. He pointed out that the idea that 'all waters flow east' was confirmed by observation wherever early modern shipping routes led sailors across the Kuroshio.[113] The idea of a general direction of all oceanic flows

[113] Kawai 1994, 1997, 1998.

towards the east in fact has a long history in East Asian natural philosophy. In the fourth century BC, Chinese philosopher Zhuangzi explained the eternal equilibrium of the sea level despite precipitation through the concept of an enormous drain in the Ocean: "Of all the waters under heaven there are none so great as the ocean. A myriad streams flow into it without ceasing. The cosmic drain '*Wei Lü* 尾閭' drains them continuously, and yet [the ocean] is never emptied."[114] Joseph Needham translated the idea of *Wei Lü* as 'Wei Lü current,' 'the ultimate drain,' or 'cosmic cloaca' – an idea that, no matter how we translate it, illustrates the eerie feelings for the eastward current elicited among coastal observers.[115]

According to Kawai, Arai Hakuseki's 新井白石 (1657–1725) description of the *falling tide* (*ryakusai* 落漈) near the Ryukyuan islands dating to 1720 is the earliest specific description of the Kuroshio in written text.[116] Around 1750, a black bar, sometimes dashed and labelled 'River Kurose' (*kurose kawa* 黒瀬川), appeared on maps north of Hachijō, but hardly any explanation of the phenomenon was ever given in text form (See fig. 3.8). Much more complex observations of the Kuroshio, however, were made in the locality. To my knowledge, the historian Kondō Tomizō of was the first in Japan to describe the "River Kuroshio" as an interregional maritime highway, based on his observation of sailors accelerating their voyage by steering into the

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[114] "天下之水，莫大於海，萬川歸之，不知何時止而不盈；尾閭泄之，不知何時已而不虛；春秋不變，水旱不知" *Autumn Waters,* in: Chinese Text Project.

[115] Needham 1978, vol. 3, 156–7. In modern Chinese, '*wei lü*' fittingly describes the last vertebra of the human spinal column.

[116] Kawai 1998, 536.

current in a manuscript dating to 1853. Citing drifters from western Japan, he remarks: "they tell that this tide is one path of fresh water from river Ryūsa in India."[117] The apparently compact flow of the Kuroshio gave rise to a riverine model of currents.

Like Krusenstern, the oceanographer Silas Bent (1820–1882), who traveled across the Kuroshio forty-nine years later with Perry's expedition, read Hayashi to learn about maritime routes.[118] To chart the open sea, where drift speeds were almost impossible to measure with precision, he attempted new methods to construct an integrated hydrography of the region measuring water temperature.[119] Empirically confirming the current "*Kuro Siwo,* a River in the Ocean" south of Japan, Bent's initial theory picked up the riverine model of currents which he reconciled only later with the more macroscopic view of oceanic movements coined by Matthew Fontaine Maury (1806–1873). Based on tens of thousands of punctual observations, the latter described the current as a general eastward flow across the entire breadth of over 900 km between Japan and the Bonin Islands. This floating carpet was patched by static and immobile 'cold strata' rather than countercurrents or eddies.[120] In treatises Bent published over the subsequent decades, his *Kuro Siwo* gradually turned into a

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[117] 黒瀬川, 又黒潮ト云. 大灘ノ逆浪急流モ, コノホトリノヨシ. 土佐国ノミサキヨリ, 紀伊国ノ塩ノ岬（又汐ノ御岬トモ書）ヲスギテ, 銭洲ニツキカクル潮汐ト行船者ハ伝エタリ. 志摩国大王崎ヨリ八十八里ノ沖ノ聞リ. (…) 夏秋船乗易ク, 冬春船乗ガタシ. 志摩国鳥羽ヨリ南ノ沖へ乗出シテ, 東スレバ海路甚易シト（文）. 土佐伝テ, 此シヲハ天竺ノ流砂川ヨリツ, ク一通ノ真水也ト云云." *Hachijō Jikki*, vol. 1, p. 30, in: Kondō 1964.

[118] Perry 1856, 198–9. features a full-length translation of Hayashi's discussion of the Bonin islands and the Kuroshio current.

[119] Bent 1856b *A Paper on the Kuro-Siwo,* 2.

[120] Bent 1856a *Report made to Commodore M.C. Perry,* map between pages 364 and 365; Bent 1856b.

compact current he called the "Pacific Gulf Stream."[121] This gulf stream, Bent speculated, was part of a system of currents that integrates the Atlantic and Pacific oceans through the Arctic polar sea. Appealing for the ongoing search for a northwestern passage into the Pacific, Bent's theory as late as 1872 expressed the hopes that both currents' warmth would keep a polar passage open to navigation between the two oceans, thus forming a maritime highway between the Atlantic and the Pacific spheres.[122] (See fig. 3.10) Despite the influence of Japanese treatises on such western scientific constructs, it was not until the mid-nineteenth century that the idea of the Kuroshio as a transregionally connected phenomenon entered the scholarly canon in Japan. In fact, even the acclaimed navigator Ono Tomogorō 小野友五郎 also "Kōhan" 広胖 (1817–1898) wondered, when he steered the first shogunal steamboat *Kanrin Maru* across the Pacific in 1860, whether his drifting off course "must be due to that current I have heard about before."[123] The conceptualization of the current was thus the project of a confluence of culturally specific, yet inherently modern discourses on Pacific geography.

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[121] Bent 1856a *Report made to Commodore M.C. Perry,* 363.
[122] Bent 1872, 49.
[123] "是は予て聞く潮流によるものなるべし." In: Kawai 1997, 178.

Fig. 3.10) Silas Bent's hypothesis of a trans-polar highway created by the joint paths of the *Kuro Siwo* and the Gulf Stream. (Bent 1872, 41.)

The Bonin Entrepôt

In Europe, Hayashi's *Glance at Three Countries* received most attention in the context of British imperial strategy, mostly inspiring new interest in the Bonin Islands as a possible entrepôt for illicit trade to China. Translating the work involved an international scholarly network. Jean-Pierre Abel-Rémusat (1788–1832), a young and ambitious sinologist, first published an excerpt on the Bonin Islands from the

book in 1817.[124] Written in a language that was mostly decrypted by means of the better-known Chinese characters and sometimes complemented by speculative additions, the text engaged several experts over the subsequent years. In 1825, Julius Klaproth (1783–1835) published his own, tentative translation of Shihei's treatises on the Bonin Islands in the *Journal Asiatique.*[125] Shortly after his publication, Klaproth was offered a grant by the *Oriental Translation Fund of Great Britain and Ireland* to translate the book in its entirety.[126]

Over the decades leading up first Opium War (1839–42), the British East India Company took an active interest in the Bonin Islands as a possible *entrepôt* to smuggle British merchandise to Chinese intermediaries, avoiding Chinese restrictions on foreign trade. The British Captain Frederick Beechey (1796–1856) had claimed the Bonin Islands for the crown in 1827, guided there by Hayashi's text in both Abel-Rémusats and Klaproth's translations, as David Chapman has found.[127] Even though it became clear that the islands were too far from the continent to act as an entrepôt, alternative plans were made to avoid Chinese tolls in Japan-bound exports mediated by Chinese traders.[128] In 1834, however, the Colonial Office decided that the Bonins

[124] Abel-Rémusat 1817, 387-96.
[125] Klaproth 1825, 243–50.
[126] Klaproth 1832. This was likely the first Japanese text of this length to be translated into an European language since the expulsion of Jesuits in the seventeenth century. Kawai Hideo cites Siebold in stating that Hayashi's book was brought to Europe by Isaac Titsingh, an employee of the Dutch factory in Nagasaki, a few years after its publication. Kawai 1998: 549. Titsingh had left Japan the year before Hayashi's publication, though he may have picked up the book in either Batavia, or China, where he was stationed in later years. (*Kokushi daijiten* in: JK.)
[127] Abel-Rémusat 1817, 387–396; Chapman 2016a *The Bonin Islanders,* 14–5.
[128] Beasley 1951, 15–20.

were outside the range of ordinary assistance, and declined the proposal for the establishment of a British colony. With the opening of treaty ports in China, the Bonin Islands instead became a stateless settlement that catered to the whaling vessels cruising the Japan Ground at the time. While Hayashi's calls inspired Japanese armchair expansionists to build castles in the sky, the very same texts had lured foreign explorers to Japan's "southern sea."

Conclusion: The Malleable Boundaries of Japan's Pacific

The fragmented view of the Pacific apparent in Asian descriptions of the maritime world is often used for deterministic narratives along the lines that "the cultural foundations had not yet been laid in Japan"[129] to conceive of the sea as a connector rather than an insurmountable obstacle. This chapter has shown that the ocean – *tōyō, taiyō,* or *nan'yō,* as it was called in different contexts over the early modern period, constituted an indispensable part of Japan's changing self-perception. In fact, with the intellectual emancipation from the continent and its concomitant shift of attention to Japan's archipelagic environs since the late eighteenth century, the maritime space gained prominence in scholarly and vernacular discourses.

Originally emerging on the map as a graphical convenience – Matteo Ricci used the Pacific to center Asia – the maritime space also served the shift of focus that created Japan as an independent geo-body in the late eighteenth century. A

[129] Endō 2007, 32.

Japanocentric world view, propagated by Hayashi Shihei and buttressed by nativist thought, connected Japan to its archipelagic environs. Japan was now at the center of an oceanic world that stretched from Taiwan and the Ryukyus to the Aleutian islands and Kamchatka, and as far as the Bonin Islands in the south. The Bonin Islands, first mapped by the Shimaya expedition of 1675, held a particular position among the discourses that projected Japan's colonial ambitions into the Pacific. Honda Toshiaki's and, later, Satō Nobuhiro's brazen scenarios of colonial expansion pushed the boundaries of Japan's envisioned sphere of interest from Kamchatka to the Mariana Islands, gradually inflating the economic and strategic importance attributed to the Pacific archipelago.

In the process of geographical and historical reorientation, crucial terms were coined pertaining to the Pacific. Perspective mattered for the construction of the ocean at various scales. In vernacular perceptions, the offshore *nada* 灘 was a concrete location related to on-shore geography, as in Hyūga-*nada*, Kumano-*nada*, or Genkai-*nada.* The term for oceans or *yō* 洋 as it appears in more macroscopic discourses, by contrast, descends from ancient cosmologies that place the terrestrial world in the middle of four oceans – one for each cardinal direction.[130] Though comparable in principle to the flowing *oceanus* that surrounded the three continents of the known world in European antiquity, the metageographical property of *yō* underwent a different reconfiguration with early modern globalization. If Europe's

[130] Lewis 1999, 190.

oceans became the aquatic counterpart to the three, then four, and ultimately seven continents, *yō* offered a higher level to organize an archipelagic world of local seas. If the western ocean *seiyō* and the eastern ocean *tōyō* became tantamount to the countries of the western and eastern hemispheres respectively, the southern ocean *nan'yō* became a recipient of a vaguely defined southern archipelago that encompassed Hawai'i, Australia, and Southeast Asia. The renaming of the Pacific *taihei-kai,* as it was coined in 1810 by Takahashi Kageyasu, into *taihei-yō* by the mid-century can be read as a reconfiguration of the metageography of four oceans with a growing number of continents that came to define the oceans.[131] However, the rim-centric definition of the Pacific by no means supplanted the "Southern Ocean" *nan'yō,* which remained intimately tied to debates pertaining to Japan's position between the continent and the island Pacific. By the late nineteenth century, expansionist authors stretched the *nan'yō* as far as Hawai'i, Australia, and Southeast Asia, a concept that maintained currency through to the collapse of the Japanese Empire in 1945.[132]

The maps and treatises that purported these Japanese versions of oceanic geography came about in conversation with international intellectual trends. By the late eighteenth century, cartographic innovations such as global coordinates, consistent scale, and a focus on topographic shapes rather than cultural geographies gave rise to a scalable and combinable type of maps. This enabled foreign geographers

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[131] *Shintei bankoku zenzu*, in: LOC, Acc. No.: 2021668274.

[132] The contemporary term *Tōnan Ajia* 東南アジア was also used since the early 20th century, but it did not replace *Nan'yō* in the general discourse until after World War II. Tsuchiya 2013, 9.

to source the findings of Japanese explorations not only to the Bonin Islands, but also to the Kuriles, Sakhalin and the Amur River. These documents were of strategic importance, and their exportation at the hands of Philipp Franz von Siebold in 1829 triggered a scandal that led to the removal of several shogunal top officials. In Europe, Japanese geographical materials influenced the strategic connotations of the North Pacific. With Adam Johann von Krusenstern's reproduction of Nagakubo Sekisui's map of Japan (1774) and multiple translations of Hayashi Shihei's *Glance at Three Countries,* concepts such as the "River" Kuroshio circulated into western geographical discourses. Likewise, the British navy apprehended Hayashi's call to strategize the Bonin Islands, first with Beechey's expedition of 1827 and then with plans for a British offshore entrepôt in the 1830s that, though, never quite materialized.

The invention of Japan's Pacific was the product of a global geographical conversation. Local observations, long-distance explorations, and innovative cartographic methods were formative in the development of a scientific gaze on the archipelago and its oceanic surroundings. The concepts this conversation coined in Japan were arguments about the archipelago's relationship with the continent on one, and its oceanic environs on the other side. By the mid-nineteenth century, Japan's Pacific had emerged from the depths of the ocean as an archipelagic continent whose malleable boundaries could be stretched according to context, ambition, and political agenda.

CHAPTER FOUR

Harbingers of Empire

> If that double-bolted land, Japan, is ever to become hospitable, it is the whale-ship alone to whom the credit will be due; for already she is on the threshold.
>
> Herman Mellville, *Moby Dick*, 1851.[1]

One day of September in 1847, the New Bedford whaler *Franklin* was plying the ocean some 200 *km* off Sendai in northeastern Japan when the crew discerned twenty or thirty fishing boats weighing in the waves. A Japanese castaway who had been had taken aboard in Honolulu asked the captain to lower the sails and stop the vessel for a moment in order to try and communicate with the fisherfolks. Startled at the sight of the three-masted bark at first, the seamen now approached readily. The ship's boat was lowered, and "John" Nakahama Manjirō 中浜万次郎 (1827–1898), the castaway, interpreted for a brief exchange of goods and information. Though it turned out that the castaway from Tosa province far south had difficulties communicating with the sailors from the northeast, his presence on board was a valuable asset for captain Ira Davis (1805–81). Davis, who had repeatedly approached the shores of Hachijō, southern Hokkaidō and minor Ryukyuan islands in the hope of establishing a contact,

[1] Melville 2003 [1851], 125.

was conscious of the strategic importance of traveling with a Japanese castaway, both as a pretext for landing in the secluded archipelago, and to facilitate a conversation with local authorities.[2] On an earlier voyage aboard the ship *Florida II* in 1846, Manjirō and two fellow castaways had already been taken ashore near Matsumae when Captain Arthur Cox aborted their repatriation since no formal handover to Japanese authorities could be organized.[3] Whaling voyages to the abundant whale grounds off Japan had long blended in with missions to gain diplomatic and commercial access to the politically isolated archipelago.

The onslaught of Atlantic whalers on the Japan Ground since the 1820s had turned the Oceans around Japan into a maritime sphere of industrial production and international encounters. As an effect of industrial development in Europe and North America, the booming whaling industry had led ever more vessels to sail from their Atlantic harbors all the way to the prolific Kuroshio current in the western Pacific. Georeferenced logbook data visualize that decades before the political "opening" of Japan to diplomatic and commercial exchange with Western nations, whalers were cruising all around the archipelago, and often cruised within view of the land.[4] (Fig.

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[2] *Nakahama Manjirō den*, p. 94–7, in: OVBE, Acc. No.: dehumidified closet B-31. The date of this event is given as *hachi-gatsu koro* "around the eight month," i.e. betweem Sep. 11 and Oct. 08, 1847, and the location as "80 [Japanese] miles off Mutsu province." Data regarding the voyage can be found in the *American Offshore Whaling Voyages Database*.

[3] *Nakahama Manjirō den*, p. 66–7, in: OVBE, Acc. No.: dehumidified closet B-31; *American Offshore Whaling Voyages Database*.

[4] The *American Whaling Logbook* database published by the New Bedford Whaling Museum is a dataset of 466,136 digitized logbook entries between 1784 and 1920. *American Whaling Logbook Database*.

4.1c) Contacts with whalers happened chiefly in the archipelago's periphery: especially near the Ryukyus (Okinawa), as well as in the narrow Tsushima and Tsugaru straits, American whalers frequently cruised in plain view from the archipelago's shores. Regardless of stepped-up maritime seclusion laws, Matsumoto Azusa counts encounters with 36 vessels in Ezo between 1823 and 1853, events that included friendly communication, acts of piracy, trade in foodstuff, and the temporary landing of hundreds of sailors.[5] In the process, it happened time and again that Japanese sailors lost at sea were returned to Japan with eerie news of Westerners plying the seas all around Japan. Curiosity about these developments spread among the broader population. Cheap and colorful world maps flooded the markets in the 1840s, depicting foreign vessels along with sea lanes and distance indications to foreign locations, as Kären Wigen's forthcoming piece shows.[6] Years before the arrival of Commodore Perry's famous black ships, it had become clear that Japan had become entangled with a rapidly transforming Pacific world.

In the mid-nineteenth century, American voyages represented around 70% of all international whaling voyages. Lund 2010, 2.

[5] Matsumoto 2006, 76-9.

[6] Wigen 2023, (forthcoming). *Early citation kindly granted by the author.*

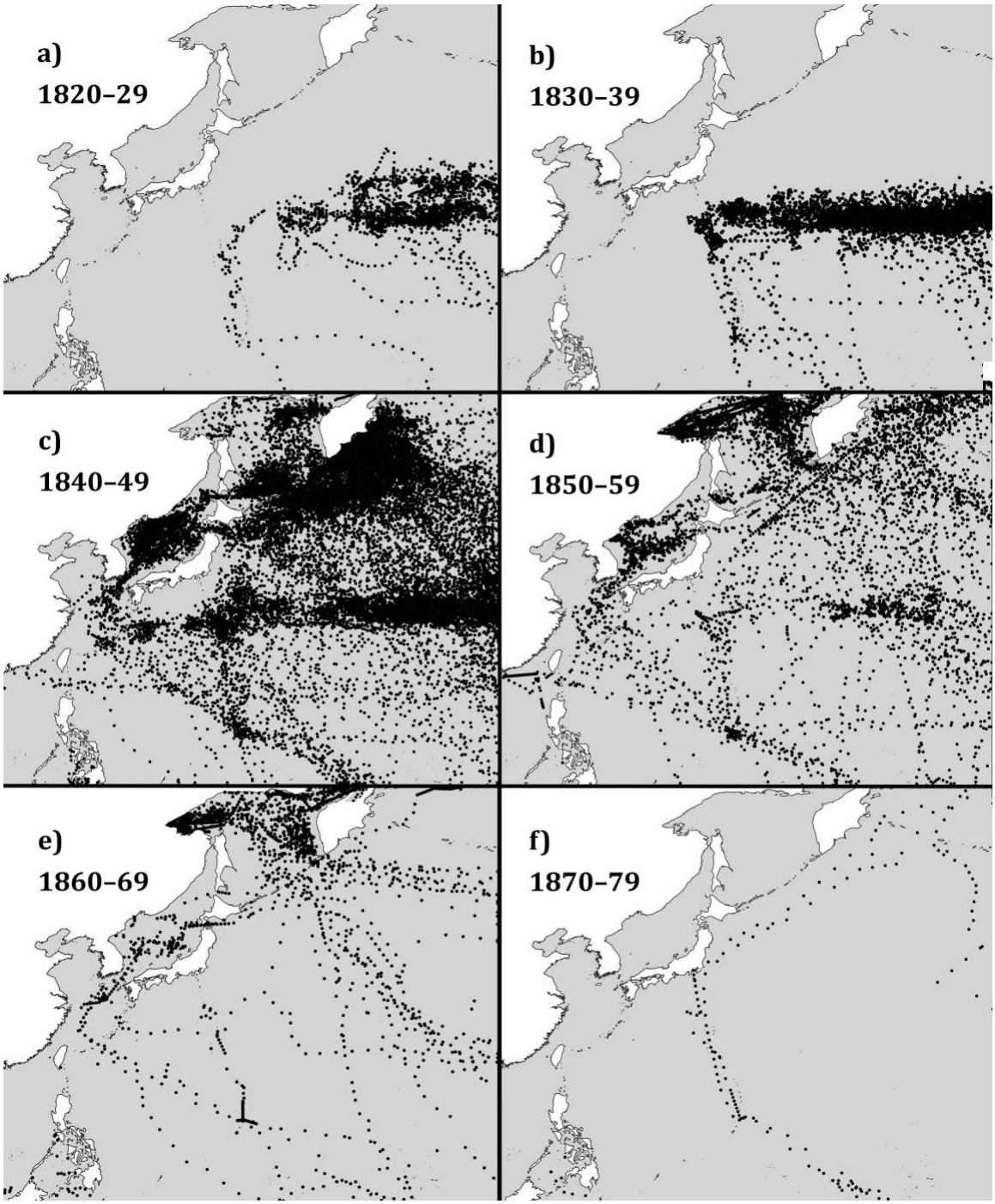

Fig. 4.1a–4.1f) Georeferenced logbook data of American whaling vessels between 1820 and 1879. Notice the explosion of whaling activity all around Japan in the 1840s, and the quick shift from the Kuroshio Extension to the Sea of Okhotsk after 1850. Mapped by the author, based on the *American Offshore Whaling Logbook* database published by the New Bedford Whaling Museum. These data do not include British voyages that played a prominent role in the Japan Ground throughout the 1820s. Author's design.

These offshore developments forced Japan to reorient itself amidst a rapidly changing geopolitical environment. Fear of naval incursion caused major discomfort among the Japanese rulers who had embarked on a non-interaction policy with uninvited foreign missions. The shogunate, whose fisheries and shipping lanes hugged the shoreline, reacted initially with stepped-up seclusion policies, such as the *Don't Think Twice* edict of 1825, which commanded that any foreign vessel be shelled and repelled "without a second thought."[7] The edict, which has been related to the sighting of 42 vessels off northeastern Japan in 1823–24 alone, effectively enforced a no-landing policy – in fact, the logbook data corroborate that the coasts of the Japanese heartlands were actively avoided. In the archipelago's periphery, including the Tsushima and Tsugaru straits, however, whalers continued to cruise in immediate vicinity of the land. By the mid-1850s, it had become undeniable that Japan was already engaged in a global competition over resources and security interests in the oceanic frontier, as magistrate Egawa Tarōzaemon's following petition to the shogunate shows:

> The foreigners cruise Japan's seas without distinction between what is theirs and what belongs to others, and devour our national resources (*kokueki*) in front of our eyes. I have a sense that the Americans desire the harbor of Niigata in Echigo Province, since they certainly expect advantages for their whale hunt. Therefore, we should not lose a single day but learn the foreigners' methods and see whether we can start this business

[7] Howell 2014, 298. Howell relativizes the universal applicability of this edict. Though the Morrison incident of 1837 is considered the only instance of significant confrontation due to the policy, Matsumoto 2006 lists several instances of cautionary salvoes fired under the edict in Ezo. (Matsumoto 2006, 76–9.)

> [ourselves]. I need not mention that this will bring constant national benefit. I also think it should be helpful to train [our men in] navigational skills and to keep away the hordes of foreign whalers.[8]

With the realization that foreign competitors were depriving Japanese whalers of their resouces, classical scenarios of naval incursion became linked with claims over offshore resources and maritime sovereignty.

This chapter examines the way the expansion of the Atlantic whaling frontier to Japan affected the archipelago culturally, politically, and economically. The topography of the ocean with its currents and winds, as well as the ecological transformations that occurred under the impact of pelagic whaling, are central to understanding the manner in which oceanic encounters influenced Japan's reorientation amidst a quickly transforming Pacific World. Decades before the opening of treaty ports, commercial development in the catchment area of the Kuroshio Current had enmeshed Japan in a process of maritime globalization at cultural, political and ecological levels. The whalers, harbingers of empire, prompted both Japan's reorientation amidst the fluid geopolitical landscape of the Pacific World, and its subsequent search for responses to the new naval challenges.

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[8] "右躰眼前之　御国益を外国人共自他分界之無差別日本近海江廻り居、自国之物之如く利を貪候(…) 且は亜人越後国新潟湊を渇望罷在候哉之趣承知仕、右は畢寛鯨猟之便利を量り候故ニも可[有]之哉与推考仕、彼是一日も早く外国人漁猟之仕法ニ倣ひ、御開業被為在可然哉、左候へは往々御国益与申上候迄も無、御〇航海習錬之一助且彼国より群集仕候鯨船も追々遠かり可申哉ト奉存候。" *Kujira ryō goyōdome*, pp.5–6, in: EGAN, acc. No. S 続 0008.

The Atlantic Whaling Frontier Encloses Japan

The history of pelagic whaling as it emerged in the Atlantic in the latter half of the eighteenth century is intimately tied to the emergence of capitalism and naval state power, most clearly so in the United States.[9] Whale oil grew high in demand as an effect of mechanical industrialization, chiefly as a lubricant and as fuel for particularly bright-burning lamps and candles. Whaling enterprises were extremely capital-intensive and relied on indentured labor, a circumstance that necessitated the development of financial and legal mechanisms to enable voyages that lasted for several years.[10] Yet, the industrial expansion of whaling to ever new frontiers began centuries before mechanical industrialization. The shift of whaling industries from local to global scales is thus the result of a continued cycle of local resource exhaustion, technological efficiency improvement, and continued spatial expansion.[11] Nation-

[9] For a classical narrative of American whaling, see Francis 1990. Despite its title, Francis' *History of World Whaling* remains limited to the national whaling industry. National narratives tend to center on technological innovation and market power, but understate the importance of the industry's environmental context. Such technological turning points are 1762, the year in which the first onboard blubber kitchen is confirmed in America (Lund et al. 2010, 1), or, in Tønnesen and Johnsen's Norwegian story, in the 1860s with the introduction of Svend Foyn's Norwegian version of the *bomb lance* (Tønnesen and Johnsen 1982).

[10] Shoemaker 2014, 39.

[11] As is discussed in more detail in the introduction, this resembles the commodity frontiers Jason Moore describes in his work on sugar, though the fluidity of the ocean accelerates the expansion without a significant incorporation in its wake. Moore 2000.

centric histories obscure the fact that this process relied on the international migration of labor and know-how as the new whaling metropoles emerged.

The earliest large-scale whaling enterprise that integrated extensive know-how in shipbuilding, a formidable financial network and market access across Europe was the Basque enterprise that established a seasonal whaling station in Newfoundland as early as 1517. Basque whalers had hunted whales locally since the twelfth century, but with their expansion to Newfoundland, Basque whalers by 1540 peddled their produce – whale oil, baleen and bones – all across Europe.[12] Though operating over vast distances, the Basques were coastal whalers tied to try-pots and hearths on shore. Accordingly they felt the impact of local whale stock decline within a few decades. After 1580, the Basque outposts shifted to cod fishing.[13] Basque whaling experts were later hired by Dutch enterprises that, in 1612, first sailed to Svalbard (Spitzbergen), an archipelago in the Polar Sea discovered just two decades earlier. In Svalbard and its neighboring Jan Mayen Island, each shareholding chamber of the Dutch *Noordsche* or *Groenlandsche Compagnie,* incorporated as such in 1614, kept seasonal settlements with flensing and trying facilities on shore. The decline of local whaling grounds and, as Joost C. A. Schokkenbroek argues, frozen bays during the short ice age, forced the Dutch to develop methods to hunt and flense whales off-

[12] Barkham 1984, 515. Schokkenbroek 2008, 26; Loewen and Delmas 2012, 213. By the mid-16th century, 13 Basque whaling stations in the Strait of Belle Isle between Labrador and Newfoundland delivered an annual average of some 15,000 barrels of whale oil to Europe.

[13] Barkham 1984, 515–18. Loewen and Delmas 2012, 251.

shore.[14] This enabled the expansion all across the Atlantic, to the abundant whale grounds of the Davis Strait west of Greenland. Though the Dutch lost around 10% of all ships annually, the whaling fleet grew to 258 vessels in 1721, carrying a crew of some 11,000 men.[15] The early boom of Dutch whaling in the 1720s was fueled by demand from markets across Europe and the continued opening of new whale grounds. Its decline in the late eighteenth century was ushered in by mercantilist policies closing down European markets, and fierce, state-sponsored British competition.[16] Ultimately, the Anglo-Dutch and Napoleonic wars did the rest, and by 1800, the classical age of Dutch whaling belonged to the past.[17] The largest expansion of whaling frontiers, however, was yet to come.

The abundant fish grounds of New England impressed European settlers who, in the seventeenth century were already used to fishing in the starkly reduced grounds of the North Sea and the English Channel.[18] But also in New England, where even drift whales had once been "so numerous that no need had arisen to go to sea to kill them,"[19] significant decline in whale and fish abundance was apparent by the early eighteenth century, and in 1720, it was reported that the coastal whale fishery

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[14] Schokkenbroek 2008, 28–9.

[15] Ibid.

[16] Ibid., 45–8.

[17] Ibid., 36–40.

[18] Bolster 2008, 26–8.

[19] Elizabeth A. Little and J. Clinton, cited in Bolster 2008, 32.

on Cape Cod "has failed … as it has done for many winters past."[20] New England whalers subsequently expanded their activities further south along the coast, to Long Island and North Carolina.[21] As Nancy Shoemaker has shown, the industry's expansion around that time relied on Native American participants and their familiarity with the local marine environment.[22] Around 1762, whale blubber could first be tried out at sea, an innovation that dramatically expanded the scope of voyages.[23] Thereafter, whaling activities expanded first to the Caribbean and the Cape Verdes, then to South America and in 1789, the British whaleship *Emilia* was the first to embark on a whaling voyage to the Pacific.[24]

After the war of 1812, the American whaling industry expanded, most rapidly after 1830, when not only the number of vessels cruising the seas in the service of America's industrial project, but also the vessels' average tonnage and duration of voyages rose sharply.[25] British vessels had reached the Japan Ground shortly before the American fleet, making for a prominent presence off northeastern Japan in the

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[20] The *Boston Newsletter,* cited in Bolster 2008, 33. The North Atlantic gray whale, one species living in shallow, coastal waters, for example, is believed to have gone extinct around 1675 already. Bolster 2008, 35.

[21] Lund et al. 2010, 1.

[22] Shoemaker 2014.

[23] Lund et al. 2010, 1.

[24] Bolster 2008, 33; Lund, et al. 2010, 1; Schokkenbroek 2008, 46. The special development of the whaling frontier also becomes evident when georeferencing the *American Offshore Whaling Logbook* Database.

[25] Lund et al. 2010: 8–12.

1820s.[26] Georeferenced ship positions from the *American Offshore Whaling Logbook Data* published by the New Bedford Whaling Museum, a dataset of 466,136 digitized logbook entries of American whalers between 1784 and 1920, gives a clear picture of the spatial development of the whaling frontier. Once they had reached Chile, Atlantic whalers migrated from the Humboldt Current to the South Equatorial Current off Peru, and from there, they spread all across the Pacific. Figures 4.1a–4.1f show that the whalers who had first reached the Kuroshio Extension around 1820, gravitated towards the Bonin Islands over the 1830s. It is during this decade that a group of retired whalers established the first permanent settlement in the islands, bartering food and freshwater to the frequently approaching vessels. During the 1840s, Americans were hunting whales all around the Japanese islands, including the Sea of Japan and the Sea of Okhotsk.

[26] Unfortunately, there is no British equivalent to the *American Whaling Logbook* Database, which lists individual ship positions by date. Lüttge argues that in Britain, the importance of logbook keeping had declined under the emergence of the chronometer, perhaps one reason why no consistent databases could be created. Lüttge 2020, 110. On encounters with whalers in northwestern Japan, see Howell 2014.

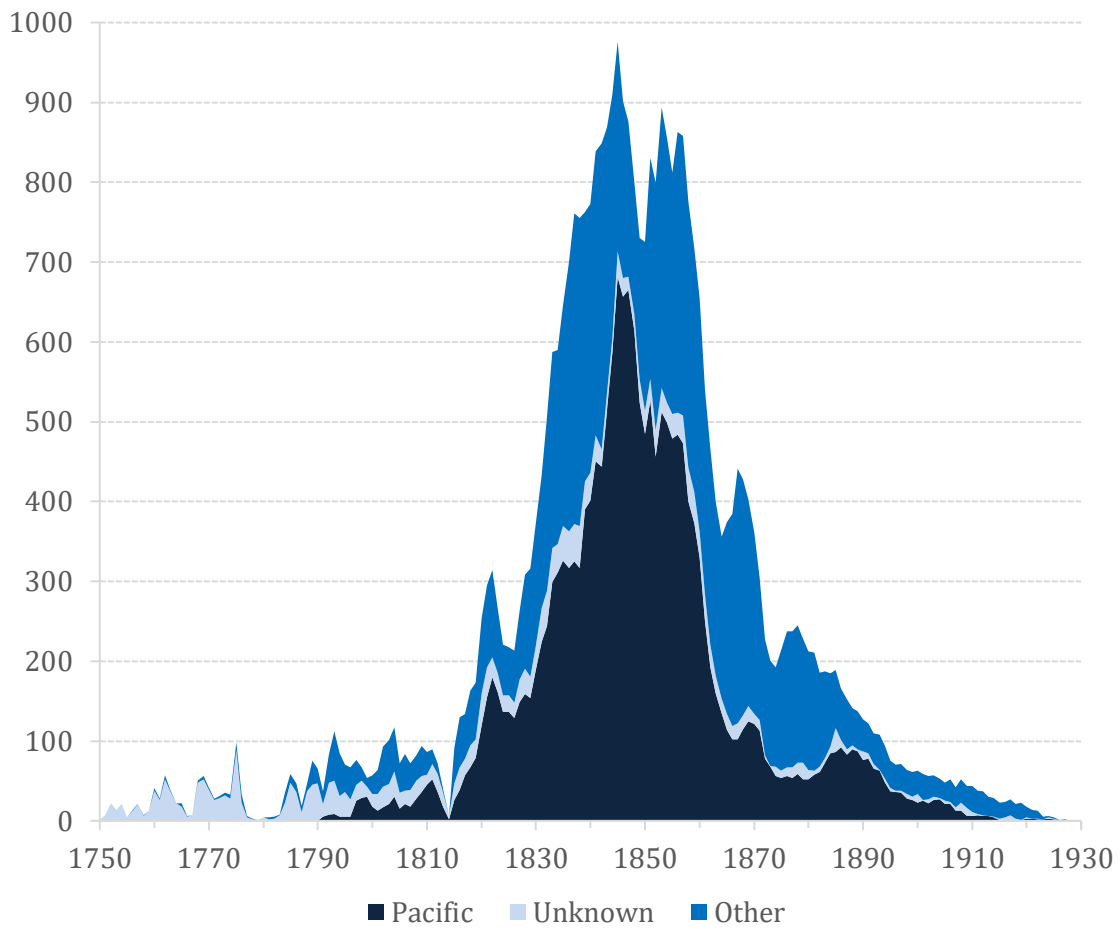

Fig. 4.2) Count of ongoing American offshore whaling voyages per year 1750–1927, and the share of voyages partly or entirely occurring in the Pacific. It becomes evident that the heyday of whaling in the Pacific was in the 1830s–40s, the decades prior to the "opening" of Japan. By the late 1850s, the industry was already in sharp decline, the number of voyages decreasing fast. Note that single vessels can carry out multiple voyages in the same year, explaining a peak voyage count of 976 while the number of American vessels peaked at 722 in 1847. Based on the *American Offshore Whaling Voyages database*, created with Anton Stigö's help.

The whale rush to the Japan Ground coincided with the American whaling industry's heyday. Whaling voyages had been halted entirely during the war of 1812, but by the 1820s, Pacific whale grounds figured prominently among the whaling destinations at that time. (Fig. 4.2) As the graph above, based on the *American Offshore Whaling Voyages* Database shows, the number of ongoing voyages partly or entirely carried

out in the Pacific peaked in 1847, before a caesura during the Mexican-American war ushered in an era of decline. The number of voyages recovered briefly in the early 1850s, but before the decade's end, the number of voyages was in unstoppable decline, particularly so in the Pacific. The geo-referenced logbook data, again, show that the crowd of international vessels that had populated the seas of Japan in the 1840s were shifting to the northernmost edges of the Sea of Okhotsk since the 1850s, as declining whale stocks reduced the profitability of Japanese whale grounds.[27] (Fig. 4.1c–4.1d). Competing over a dwindling number of cetaceans, Yankee whaling had been in decline for over a decade, and pressure on the industry increased with the commercial extraction of petroleum after 1857.[28] By the time the Japanese joined the scramble for the Pacific in the 1860s, the frontier of international whalers had long moved to the northern rims of the Sea of Okhotsk, leaving the Kuroshio region behind with a sharply decimated whale population.

Despite its ephemeral nature, the whaling industry played a central role in the expansion of Atlantic power to the Pacific. Jason Smith argues that the United States' state-led effort to combine experience-based knowledge produced by private whalers

[27] Based on the *American Whaling Logbook* Database. Some caution is necessary in interpreting these data, as American whaling accounts for most, but not all Pelagic whaling in the region. Especially after the mid-century, American vessels active in the Pacific changed their registration to Hawai'i, thus falling off the U.S. statistics. Lund et al. 2010, 3. In 1862-63, twelve foreign whaling vessels visited the Bonin Islands, of which nine sailed under the American, two under the Hawaiian and one under the Russian flag. *Ogasawara-tō fūdo ryakki,* p. 58, in: NAJ, Acc. No. 173-0185.

[28] On the emergence of petroleum, see: Black 1998, 210.

into a scientific geography of the Pacific, first with the *United States Exploring Expedition* and later in Matthew Fontaine Maury's *Whale Charts of the World,* was intimately linked with the expansion of American commercial and naval power to the Pacific.[29] Whalers were drafted for war in 1812 and in the Civil War, and since the 1840s, their presence in the Pacific provided the pretext for violent actions against mutineers and hostile islanders.[30] The desire to repatriate castaway whalers was also an openly stated motivation, even if of secondary relevance, for M.C. Perry's expedition to Japan in 1853.[31] As the whaling frontier enclosed the Japanese archipelago, expanding and shifting across a landscape of declining whale grounds, it created a new state interest in access to Japan, its resources and its harbors.

Japan's Whaling Frontier

A decline in whale populations was noticed in Japan at least since the 1820s, a tendency that accelerated towards the mid-century. Whalers along the Kuroshio and Tsushima currents were the first to go in debts with investors and domain lords. This led to the invention of new financial mechanisms that accommodated the fluctuating catch volumes from year to year, but by the 1860s, domains had to step in granting

[29] Smith, J. 2018 *To Master the Boundless Sea*, 5–6. Felix Lüttge speaks of a "scientification of nomadic knowledge." Lüttge 2020, 73.

[30] Lüttge 2020, 26-7; 70–1.

[31] President Filmore's letter to the "Emperor" of Japan is printed in full in Perry's report. Perry 1856, 256–7. On the other motivations for Perry's approach, see chapter 5.

emergency credits or disbursing rice rations to bail out entire whaling communities.[32] Falling catch rates also inspired research into improved whaling methods that Norwegian and American whalers would only explore decades later, such as the use of firearms against whales.[33] Given the prohibition to build larger vessels, and the fact that the categories of whale produce in demand on Japanese markets needed to be processed on shore, the Japanese were unable to expand their pelagic whaling frontier at a pace that would have momentarily sustained their catch while local whale populations declined.

In Japan, whaling had grown into a substantial proto-industry since the seventeenth century. Morita Katsuaki writes of a "whaling revolution" that unfolded over the 1590s in the aftermath of Toyotomi Hideyoshi's unification of the realm.[34] The *wakō* pirates that had raided the coasts of East and Southeast Asia since the thirteenth century, with bases mostly in Japan and the Ryukyus, were now compelled to become permanent residents bound to their bases on the coasts of Kii, Tosa, Hizen,

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[32] Arch 2018, 71–5. Arch has argued that the vast reach of whale commodity markets elevated the industry's relevance transregionally. Kalland's somewhat static depiction of Tokugawa period fishing villages describes the commercial mechanisms that expanded the scope of trade far beyond the markets that fishermen could reach directly. (Kalland 1995, 198–207.). We ought not forget that not all marine products are perishable, such as fertilizers or tools produced from whale bones. See Arch 2018, Howell 1995.

[33] Holm 2020a *Living with the Gods*, 110–8.

[34] Morita 1994, 137; Amino 1995, 256–7.

or Nagato in western Japan.[35] The experienced sailors developed methods to chase whales by orchestrating hundreds of men in tens of agile rowing boats by means of flags and smoke signs from tall promontories.[36] The whale hunt had been practiced locally before at a much smaller scale, but over the seventeenth century, the number of enterprises grew fast. Ōtsuki Heisen, a universal scholar and expert on whaling in the early 1800s, summarized the growth of whaling in the 17th century as follows:

> In the 1570s, there were seven or eight vessels in Mikawa bay that for the first time hit whales with lances. Thereafter, people in Tango, Tajima and Mikawa provinces began this practice, but as it was unprofitable, they gave it up. In the 1590s, they began in Osatsu and Kumano in Kii province. In 1616, they first caught [whales] in Shikoku. By the 1620s, the whale groups began to hire people here and there, on islands and in bays, settled for a location, and began to hunt. In the 1650s and 60s, they became more and more profitable and as many as 73 whale groups had been formed.[37]

Over the first century after the "whaling revolution," methods and organization of whaling were in constant flux as whaling groups across the archipelago exchanged experiences in search for the best business practices. At its peak, Japanese whaling

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[35] Rather than "Japanese," these *wakō* pirates were a cosmopolitan hoard of seafarers with ties and bases in various coastal regions. Gregory Smits even finds evidence that the royal Shō lineage of Ryukyu went back to a *wakō* ancestry. Smits 2018, 118–9.

[36] A detailed and illustrated description of the hunting practices can be found in Ōtsuki Heisen's six-colume *Historia of Whales* (*Geishikō*) of 1808. On the methods of whaling in early modern Japan, also see Morita 1994, 125–80.

37 "元亀年中…三河国内海の者舩七八艘ニテ初テ鉾（ほこ）ニテ突取リ、其後丹後但馬（たじま）ノ辺ニモ三河ノ者行テ取リシカトモ利無シテ止ム、又文禄ノ初、紀伊州尾佐津或ハ熊野辺ニテ取リ元和二年四国ニテ初テ取リシ…ヨリ寛永年中ニ至リテハ鯨組トテ彼レコノ島爰ノ浦ニ人数ヲ[備]へ場所ヲ定テ突取ル事ニナリ、明暦万治ノ頃イヨイヨ盛ニシテ七十三組マテ組ヲ立テ取リシナリ" *Geishikō* vol. 4, p. 25-8, in: NDL, Acc. No. 130-72.

businesses likely employed more men than the Dutch industry around the same time: if the 73 whale groups Ōtsuki Heisen counts around 1670, employed an estimated average of 300 seasonal whalers, the workforce would amount to some 22,000 men, as compared to 11,000 sailing for the Dutch half a century later.[38]

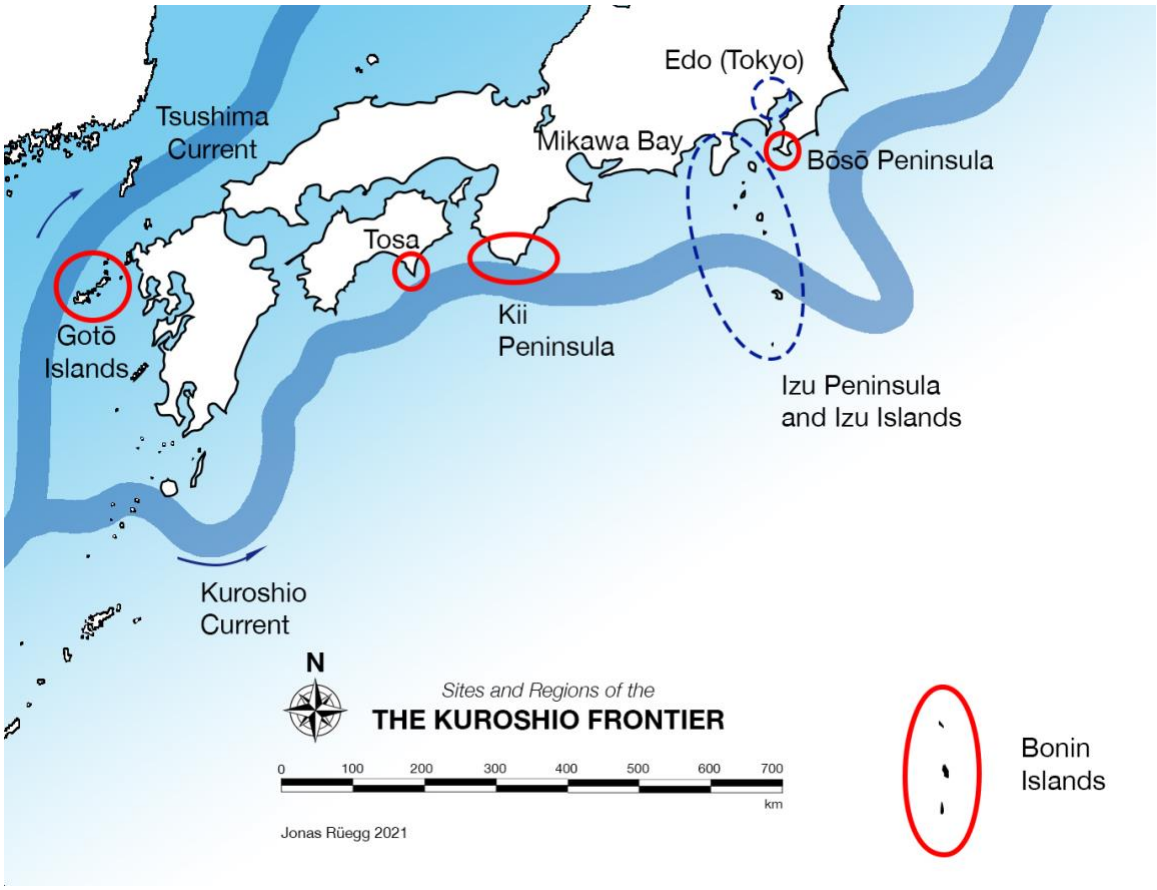

Fig. 4.3) Map of early modern whaling regions in Japan (in red), with locations mentioned.

As an effect, some coastal whale grounds declined within a few decades. At Heisen's time, some die-hard whalers in Owari province, kept "roaming the sea tirelessly,

[38] *Geishikō,* vol. 4, p, 26, in: NDL, Acc. No. 130-72; Schokkenbroek 2008: 29.

regardless whether there are any whales or not. Whenever it looks like a catch could be made, they rush to Ise to hire men. The same holds for Shima province."[39] Whalers from Mikawa Bay, again, migrated to the Kii peninsula, where the fast and nutrient-rich Kuroshio current meanders along the continental shelf.[40] The current acts like an enormous pipeline or 'nutrient stream' that transports energy in the form of warm and salty water rich in phosphate from tropical climes. The nutrients are consumed by plankton and attract fishes of all sorts wherever the current climbs over underwater ridges or on the continental shelf into the photic zone, within the reach of solar rays.[41] Around the Kii peninsula, the current's steady supplies from the greater Pacific supported the resilience of whale stocks and delayed the impact of commercial resource extraction.[42]

Some experienced whalers applied for permission to establish new branches in hitherto untapped regions, such as the Izu islands. Just a year after the botanist Tamura Genchō 田村元長 (1739–93) had published his description of whales near the islands in his *Illustrated Explanation of the Produce of the Izu Islands* of 1791, an inquiry from Kii province reached the shogunal intendant in Izu, asking for

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[39] *Geishikō*, vol. 4, p. 5, , in: NDL, Acc. No. 130-72.

[40] Arch 2018, 52–3; 58–9. *Geishikō*, vol. 4 p. 5–6, in: NDL, Acc. No. 130-72.

[41] Oceanographers have shown that the confluence of the deep Ryukyu current east of Okinawa contributes a significant quantity of unused nitrate to the Kuroshio which, having left the shallow East China Sea, has lost some of its original nutrient content. Guo et al. 2013, 6412.

[42] Arch 2018, 25–41.

permission to explore whaling in the magistrate's jurisdiction.[43] The magistrate had just ordered an investigation himself whether whaling was already practiced among his subjects, finding that in all of eastern Japan, only two villages in the Bōsō peninsula customarily hunted a "fish" called *tsuchibō,* the baird's beaked whale.[44] The report continued:

> In order to conduct a whale hunt, one needs a crew of 7-12 people per boat, one fleet consisting of up to ten boats. These conduct the hunt shooting several harpoons. The cost for one boat is 20 golden *ryō*, and the cost of various tools is approximately [another] 20 *ryō*. One fleet comes to cost around 500 *ryō*. From the 6th through the 8th month, the owners of these boats hire fishermen at a double rice stipend each and earn good money from it.[45]

Whether the initiators of a whaling enterprise were private investors or state institutions, whales were, at this point, monetized resources that could be pursued according to a clear-cut business plan. Unlike the whalers sailing out of Atlantic harbors, however, the Japanese remained tied to their bases on shore, a fact that limited their scope of activity to ten or fifteen kilometers from the shore.

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[43] *Nihon jinmei daijiten,* keyword "Tamura Genchō," in: JK.

[44] *Kansei yon nen goyōdome,* pp. 7–9, in: EGAN, Acc. No.: S19.

[45] "右鯨漁いたし候ニは漁船壱艘ニ付乗組七人より拾弐人迄、壱組拾艘迄を一組ニいたし、もり（銛）ニ而数本突込漁業仕候由、尤船一艘ニ付入用金弐拾、両諸道具代弐拾両位、一組五百両程も相掛り、六月より八月迄右船持引請候ものより漁師に弐人扶持宛差遣相稼候趣ニ御座候" *Geigyo no gi o-tazune ni tsuki mōshiagesōrō kakitsuki,* p. 2, in: EGAN, Acc. No.: N117-1,

Whaling and Maritime Security

By the turn of the nineteenth century, when Russian naval incursions from the Sea of Okhotsk had become more frequent, the shogunate began taking the initiative to relocate whaling groups to the northern frontier. Since the times of Toyotomi Hideyoshi, whaling was seen as a contribution to maritime defense and naval infrastructure, and moreover, a self-financing one.[46] When the shogunate confiscated Matsumae domain in Ezo to install direct control over the frontier in 1799 in reaction to Russian incursions, they relocated the whaling group "Daigo," led by a certain Shinpei 新兵衛 from Katsuyama to the Kurile island of Iturup. It was not long before the Japanese outpost of some three hundred men was devastated in a skirmish in 1806–07.[47] Fynn Holm's recent dissertation has further shown that attempts to relocate whalers to northeastern Honshu were tackled in the early nineteenth century, when foreign vessels were sighted more frequently in the region.[48] As the

[46] Noell Wilson has argued that while military preparedness was one fundamental principle of the Tokugawa state's organization, the military was a patchwork of duties performed by regional entities. (Wilson 2015) The attempt to consolidate defense under the shogunate in the Bakumatsu period necessitated budget cuts that accelerated the decline of the Tokugawa clan's authority. (Totman 1980, 64).

[47] Itabashi 1989, 52–5.

[48] Holm 2020a *Living with the Gods*, 103–4. For example, the watchtowers used to spot whales near the coast were also used for coastal surveillance.

scholar and later headmaster of the Sendai domain academy, Ōtsuki Heisen 大槻平泉 (1773–1850), brought it to the point: [49]

> Even if a maritime country is governed well on the inside, it cannot be estimated at what time foreign calamity will be imposed upon the state. We cannot help but relying on naval defense. If we were to construct new battle ships at the time of [a naval conflict], we would embarrass ourselves with incapacity. Given our geography, there is nothing more apt for naval defense than whaling groups. In times of peace, they shall hunt whales, and in the event of a conflict, they are prepared for naval battles, they truly are the perfection of military preparedness. Moreover, there is nothing like a whale boat when it comes to the strength of its hull and its rowing speed .... The whale hunt should not be left up to commercial entrepreneurs. Even at an exploratory stage, we must seriously consider the great meaning of using whaling groups for military purposes.[50]

Heisen had been dispatched to the whaling regions of western Japan upon a request by his relative, the renowned physician Ōtsuki Gentaku 大槻玄沢 (1757–1827) who, since an encounter with whalers en route for Ezo in 1800, had contemplated about the industry's viability in his home domain.[51] Heisen completed his six-volume compendium *Historia of Whales* in 1808. The work embedded his first-hand observations in Hirado domain with the geographical treatises of Johann Hübner

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[49] According to Terrence Jackson, Heisen owed part of his promotion two years after the completion of his *Historia of Whales* to his famous cousin, the physician Ōstuki Gentaku. Jackson 2016, 37, 90.

[50] 海国ハタトヒ国内ハ善治レリト云フトモ何レノ時何ノ国ヨリ如何ナル外患出テ来ランモ逆メ測リ知ラレヌ事ナレハ, 海防ノ備セテハ叶ハス事ナリ, 左レトカク治リタル時ニ当テ新ニ戦艦ナト備ヒ設ケシモ人ノ耳目ヲ駭ス（おどろかす）ノ憚リ（はばかり）アレハ地勢ニヨリテ海防ノ備ニハ鯨組ヲ設クルニ如ハナシ, 無事ノ時ハ鯨ヲ漁シ, 萬一事ノ出来ラン時ハ水戦ノ用ニ備ヘナハ海防究竟ノ武備ト云フベシ, 凡船ノ堅固ナル事鯨船ニ若ク（しく）ハナク漕行事ノ疾速ナル事モ亦鯨船ニ如クハナシ, コレ軍用ニ備ル究竟ニ船ナリ. *Geishikō,* vol. 6, pp. 52–4, , in: NDL, Acc. No. 130-72.

[51] Holm 2020a *Living with the Gods*, 99–100.

(1668–1731) to explain how whales were caught in Spitzbergen, Greenland, the Americas, the South China Sea, and elsewhere.[52] Heisen's global perspective connected the local whaling enterprises of Japan to an international context: "in the oceans, there seem to be paths along which whales migrate …. Since the whales of Tshusima, like those of Iki and Ikitsuki, migrate to the sea of Manchuria, they must be of the same [stock] as those in Korea."[53] Though he may not have thought of this as a resource competition, Heisen understood the ocean to be a border-crossing system that humans harvested over vast distances. With the appearance of foreign whalers in unforeseen numbers off northeastern Japan in the 1820s, however, it was indisputable that the vessels posed a new challenge to naval security all along the archipelago's coasts.

Offshore Mingling

As an effect of the Atlantic whaling frontier's expansion into the Japan Ground––a term that in the 1820s mainly referred to the prolific Kuroshio Confluence Zone off northeastern Japan––the North Pacific became a site of international mingling.

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[52] *Geishikō,* vol. 4, p. 3–5, in: NDL, Acc. No. 130-72.

53 "惟フニ大洋ノ中ニハ必ラス鯨ノ往来スル定リタル路アルヘシ … 然ラハ朝鮮ノ海ニ往来スル鯨ハ必ラス対馬ト同シ鯨ナルベシ, 対馬ノ鯨ハ壱岐・生月ト同シ, 満洲ノ海ニ往来スルハ朝鮮ト同シカルベシ." Ibid., vol. 4, 21. Ōtsuki Heisen, a cousin of the renowned physician Ōtsuki Gentaku, and headmaster of a Confucian school sponsored by the daimyo of Sendai, moreover propagated the expansion of whaling to untapped frontiers in the north and east, though with little success. Jackson 2016, 37.

Fishermen from Mutsu province habitually sailed to remote tuna fishing grounds, where they increasingly often encountered large foreign vessels.[54] The discovery of "informal diplomacy," as David Howell frames these subaltern encounters, called for thorough investigation. In 1824, when a crew of twelve Englishmen came ashore in the town of Ōtsu in search for fresh food, Aizawa Seishisai, a notorious nativist and xenophobic scholar, was called to the site to interview the whalers and submit recommendations for a political response.[55] Aizawa's investigations revealed that fishermen sailing beyond view from the land habitually engaged in friendly exchange with the whalers offshore. As a certain Shinpei 新兵衛 reported, the fishermen did not understand why the shogunate would treat these foreigners like enemies:

> Since the foreigners are extraordinarily friendly, we wait out wind and rain on their ships, and in the blasting heat they offer us water and provide medicine when we are sick. They have been tremendously helpful. All they do is hunting whales, which exceeds our strength, so they hinder our fisheries in no way.[56]

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[54] Manjirō's account has it that the encounter portrayed at the beginning of this chapter occurred "approximately 80 *ri* off Mutsu province (奥州の沿岸を距ること約八十里)." Presumably, Manjirō referred to nautical miles, making for a distance of approximately 148 km. (*Nakahama Manjirō den*, p. 96, in: OVBE, Acc. No.: dehumidified closet B-31.) This resembles the 40 Japanese miles or 156 kilometers cited in *Ibaraki-ken susisan-shi.* (See. Howell 2014, 318.)

[55] Howell 2014, 304–8.

[56] "異国人は至て深切なるもの故、吾々沖合にて風雨にあひ難儀の節は、彼船にて相凌き、炎天の節は冷水をあたへ、病気の節は薬をあたへ、大に力を得候事多く、吾等の力に及ひ兼候鯨魚を捕るのみにて、漁猟（ぎょりょう）の妨に少しも不相成候" Cited in Tanaka 2011, 40.

For the shogunate, which claimed a monopoly on foreign relations, such subaltern exchange was an unacceptable challenge to state authority.[57] Interaction with Christians had been strictly forbidden since the expulsion of Jesuits in the early seventeenth century, and under the repeated invocation of an "ancient law" that forbade trading with new partners, such informal exchange risked to undermine Japan's official policy.[58]

In 1825, the shogunate issued the so-called *Don't Think Twice* edict which ordered that defense batteries fire at any foreign vessel approaching Japanese shores, and even if officials were to fire at Dutch or Ryukyuan vessels by mistake, which were authorized to trade with Japan, they should not face punishment. Ideally, however, violence should be kept low and ships be allowed to escape.[59] As numerous recorded encounters with foreign vessels in the archipelago's periphery shows, the common

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[57] Ronald Toby's now-classical work *State and Diplomacy in Early Modern Japan* (1984) has made the case that though the Tokugawa shogunate did not claim exclusive rights to international trade, it maintained a monopoly on formal foreign relations that only eroded in the 1850s. (Toby 1984, 108–9.) Though more recent scholarship has emphasized the relevance of subaltern forms of diplomacy, such as smuggling or informal offshore encounters, such acts generally conflicted with the shogunate's formal authority.

[58] The idea of an "ancient law" (*inishie yori kokuhō* いにしへより国法) forbidding the opening of new trade relations was first articulated by Matsudaira Sadanobu in 1793 to explain his rejection to trade to the Russian Laxman expedition. (Tanaka 2011, 29.) This formulation supported unduly static views of Japanese international policies at the time.

[59] Howell 2014, 312.

practice over the ensuing years was centered on conflict avoidance rather than blind confrontation.[60] A law (*fure* 触) issued around the same time specified that

> When sailing, it shall be avoided consciously and as well as possible to encounter foreign vessels. If it becomes evident *post factum* that friendly interaction occurred secretly, [perpetrators] shall be punished severely. Since informants shall be rewarded even if they are former accomplices, they need not keep secrets.[61]

The striking discrepancy between the shogunal authorities' anxiety and the fishermen's carefree curiosity reflects a divergence between erudite geopolitical concerns and the experience of personal encounters on the (whaling) ground. Reports of castaways rescued by foreign vessels spread a positive view of foreigners beyond the coastal communities, while news of foreign designs on uninhabited islands in the vicinity of Japan raised concerns among the shogunate.

The Colonized Pacific

As the center of gravity in the Japan Ground shifted south over the subsequent decade, whalers in search of fresh water, firewood, and fresh turtle meat began to frequent the still uninhabited Bonin Islands south of eastern Honshu. The islands had been

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[60] On foreign landings in Ezo under the *Don't Think Twice* edict, See Matsumoto 2006. Kobayashi Nobuya points out that the Ryukyu kingdom handled foreign landings according to principles that were codified in 1704 and remained unchanged until 1856. Though reported to Satsuma, however, foreign landings were dealt with largely independently. Kobayashi 2017, 26–8.

[61] "船之乗筋等、可成たけ異国船に不出会様心懸可申候、若異国人に親み候儀を隠置、後日相顕るゝおいては、可被処厳科候、右体に訴出候はゝ、一旦同意之者にても、御褒美可被下候間、不相包可申出もの也" Cited in Tanaka 2011, 41.

known to Westerners mainly through Japanese texts (see chapter 2), but only when whalers began to stop by the Bonins regularly did American, British and Russian explorers claim formal discovery in 1824, 1827 and 1828 respectively.[62] Russian explorer Friderich von Lütke's (1797–1882) encounter with two British castaways who had decided to forgo rescue by earlier visitors and instead held out on the islands for two years, cautioned the explorer that Britain would possibly occupy the port of call.[63] Indeed, the British consul in Hawai'i, Richard Charlton (1791–1852), in 1830 authorized the private enterprise of five retired whalers accompanied by twenty-five Hawaiian men and women to settle down in the Bonin islands. Apparently, the expedition was underpinned by the settlers' private funds.[64] The community in the settlement fluctuated greatly as the islands became an important port of call in the Japan Ground. Daniel Long counts 70 arrivals on eighteen vessels by 1837, though many temporary settlers chose to leave within a few years.[65] The trade with whalers prospered, allowing certain individuals to accumulate a considerable fortune.[66] Given the islands' strategically valuable situation, this project should have paved the way for a British offshore trading base.[67]

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[62] Arima 1990, 28–31.

[63] Chapman 2016a *The Bonin Islanders*, 13–7; Arima 1990, 31.

[64] Arima 1990, 33; Cholmondeley 1915, 14–22.

[65] Long 2007a *English on the Bonin Islands*, 43.

[66] As will be discussed again in chapter 5, Nathaniel Savory was robbed of private property amounting to $2,000 in a pirate raid in 1849, illustrating the profitability of trade in fresh food with crews plagued by scurvy. (Cholmondeley 1915, 26–8).

[67] Beasley 1951, 17.

Charlton's correspondence makes clear that the entrepôt he envisioned in the Bonin Islands should help avoid customs at Canton and facilitate the smuggling of British merchandise into Japan on Chinese boats. Other commentators added that "these Bonin Islands would be an appendage to the Government of the Sandwich Islands,"[68] as David Chapman has found, to follow through despite skepticism on the part of the British government. By 1835, Charles Elliot (1801–1875), at the time Superintendent of Trade in Canton, expressed the need to police the region lest the whalers in their 'acts of depredation' would incur the wrath of the Japanese.[69] As tensions were mounting between Britain and the Qing empire, Elliot again urged his government in 1837 to militarize the islands.[70] These developments were soon known in Japan. Watanabe Kazan's (1793–1841) *Writings on the Conditions in Foreign Countries,* a security analysis submitted to shogunal intendant Egawa Tarōzaemon in early 1839, refers to a Dutch *fūsetsu* report from 1837: "Britain has seized islands in the vicinity of Japan, which should make us vigilant."[71] Elsewhere, he continued: "Whenever Anglia with its navy seized distant territories to colonize fecund lands in the warm zone, they relied on islands that granted access to strategic routes and naval advantages, which they occupied and named before any other nation

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[68] Cited in Chapman 2016a *The Bonin Islanders*, 24–5.

[69] Beasley 1951, 18.

[70] Tanaka 2011, 180–1.

[71] "ニーマンの逗留中、オルフと申蘭人の申候は、イギリス日本地方の島々を取候間御用心可被成" Watanabe 1941, 45. An alternative version of this passage cited in Tanaka 2011, 40, specifies the date of this report as "two years ago."

to forestall annexation by others."[72] In reality, the British Colonial Office had turned down Elliot's request since the islands were considered too small and too remote to make for a profitable colony.[73] With the Chinese concessions after the Opium War in 1842, the option of offshore smuggling, as well, lost attraction. Among Japanese strategists, however, the tensions were mounting.

On July 30, 1837, the arrival of the merchant brig *Morrison* at the entrance of Edo bay exposed embarrassing deficiencies in naval defense. Elliot had entrusted the American-owned vessel with the mission to repatriate seven Japanese castaways, four of whom had drifted to the Philippines, three others, however, that had been picked up by the native Makah tribe in the Oregon Territory, present-day's state of Washington, having drifted across the Pacific for fourteen months. The Hudson's Bay Company sent the three men, Kyūkichi, Iwakichi, and Otokichi, to London in the expectation that the British government would happily coordinate their return and by way of it, open communications with Japan. The plan, however, was met with moderate interest in the capital. Since no British mission was authorized, the castaways were sent to Naha on the *Morrison,* which convened there with the HMS *Raleigh* – incidentally en route for the Bonin Islands – to take aboard the missionary

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[72] "英吉利亜ハ海軍ニ長シ隔遠ノ地ヲ併呑仕、暖帯利地ヲ拓キ海門要路航海便利之島々ニ拠リ諸国ニ先立地ヲ占メ名ヲ命シ他国併呑ノ邪魔を仕候" *Gaikoku jijōsho*, p. 39, in: EGAN, Acc. No.: 33 外国事情書.

[73] Beasley 1951, 20, 29.

Karl Friedrich August Gützlaff before the *Morrison* set sail straight for Edo.[74] If foreign landings had been dealt with pragmatically in the periphery, the bold advance to the Japanese capital evoked a stern response. Even though the *Morrison* had sailed unarmed to underline the peaceful character of her mission, the expedition was surprised by sudden cannon fire and had to withdraw without an opportunity to submit its formal correspondence along with the castaways.[75] In Japan, however, the incident off the very capital triggered heated debates about Japan's stance vis-à-vis maritime approaches. Even conservative voices like Hayashi Jussai 林述斎 (1768–1841), the headmaster of the Hayashi academy and father of urban magistrate Torii Yōzō 鳥居耀蔵 (1796–1874), recognized that firing at foreign vessels with Japanese castaways aboard would risk to undermine the principles of benevolent rule. Jussai admonished that "it is important for a rightful ruler to show mercy even for those lowly sailors from distant provinces, for they are our countrymen!"[76] Mercy was an elegant framework under which to criticize a faulty policy.

Defending the On-Shore

The *Morrison* incident ushered in reforms in the maritime defense structure of Edo and Sagami bays. The competence of Egawa Tarōzaemon Hidetatsu "Tan'an" 江川太

[74] Beasley 1951, 21-5; Tanaka 2011, 182.

[75] King 1839, 128–32.

[76] "遠国船方等之賤き者迄も我国之人に候得は、御憐愍被下候と申義君徳之重き所に候" Tanaka 2011, 189.

郎左衛門英龍坦安 (1801–55), the shogunal intendant responsible for navigation security between Edo and western Japan, was expanded to the coasts of Awa and Kazusa provinces, to encompass Sagami bay in its entirety. For generations, the house Egawa had administered large part of the Izu peninsula, including its outlying islands and the town of Shimoda at the peninsula's southern tip, a checkpoint that all vessels had to pass before entering the bay of Sagami.[77] Egawa was thus the protector of the most important cargo route that connected Western Japan to the capital by sea. A scholar in his entourage underlined, "since [the Izu peninsula] extends far into the sea, one can sail in all directions; as you go east, you may reach as far as Edo in half a day; as you sail to the west, you may reach Osaka and other places within one day!"[78] Having enjoyed a formidable education––including lessons in cartography under the great geographer Inō Tadataka––Egawa attracted an entourage of scholars and artists to draft strategies for domestic and international politics.[79] With the shock of the *Morrison*'s bold approach, Egawa and his advisers gained significant influence over shogunal defense policies.

The Japanese system of maritime defense had been set up in the early seventeenth century, when the Tokugawa shogunate extended its military power into

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[77] Nakada 2001, 81–3.

[78] "大洋ニ張出居候事故，海上往来自在ニテ、東ニ出船スレハ半日ニシテ至江戸，西出船スレハ一日ニシテ至大阪、扨又廻船江戸エノ往来ニ下田港ニ繁泊セサルハ少シ" *Izu koku go-biba no gi ni tsuki zonjiyose mōshiagesōrō kakitsuki*, p. 3, in: EGAN, Acc. no. Q3-14.

[79] Nakada 2001, 17–9.

proximate waters. Works by Xing Hang and Adam Clulow underline how the shogunate managed to wield commercial power to enforce its interests at sea, even in absence of a standing navy.[80] This allowed the Japanese to define the waters within view from the shore as a 'territorial zone' (*ryōiki* 領域), policed by each adjacent domain. The military system on shore and at sea was devolved into the hands of the domains––or rather, it had remained with the vassals that submitted to the Tokugawa throughout the early modern period. Over the course of two centuries, however, this highly cost-effective system in which military services were performed in the manner of corvée labor, gradually undermined the shogunal violence monopoly in a manner that ultimately hampered the attempts to centralize state power over the 1850s and 60s.[81] Stepping up military preparedness along the shores put pressure on the local domain's finances, as *metsuke* Ōkusa Takayoshi 大草高好 remarked: "we must not allow that the coastal domains become exhausted and their livelihood cut off like when pirates harassed the Chinese Emperor Jiajing (1507–1566) in the late Ming dynasty."[82] Increasingly often, however, this resulted in a situation in which domains performed defense duties at the order of the Tokugawa for payment, as Noell Wilson

[80] Hang 2016, 111; Clulow 2014.

[81] Wilson 2015, 6, 214.

[82] "沿海之諸国奔命に疲労仕, 身上刺切に相成候而者, 明末嘉靖之比海賊に疲労様に相成候而者不相成." Cited in Tanaka 2011, 77.

has shown, a fact that further eroded the shogunate's authority when foreign pressure mounted in the 1850s and 60s.[83]

Even after the *Morrison* incident, defense remained centered on the improvement of harbor batteries, since a shift towards naval defense was rejected as too costly. As Shibukawa Rokuzō 渋川六蔵 (1815–1851), shogunal archivist (*shomotsu bugyō*) under Senior Councilor Mizuno Tadakuni 水野忠邦 (1794–1851), argued,

> even if we study the barbaric ways in a haste, it will be impossible to meet [the barbarians'] level. Rather than trying to counter intelligent and well-trained barbaric crews with ill-prepared mariners, perfecting the ways studied in our country of old is by far a better strategy. In foreign countries, they build schools for artillery and navigation, select soldiers and conduct research, day by day they invent new strange skills, changing their methods year by year. While we strive to imitate them in our country, methods are adopted by those countries that surpass those ways already. No need to even discuss feasibility and purpose of such endeavors, it is nothing else than a great waste of money.[84]

Instead, the reforms were of organizational nature. To coordinate defense improvements, which remained centered on harbor batteries, Egawa's office was subordinated to Torii Yōzō, the governor for the city of Edo. Though the new organization created a more centralized chain of command and allowed for more coherent strategic planning around the capital, the limited resources on the part of

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[83] Wilson 2015, 213–14.

[84] "唯今俄に蛮法相学び候とても，決而彼には難及候故，未熟之兵を以、精練熟知之蛮舶に向かひ候より， 従来学び慣候本邦之法を精練仕候方， 最上之良策と奉存候. 異国に而は、砲術並航海之事に付学校を設け， 軍師を撰び， 研究仕候故， 実以日新之奇巧有之， 年々旧法を変革仕候故，折角本邦に而習学仕候内には，最早彼国には其上に出候法を取用ひ候に付，成敗利害は論ずる迄も無之，徒に失費多く相成候のみに御座候. Shibukawa Rokuzō, cited in Tanaka 2011, 78.

the shogunate hampered more pervasive reforms. Upon Egawa's request, investments were concentrated in the forging of better cannons, though critical voices pointed out that Sagami bay was too wide to be policed solely from shore.[85]

It was the trio Watanabe Kazan 渡辺崋山 (1793–1841), Takano Chōei 高野長英 (1804–1850), and Koseki San'ei 小関三英 (1787–1839), three intellectuals in the entourage of Egawa Tarōzaemon, that voiced the most explicit criticism of the shogunate's conservative response to the new geopolitical reality. The impact of their warnings is overshadowed by their criminal prosecution under urban magistrate Yōzō in the summer of 1839, but their critique of the dominant policy did not immediately cause indignation among the government, as we will see. Chōei and San'ei had studied medicine under Philipp Franz von Siebold (1796–1866) in Nagasaki, and Kazan had dedicated himself to the study of Western art and politics. Around 1836, the three had formed the study group *shōshi kai* (尚歯会) to debate political responses to the Tenpō famine (1833–38), but soon the group began revolving around questions of international affairs. In his *Case for Restraint* (*Shinkiron*), Kazan explained his concerns about the shogunate's continued rejection of foreign advances as follows:

> For the foreigners, our country is like a piece of meat thrown on the road. How could those hungry tigers and thirsty wolves keep away from it? Should England be refused commercial rights, they would probably argue: "Your country's strict prohibitions are unyielding. Though we don't intend to invade you, when boats from our and other countries are in distress at sea, in need of fuel and water, or when the sick must be rescued on shore, your maritime policy creates an obstacle to ocean travel. If you think that you

[85] Tanaka 2011, 79.

> can harm all countries in the world for the sake of one country alone, you are truly trying to turn the world upside down and you do damage to your own kind!" ... Though they are lowly barbarians, the westerners never raise an army without stating a reason: when [Napoleon] Bonaparte invaded Egypt, he gave two reasons, one being [Egypt's] obstructing navigation in the Mediterranean, the other was an old enmity. The same reason could indeed provide the grounds for Russia's and Britain's arrogance.[86]

Kazan's criticism was directed explicitly at the *Don't Think Twice* edict. He realized that Japan's location amidst a densely traveled sea would make the rejection to open harbors an obstacle to foreign interests and potentially provide a reason for war. In their pervasion that friendly interaction with Britain would hedge the risk of a Russian incursion, the scholars were particularly alerted to the news about the "islands of the south sea from the Bonin islands south"[87] Britain had brought under its control. Chōei warned that "since, the islands in the vicinity of Japan that belong to England are so numerous, her ships continually travel to and fro. It is hard to underestimate the danger that in the future they will become hostile and obstruct our

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[86] "西人より一視[す]れば、我国ば途上の遺肉の如く, 餓虎渇狼の不顧を得んや. 若[し]英吉利斯交販の行はれざるハ貴国永世の禁固く侵べからされとも、我邦始海外諸国航海の者、或ハ漂蕩し、或は薪水を欠き、或いは疾病何のもの地方を求め, 急を救はんと也に, 貴国海岸厳備にして航海に害ある事, 一国の故を以て地球諸国に害あらん. 全く天地を載踏して類を害ふ ... 西洋戎狄と云へども, 無名の兵を挙る事なけれは--ホナハルト厄入多（エジプト）を攻するときニ恨を書し、一は地中海航海の害、一は旧年の恨み--実に鄂羅斯、英吉利斯の二國驕横の端となるへし." " *Shinkiron,* pp. 6–7, in: NDL, acc. no. YD-古-1622, pp. 6-7. A full translation of *Shinkiron* can be found in Abiko 1982, 293–304.

[87] "日本ノ近海南洋ノ諸嶌無人近所ヨリ南ノ嶌ニテ候" *Yume monogatari*, p. 3, in: CTMH, no Acc. No.

maritime transportation."[88] Accordingly, Chōei advocated a policy sensitive to Western claims that harbor access is necessary for Pacific traffic, a policy later adopted with the 1842 *Order for the Provision of Fuel and Water* (*shinsui kyūyo rei* 薪水給与令) to foreign vessels in distress.[89] Some accounts have it that the shogun himself was impressed with the scholars' extensive knowledge of foreign affairs.[90] Kazan and Chōei advocated friendly relations with Britain to reduce Japan's vulnerability to Dutch information manipulation and Russian designs on the northern periphery. Brazen though they were, Kazan's plans to open a channel for exchange with Britain by way of the Bonin Islands were not problematized until they inspired private adventurers to undermine shogunal foreign policy.

Intellectuals and The Bonin Question

Immediately after the *Morrison* incident, rumors began to circulate that shogunal magistrate Hagura Geki 羽倉外記 (1790–1862) had been ordered by the shogunate to inspect the Bonin Islands on an extended routine visit to the Seven Islands of Izu. Since Hayashi Shihei's *Illustrated Glance at Three Countries* of 1785, the Bonin islands had entered the common geography of Japan as an overseas province awaiting

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[88] "日本近海ニハイキリスノ属嶌夥シク之在，始終通行致候得ハ，後来海上ノ寇ヲ相ナシテ海運ノ邪魔相成候モ難計." *Yume monogatari,* pp. 3, 8, 12, in: CTMH, no Acc. No. A full translation of Yume monogatari, is given in Greene 1913, 417–33.

[89] Matsukata Fuyuko shows that this decision was made in the context of Britain's victory in the Opium War. Matsukata 2011, 103.

[90] Greene 1913, 432.

colonization. (See chapter 2). This inspired expansionist fantasies among some––Satō Nobuhiro's *Secret Plan for Unification* of 1823 envisioned the islands as Japan's first foothold in the Pacific on a campaign to subject continental East Asia––while others hoped that the produce of the southern islands would improve the livelihood in Japan.[91] With evidence of a foreign settlement in the Bonin Islands, the security aspect became more pressing. Together with Kazan, Chōei and San'ei, Hagura had joined the study circle *shōshi kai*.[92] Most likely, the attempted expedition was inspired by Kazan, who had already applied for a leave from his home Tawara domain in the end of the previous year to join the expedition.[93] Tanaka Hiroyuki believes that Kazan had boiled up a mere rumor in his enthusiasm to make contact with Western settlers on Japanese territory, but documents I found at the Egawa Mansion in Nirayama indicate that the expedition had been planned in earnest and was only aborted in the last instance by shogunal top executives.

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[91] Besides exchange with British settlers, improving the agrarian output of Japan apparently remained a central motivator for botanist Abe Rekisai, and Takano Chōei, whose treatise *Nibutsukō* elaborated on the benefit of introducing productive foreign crops. (Greene 1913, 419.)

[92] *Kokushi daijiten,* keyword "Shōshikai," in: JK. Bonnie Abiko counts 26 members of the *shōshi kai,* among which prominent intellectuals and politicians such as Satō Nobuhiro, Kawaji Toshiakira. Abiko 1982, 269–74.

[93] See Watanabe's letter to the Tawara domain asking for a leave to over to the Bonin Islands. *Watanabe Kazan to Suzuki Yadayū*, 25/12/1838, ed. in: Ozawa and Haga 1999, 218–221.

In preparation for his routine visit to the Izu islands, Hagura asked for permission in early 1838 to "examine soil and produce" in the Bonin Islands.[94] Chief Senior Councilor Mizuno Tadakuni, however, found no need for a man of Hagura's rank to embark on such a mission. He commanded that

> Hagura Geki's expedition to the island Ogasawara be suspended and [instead], [Izu] islanders be added to the crew. These we shall dispatch to seek a maritime route and investigate thoroughly whether any useful produce can be forund, and if it should be found that [the islands] will gradually become useful, [we order] that you submit another request [at that time].[95]

Even though he stopped Hagura's planned expedition just days before its planned departure in the third month of 1838, Mizuno was not in principle averse to an expedition beyond Japan's inhabited territory. At least ostensibly, the colonial profitability of such an endeavor took priority over Kazan's security considerations. For the time being, the project sank into oblivion.

In the following spring, however, Mizuno was made aware of an anonymously circulating text titled *Tale of a Dream* (*Yume monogatari* 夢物語) that warned that foreign "gunboats had brought the southern sea under complete control,"[96] and

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[94] *Kaitō tsuide Ogasawara-tō e makari koshi sōrō gi nit suki go-nai'i ukagai sho,* p. 1, in: EGAN, Acc. No. N68-51.

[95] "書面小笠原島江羽倉外記罷越候儀は先見合セ手代共之内江島人差加へ、為見分差遣シ海路之様子をも為相試、且又土地柄、実用之産物等も有之哉否、篤と相糺シ弥御用ニも可相成と見極も有之候ハヽ、猶其節相伺候様可被申渡候事." *Kaitō tsuide Ogasawara-tō e makari koshi sōrō gi nit suki go-nai'i ukagai sho,* p. 2, in: EGAN, Acc. No. N68-51.

[96] "南海中ノ諸軍艦一切支配仕候由" *Yume monogatari*, p. 8, in: CTMH, no Acc. No.

criticized the shogunate's perilous policy of firing at foreign advances. Yōzō, who was commissioned to investigate the case, suspected Kazan, and used Hanai Toraichi 花井虎一 (*life dates n.k.*), a member of Kazan's study group "Produce Society" (*Bussan-kai* 物産会), as an undercover agent to spy on the scholar.[97] Tanaka Hiroyuki finds that only in the course of these investigations, Kazan's involvement with private enterprises interested in the Bonin Islands aroused suspicion.[98]

Since the fall of 1837, Kazan had advised the private study circle in drafting plans for a private expedition supposed to sail to the Bonin Islands in the summer of 1839, a project he continued to support informally.[99] Under the initiative of the priest Junsen 順宣 of Muryōsu temple in Mutsu province, eight commoners had––unsuccessfully––applied for permission to explore the islands' "strange minerals and unknown plants," since this would be "extraordinarily gainful."[100] The group of merchants and samurai continued to meet monthly at the home of botanist Abe Rekisai 阿部櫟斎 (1805–1870). As the botanist asserted in a later interrogation, the scholars had grown interested in the islands through the ostensibly harmless attempt to grow pepper domestically. Abe was a student of Tōjō Kindai 東条琴台 (1795–

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[97] Tanaka 2011, 255, 261.

[98] Tanaka 2011, 261.

[99] "無人島に異国船懸り居候哉、渡海中漂流致し外国へ参り候哉、浦賀洋中に而諸国廻船之妨致し候而は差支候由、又は金花山之辺へ異国船罷在、右見物出来候趣は金次郎秀三郎渡辺登等〇開候旨申立…" Hirano 1998, 21.

[100] Hirano 1998, 19–20.

1878), a former lecturer at the Hayashi Academy. Though Tōjō's involvement with the *Bussan kai* remains unclear, the two later co-authored a polemic *Map of the Seven Islands of Izu with the Eighty Islands of Munin Jima.* The map, which features the remark "do not sell," apparently remained undetected by the censors until 1850, when Tōjō was taken into arrest.[101] (see fig. 4.4).

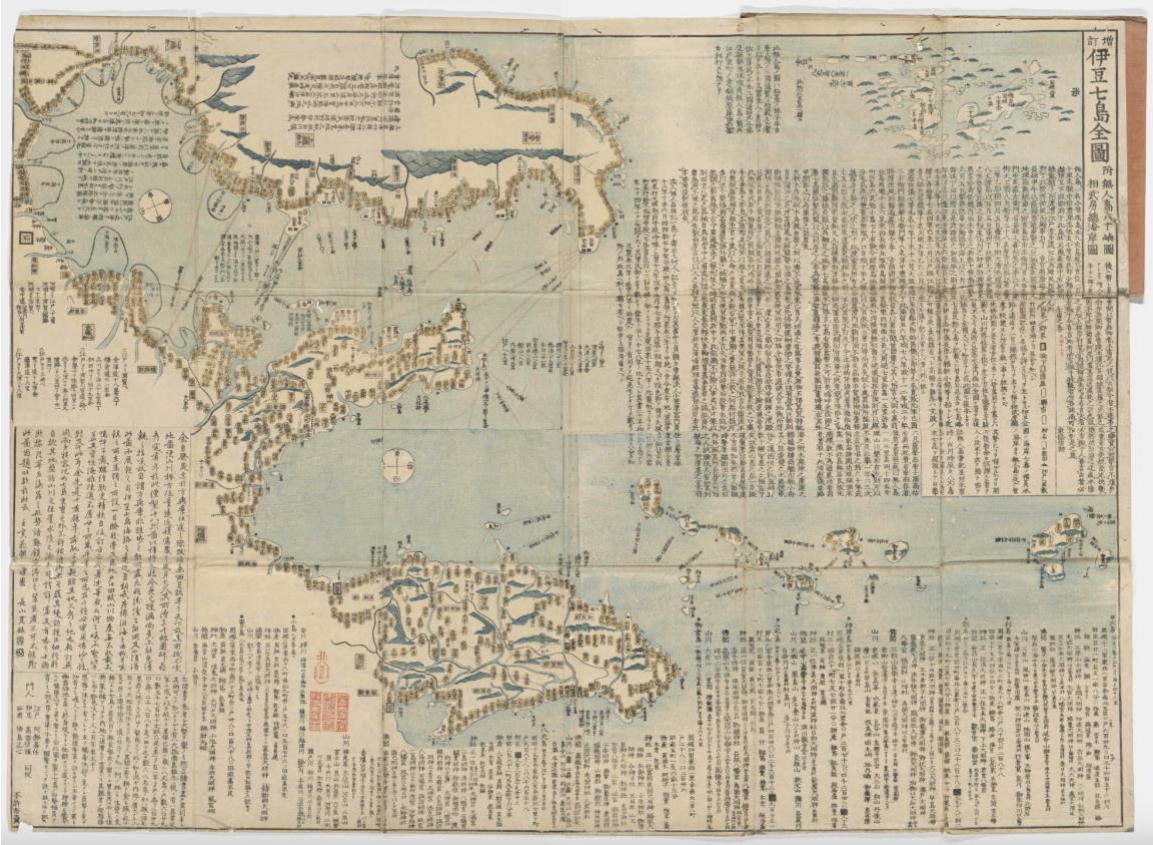

Fig. 4.4) The *Map of the Seven Islands of Izu with the Eighty Islands of Munin Jima,* co-authored by Tōjō Kindai and Abe Rekisai. "Revised version" of 1842. The map is oriented with East at the top, Edo bay is located in the top left, between the Bōsō and Miura peninsulas. Note the representation of the Bonin Islands in the upper right corner. The

[101] *Kokushi daijiten,* keyword "Tōjō Kindai," in: JK. Hirano 2002, 25–6, 31–2. *Izu shichitō zenzu tsuki Munin Jima hachijuttō*, in: APC, no Acc. No.

> central text block is an eloquent argumentation in favor of settler colonialism in the islands. (*Izu shichitō zenzu tsuki Munin Jima hachijuttō*, in: APC, no Acc. No.)

As the spy Toraichi reported to the authorities, however, the group was most keen to make contact with foreign settlers in the Bonin Islands. At one meeting, Yamaguchiya Hikobei "Kanejirō" 山口屋彦兵衛金次郎, a merchant who had provided a map for the expedition, got ahead of himself asking Kazan "whether foreign ships were at anchor in the Bonin Islands, whether [the expedition] would not drift off to foreign countries; that he heard foreign ships in cruising off Uraga would cause hindrance, and whether it is true that foreigners are also sailing off Kinkasan island; and lastly, whether they would be able to see these things with their own eyes."[102] Toraichi further reported illegal attempts to borrow firearms and gunpowder, a fact that led to the arrest of several members of the project, and exposed Kazan's apparent plans to "go adrift willfully and arrive in Luzon, Sandwich, or America."[103]

Kazan was taken into custody in the fifth month of 1839, and Egawa, a truthful Tokugawa loyalist, submitted Kazan's *Writings on the Conditions Abroad* as evidence.[104] Kazan was charged for

> criticizing the current state of government and moreover, believing that he needed to open trade routes by himself since the thought that hindering the cruising of foreign vessels off Uraga would cause trouble in Edo. Moreover, he talked about complex issues

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[102] "無人島に異国船懸り居候哉， 渡海中漂流致し外国へ参り候哉， 浦賀洋中に而諸国廻船之妨致し候而は差支候由，又は金花山之辺へ異国船罷在，右見物出来候趣. " Cited in Hirano 1998, 21.

[103] "漂流に托し、呂宋・サントーウイツ・アメリカ国辺へ罷越候心組"Cited in Tanaka 2011, 261. Also see Hirano 1998, 20.

[104] Tanaka 2011, 198–8.

> as if they were chit-chat, his true intentions are hard to grasp. He also told his accomplices that foreign vessels frequent an island off Kinkasan in Mutsu province, and that if you just pay a golden coin to some random fisherman, you can travel there by yourself.[105]

The subsequent incarceration of prominent exponents of Egawa's intellectual entourage has become known as the *Purge of Barbarian Scholars* (*bansha no goku* 蛮者の獄), a term centered on the government's ostensible rejection of foreign scholarship. Chōei was thrown into jail and Kazan was convicted to house arrest.[106] San'ei, having heard of the purge, immediately committed suicide. Impoverished and abandoned, Kazan followed him in the fall of 1841.[107] Hagura was demoted to a financial clerk in Osaka, but began to write about naval strategy again in 1849 under the government of Abe Masahiro 阿部正弘 (1819-1857).[108] In the Meiji period, the purge was used as evidence for Yōzō's incompetence and blind xenophobia, the necessary antagonist to the celebrated forebearers of Japan's modern revolution. In reality, the purge was not a rejection of foreign studies per se, but a personal retaliation against subversion of shogunal foreign policy.

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[105] "当今之政事を批判、剰蛮国船交易之義ニ付而は、浦賀洋中ニ而諸国之船邪魔致候へは、一時江戸困窮ニ相成、自から交易之道も開ケ可申抔、其外不容易事を常々雑談同様ニ申候様子、心底何共難心得よし、且奥州金華山之洋中之離島ニは異国人船繋罷在、其辺浜辺之漁夫ニ金一分遣候へは、自在ニ通路出来候旨、同好之者へ相咄し候由." Cited in Tanaka 2011, 265.

[106] Gardner Nakamura 2005, 39–41.

[107] *Kokushi daijiten,* keyword "Watanabe Kazan," in: JK.

[108] *Kokushi daijiten,* keyword "Hagura Kandō," in: JK.

Conclusion: A New Geopolitical Reality

By the time of Kazan's arrest, it had become common knowledge that Japan was embedded in an oceanic landscape of whale grounds, shipping lanes, and new, foreign island colonies. Given the naval importance assigned to whaling in Japan, foreign whalers were primarily seen as a military challenge. By the mid-century, it had moreover become evident that these harbingers of empire, lured to the prolific whale grounds off Japan, also represented competition over marine resources that became framed as "national resources" (*kokueki*). The collision of Japanese and Atlantic whaling frontiers was the result of a cycle of resource over-use, technological fixes, and shift to still-abundant regions. Japanese whale populations had been in decline over the early modern period, as whaling was practiced at a quasi-industrial scale since the seventeenth century. Subsequently, whaling businesses shifted from shallow inland bays into the abundant and more resilient whale habitats in the Kuroshio and Tsushima currents. Yet, with the onslaught of Westerners on the same whale stocks, catch rates declined noticeably since the 1830s.

Hundreds of whaleships plied the Pacific over the subsequent decades, often cruising within view of the land, and despite stepped-up seclusion policies, dozens of uninvited landings are recorded in the archipelago's periphery. By the 1840s, American whalers sailed all around the Japanese archipelago, especially in the prolific Kuroshio and Tsushima currents, but also in the Japan Sea and the Sea of Okhotsk. Unlike a century earlier, when Inō Jakusui 稲生若水 (1655–1715) described the

ocean as a "natural barrier against invasion,"[109] the discovery of offshore mingling and the sheer number of ship sightings made it undeniably clear that foreign incursions had to be expected all along the archipelago's shores. Responding to the shock of the *Morrison* incident at the entrance of Edo bay in 1837, shogunal executives tried to reconcile Japan's fragmented defense structure with new and pressing naval challenges. Among Nirayama Magistrate Egawa Tarōzaemon's advisors, the foreign whaling base in the Bonin Islands attracted major attention. Their plan to hedge the security risks posed by Russia's advance in the north by establishing a gateway for exchange with the British Empire by way of the Bonin Islands, were debated at the highest level of shogunal politics before Chief Senior Councillor Mizuno Tadakuni decided to postpone the expedition in 1838. A decade and a half before the famous arrival of Comodore Perry's squadron of black American steamboats at Uraga, the question how to respond to the developments in the ocean around Japan had become the chief issue occupying the minds of shogunal strategists. Japan was looking at a sea of islands populated by vessels from around the world.

[109] Endō 2007, 30.

CHAPTER FIVE

Technology, Energy, and the Geopolitics of the High Seas

> "Direct trade from our western coast with Asia became … a familiar thought; the agency of steam was, of course, involved, and fuel for its production was indispensable. Hence arose inquiries for that great mineral agent of civilization, coal. Where was it to be obtained on the long route from California to Asia? … Viewed in the light of commercial intercourse between the two hemispheres, this coal is worth more than all the metallic deposits we have enumerated."
>
> From the report of Commodore M.C. Perry's missions to Japan, 1856.[1]

The arrival of an American squadron at the very entrance of Edo Bay in the summer of 1853 made it undeniably clear to Japan's leadership that they were at the center of a geopolitical transformation that would necessitate major reforms in Japan's internal and external security strategies. Commodore Matthew C. Perry's black ships entered the harbor of Uraga on July 8th to deliver a letter from U.S. President Millard Fillmore (1800–1874) to the "Emperor" of Japan. In his letter, asking to establish a friendly trade relationship, Fillmore stated the necessity to protect and repatriate castaway whalers, and the American desire to purchase coal from Japanese ports for trans-Pacific shipping.[2] Earlier attempts to establish commercial exchange with Japan had

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[1] Perry 1856, 60, 75.

[2] The full text of the letter is rendered in Perry's report *Expedition of an American Squadron to the China Sea and Japan*. (Perry 1856, 156–7.)

been driven by the expectation of cheap gold and an underlying missionary zeal, but the emergence of pelagic steamboats turned gaining access to fossil fuels, establishing a chain of navigational infrastructure, and defining a legal framework for its maintenance into paramount strategical tasks. With Britain in control of coaling stations along the eastward routes from the Atlantic to East Asia, the coaling stations Perry envisioned all across the Japanese archipelago would have facilitated direct naval access from the United States.

Japan, once the eastern extremity of Asian port-to-port trade networks, suddenly found itself amidst a densely traveled maritime space. Since the Atlantic slave trade had come under pressure in the first half of the 19th century, construction sites, mines and plantations in the Americas had begun shifting towards indentured laborers "shanghaied" in Asian harbors and shipped across the Pacific along Japan's southern shores.[3] The coolie ships that, especially after the Gold Rush of 1848, carried thousands of laborers yearly from Chinese treaty ports to construction sites and mines in the Americas, were plying the Kuroshio route along Japanese shores.[4] These

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[3] The major Atlantic slave trading nations had banned slave trade, but not slavery itself, between 1802 (Denmark) and 1836 (Portugal). Britain was the first empire to completely ban slavery with the emancipation act of 1833. (Meagher 2008, 27–9.) The verb "to shangai" – which emerged in the context of the coolie trade – specifically describes the practice of drugging and abducting workers abroad. This scenario unfolded for at least part of the coolies, as it happened also to Tschin Ta-Ni, who later became the first Chinese to be naturalized in the city of Geneva. Rüegg 2015, 161–2.

[4] Botsman 2011, 1331. These *coolies* were given labor contracts over many years that often entailed release or even repatriation after fulfilment of their stint. In practice, however, coolie traders abusively lured Chinese men into exploitative labor contracts. Arnold Meagher calculates that of 138,156 coolie laborers shipped to Cuba between 1847 and 1873, 11,8% died at sea. (Meagher 2008, 149.) One British voyage in 1850 reached a mortality rate of two thirds. (Ng 2017, 319.) In

voyages occurred under dehumanizing conditions for their mostly involuntary passengers, a circumstance that led to several instances of mutiny in Japan's vicinity. This involved Japanese authorities into conflicts over repatriation, prosecution, and questions of maritime jurisdiction.[5] Whaling vessels that cruised the oceans for several years on each voyage, had relied on minor supply stations such as the Bonin Islands for decades, but the growing scale of trans-Pacific labor traffic necessitated a more complex network of marine infrastructure, as well as local supplies of fuel, water, and foodstuff.

This chapter discusses shifts in the geopolitical environment brought about by technological change in the mid-nineteenth century, and their impact upon Japan's strategical reorientation. The onslaught of commercial whalers on the seas around Japan discussed in chapter 4 had paved the way for American naval power in the Pacific by providing practical intelligence that was then abstracted and configured with a transferable body of theoretical knowledge of the ocean, its resources and its rhythms. Had the whale ships been content with the possibility of restocking water and foodstuff in peripheral islands off Japan once the "Shell-Repel Edict" had been revoked in 1842, the steam-powered navies that confronted the archipelago in the

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Peru, the destination of another 100,000 coolies over the same period, it was mainly guano mining that created labor demand. Edward Melillo has shown how the British encouragement for contract-based coolie exploitation was initially propagated as a statement of abolitionism, as the empire had banned slave trade in 1807 already. (Melillo 2012, 1038).

[5] Arnold Meagher finds that in 1850, four out of seven voyages to South America ended with mutiny, while suffered mortality rates of 27% by the time they reached their destination. (Meagher 2008, 140.)

1850s pushed for access to naval infrastructure on Japanese soil. For strategists such as Commodore M.C. Perry, gaining access to harbors in the Asia-Pacific was a move to secure infrastructure and resources necessary to expand political, commercial, and military influence across the Pacific. Emphasizing the importance of naval power and infrastructure as a prerequisite for imperial expansion, Perry anticipated the principles coined by Alfred Thayer Mahan at the century's close.[6] Over the 1840s and 50s, access to Japanese harbors thus gained priority as a result of a changing geopolitical environment rather than mere commercial interest in its domestic markets.

These developments were observed with consternation in the maritime capital of Edo. While defense reforms over the preceding years and decades had focused on strategic harbors, shogunal advisors warned that the city's coastal supply routes – plied by around 7,500 vessels yearly at the time – remained poorly protected against naval attacks.[7] Cargo trade to and from the million-soul city occurred for the greatest part at sea, in small and cheaply-built vessels that traveled without significant protection. As one advisor to the shogunate warned, a foreign invasion in

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[6] Naval strategist Alfred Thayer Mahan's publications in the 1890s–1910s analyzed historical strategies of securing the sea as a commercial space, based on the geography of resource, transportation, and military advantages. The role of military power for Mahan was essentially "the necessity to secure commerce, by political measures conducive to military, or naval, strength. This order is that of actual relative importance to the nation of the three elements–commercial, political, military." (Mahan cit. in Holmes 2014, 61.)

[7] Louis Cullen's extensive surveys of coastal trade statistics indicate a slight increase in number of vessels from 7,424 in 1726 to 7,741 in 1871. Cullen further estimates that at least 3,000 of these vessels annually were carrying rice into the city of Edo. (Cullen 2009, 187.)

a secluded bay of the Izu peninsula, even by a small fleet, could sever the capital's lifeline.[8] Had Tokugawa Iemitsu's government in the early seventeenth century kept international traffic at bay by limiting foreign trade to the western entrepôts of Hirado and Nagasaki, trans-Pacific traffic in the nineteenth century exposed the eastern capital more immediately to naval threats.[9] In 1845, the shogunate tackled a defensive reform that, as Noell Wilson has shown, united the expertise of harbor defense from Nagasaki with novel technologies to improve harbor fortification and shore-borne defensive artillery in Edo bay.[10] The subsequently tackled technology and infrastructure projects, reaching from the reverse-engineering of a Russian schooner to the construction of Japan's first steamboat, transcended the much-cited turning point in which the long expected menace materialized in the form of Perry's Black Ships.

Hydrography of the Kuroshio Highway

The opening of Chinese treaty ports, codified for Americans in 1844, and the American annexation of California in 1846 put Japan in the middle of a quickly developing trans-Pacific highway. In the mid-19th century, both sailing vessels and steamboats plying the Pacific had to choose their routes in consideration of winds and currents. Thanks to lieutenant Matthew Fontaine Maury's compilation of whalers'

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[8] *Izu koku go-biba no gi ni tsuki zonjiyose mōshiagesōrō kakitsuki,* p. 3, in: EGAN, Acc. no. Q3-14.

[9] Hang 2015, 115.

[10] Wilson 2015, 15. Motozuna 2004, 189–90. On the reconfiguration of maritime defense systems in the 1830s–50s, see Wilson 2015, 137–9.

observations of the oceans' rhythms, "unchanged and unchanging alone, of all created things"[11] as he perceived them, into comprehensive charts of the Pacific, by the mid-century, sailors were navigating an intricate maritime topography of currents and winds.[12] Ships traveling west by way of the Marquesas or Hawai'i took advantage of the propulsion of easterly trade winds and the westbound north or south equatorial currents, whereas the eastbound journey from Asia to the Americas had to avoid these equatorial phenomena. As Alexander Keith Johnston's (1804-1871) *Physical Atlas* of 1850 tells, coolie ships bound for Chile and Peru could choose to cross the South China Sea, pass the Sunda Strait and sail into the circumpolar current South of Australia to reach South America.[13] More direct, however, was the Japan route. "On the voyage from India to South America," Johnston wrote, "which is generally made during the south-west monsoon, ships keep to the north of the limits of the north-east trade-wind, which is usually met with only in latitude 28° and 29° north."[14] The trading and coolie ships that connected Canton and Shanghai to the Americas, having crossed the Tokara Strait north of Okinawa, regularly sailed just a few degrees south of the Japanese coasts.

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[11] Maury 1855, 50.

[12] On Maury's *Whale Chart of the World* and related publications, see Chapter 3.

[13] Meagher 2008, 150.

[14] Johnston 1850, 40.

Fig. 5.1) Revised edition of Johnston's map of the Pacific Ocean, 1855 (detail). The map emphasizes the relevance of currents for navigation across the ocean's vast expanse. Notice the markup for equatorial westbound routes (in red) and eastbound routes (in blue) following the northerly path of the Kuroshio or "Japan Current." (*Physical chart of the Pacific Ocean,* in: UC Berkeley, David Rumsey Map Collection, Acc. No.: 0372.015.)

Maritime drift was a significant factor for navigators in the mid-century, both with and without steam propulsion. Johnston's map of the Pacific shows the Kuroshio as a maritime highway for eastbound voyages, whereas westward sailing went by way of the North Equatorial Circulation. From Canton to Port Jackson (near Sydney), the route followed the Kuroshio current between 28° and 35° of northern latitude as far as 175° of eastern longitude, to turn sharp south to Fiji, minimizing deceleration by easterly winds and currents in tropical latitudes. (See Fig. 5.1). Though sailing upwind

was possible to a certain degree, opposed currents could significantly delay a voyage. Speeds of up to 250 cm/s are observed in some stretches of the Kuroshio, and speeds of up to 100cm/s prevail in the North Equatorial Current.[15] Oceanographer Silas Bent reported that in 1848, "bound from Hong Kong to Japan, we struggled for three days, after leaving port against this south-westerly current, without making a single mile on our course to the eastward."[16] Conversely, taking advantage of maritime currents could significantly accelerate navigation. In fact, it had been observed that Chinese sailors, rather than struggling with southward currents in the Formosa strait, tended to prefer the detour east of Formosa and sail in the Kuroshio current.[17] In 1874, the American diplomat Charles LeGendre (1830–1899), in a map of Formosa (Taiwan), recommended the route to Japan along the Kuroshio current east of the island, noting that the current there flows at "20 to 40 miles per day."[18] As trans-Pacific traffic volumes grew in the mid-nineteenth century, eastward travelers plying the fluid topography of the East Asian seas were likely to choose the path of the Kuroshio and travel in the immediate vicinity of 'secluded' Japan.

Law of the Stronger on the High Seas

The growth in trans-Pacific traffic around Japan soon drew after itself assertive navies eager to demarcate the reach of their governments' law. It was unavoidable that

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[15] Talley et al. 2011, 308, 342.

[16] Bent 1856b *A Paper on the Kuro-Siwo,* 4.

[17] Perry 1856, 428.

[18] I.e., approximately 2.3–4.6 *km/h.* See Charles LeGendre's map of Taiwan (*Formosa Island and the Pescadores*, in: LOC, acc. no. G7910 1870 .L3).

increased human presence all around Japan would lead to more intense interactions than occasional foodstuff bartering, but rather, invite conflicts that define new forms of territoriality to the formerly open seas. The landing of the American coolie ship *Robert Bowne* and the subsequent incursion of British and American navies in the Yaeyama islands in 1852 immediately evidenced the violence at play.

The *Robert Bowne* had been on her way from Amoy (Xiamen) to California or Peru for ten days when the 410 Chinese laborers on board mutinied on March 30, 1852. Abusing the coolies and throwing several of them overboard, the crew had stirred a violent uprising that killed the captain, two officers, as well as four sailors, and left five of the coolies dead in battle.[19] The mutineers took possession of the vessel and ordered the remaining crew to navigate until they met with land five days later at Ishigaki, a western outpost of the Japanese vassal kingdom of Ryukyu.[20] Most coolies had disembarked by the time the remaining crew members regained control of the vessel and returned to China. Back in Amoy, the crew reported the incident and demanded prosecution of the mutineers. Since the U.S. Far Eastern Squadron had no vessels nearby at that time, U.S. consul Charles W. Bradley (1807–1865) accepted support from Her Majesty's Ships *Lily* and *Contest,* which readily steered to Ishigaki to prosecute the fugitive coolies.[21] While trans-Pacific coolie trade was developing quickly in the hands of American shipowners, the British were still the chief human

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[19] Ng 2017, 319.

[20] Nishizato 1995, 10.

[21] *United States Diplomatic and Public Papers* vol. 17, doc. No. 85, 87, 97, pp. 238–9, 240–1, 261–2, ed. in: Davids ed. 1979. Also see: Nishizato 1995, 18–21.

traffickers out of China at that time, and were therefore interested in ready assertion of western business interests *vis-a-vis* the Qing state.[22] Quickly, the conflict between Qing China, to whose territory Ishigaki was mistakenly counted, and the United States that claimed jurisdiction since their vessel had been traveling the "high seas" at the time of the mutiny, developed into a multilateral confrontation that sprawled to the court of the Ryukyuan king and his Japanese overlords in Kagoshima.[23]

A speed missive sent from Kagoshima to the shogunate summarized the events as follows:

> On the 19th day of the intercalary 2nd month of this year [April 08, 1852], it was recognized that a foreign vessel approached the offshore of the island Yaeyama in Ryukyu, which stands under our rule. Immediately, nine Chinese came ashore on a rowing boat. [Officials] approached them and learnt that there were four hundred and five of them who had embarked at Quanzhou district and various towns in Zhangzhou district. Since a drought had caused famine in those places, they intended to move to England and make a living there. They boarded an English vessel with twelve Englishmen and departed from Amoy on the first day of the month. During the voyage, they met bad winds and drifted here.[24]

The coolies disguised their true predicament in front of the local authorities, causing a great surprise when the British gunboat *Lily* approached on May 4th, opening fire on the refugee camps the local administrators had set up for the castaways:

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[22] According to Ng's calculations, 73% of all coolies shipped out of China until 1852 were traded under the British flag. Ng 2017, 316.

[23] *United States Diplomatic and Public Papers*, vol. 17, doc. No. 129, pp. 312–4, ed, in: Davids 1979. Also see: Nishizato 1995, 21.

[24] "私領分琉球国之内八重山島沖瀬へ当[潤]二月十九日異国船一艘走揚候体相見得候處， 無間揚船より唐人九人致上陸候ニ付， 役々出会来著之次第相尋候處唐国泉州府并漳州府何州府之者共四百五人各在所雨遠【ママ】へ人民飢饉ニ付為渡世英吉利国へ罷渡度， 英人十二人乗合之英国船へ乗組、去る朔日廈門出帆、浮中逢南風， 漂来之處沖瀬へ走揚 … 追々揚船より唐人三百八十人上陸致止宿度申出候" *Shiryō kōbon*, *Kaei 5 nen shōgatsu kara shigatsu made*, 106–8, in: HEN, Kinsei Hennen Database.

> On the sixteenth day of the third month, a foreign vessel approached the same shore ... immediately, [the foreigners] opened fire, their cannons aimed at the huts we had set up for the Chinese. With five wooden boats, about two hundred foreigners disembarked holding swords and guns. When [our officials] asked the Chinese translator what this was all about, [he] replied that they would also capture those Chinese who had landed in Tsushima, but without giving any further details. In turmoil, the Chinese fled into the mountains, but three were shot dead and fourteen begged for mercy. Two who had [hoped to] board the ship ran into the mountains and ended their lives hanging themselves … As we inquired, the Englishmen that came to the island [said they] had invited the Chinese to sail from Amoy to a place called "Gold Mountain" [San Francisco], but during the voyage, the Chinamen lost control of their impulses and killed the captain and five of the crew at sea.[25]

The raids that lasted for a week killed at least forty coolies but resulted in the arrest of a mere five, the others having fled into the "jungle."[26] Ten days after the British had given up the chase, on May 22nd, the East India Squadron's sloop-of-*war USS Saratoga* appeared off Ishigaki and landed approximately one hundred armed soldiers. By the end of the month, they had captured between 50 and 60 coolies with which they sailed back to Amoy.[27] One year after the incident, the district magistrate of Ishigaki, Miyara Tōsō, reported that two hundred seventy Chinese castaways still burdened the local population. Miyara asked that they be returned to China at the expense of the Ryukyuan king.[28] One Chinese official later remarked that "the prince of the said

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[25] "三月十六日同所沖へ異国船一艘渡来 … 無間唐人召置候小屋へ向石火矢打掛， 揚船五艘より異国人二百人計太刀鉄砲を持致上陸候ニ付， 何様之訳に候哉、通事唐人へ相尋候處対馬にても何も子細無く先達而卸置候唐人共可搦捕旨致返答． 唐人ハ周章候て山中へ逃去候處三人ハ鉄砲を以打殺十四人ハ申詫之体に有之、本船列越二人ハ山中へ致自縊相果候 … 同十八日異国船一艘同所渡来ニ付来着之次第相尋候處当島へ来着之英国人唐人召乗廈門出帆金山ト申所へ渡海之浮中右唐人友欲心差越於浮中船主并水主五人為打殺候由" *Shiryō kōbon, Kaei 5 nen shōgatsu kara shigatsu made*, pp. 106–8, in: HEN, Kinsei Hennen Database.

[26] Nishizato 1995, 21.

[27] Nishizato 1995, 25–6.

[28] *Shomenshū*, pp. 4, 8, in: University of the Ryukyus, Miyara Dunchi Collection, acc. no: miyara27.

country [Ryukyu], as the tyranny of the English barbarians was extraordinary, greatly feared that if they were not delivered up immediately, the barbarian ships would return, make an exhaustive search, and give rise to trouble."[29] The *Robert Bowne* incident had made it clear that conflicts between third parties at sea could no longer be kept off the Ryukyuan shores.

Oblivious of Ryukyu's political status, the American Envoy in Canton, Peter Parker (1804–1888), insisted that "had the piracy been committed within the jurisdiction of China, the 21st article of the treaty would consign the pirates to the government of China, but occurring upon the high seas and under the flag of the United States, strictly speaking, it comes under the exclusive cognizance of the laws of the United States."[30] Yet, to keep expenditures for the trial low, and in the expectation of harsher punishment for the accused, he extradited the captive coolies to a Qing court.[31] The subsequent diplomatic showdown between the two empires

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[29] Memorial by Yu-feng, provisional governor of Min-Che, in: *United States Diplomatic and Public Papers,* vol. 17, doc. 143, pp. 340–432, ed, in: Davids 1979.

[30] Consul Peter Parker to Secretary of State Daniel Webster, in: *United States Diplomatic and Public Papers*, vol. 17, doc. 107, pp. 277-8, ed, in: Davids 1979.

[31] Against Parker's expectation, however, Qing courts ruled that the coolies were victims of injustice committed against them by American coolie traders, and punished them very mildly. This matter caused much frustration among U.S. representatives. (*Unitied States Diplomatic and Public Papers,* vol. 17, docs. 129, 130, 134, etc., ed, in: Davids 1979). U.S. authorities had an interest in keeping their protection of human traffickers at a low profile. The coolie trade, resembling the practices of Atlantic slave trade in many regards, had come under sharp criticism in China and the West. Chin-kong Ng writes that in the 1840s and 50s, the practice of human trafficking, illegal under Qing law, was connived by both British and Chinese authorities. (Ng 2017, 316.) U.S. diplomats tried to suppress the involvement of the American Flag in the coolie trade. In Feb. 1862, Congress banned

exposed systematic abuse on the part of coolie traders and triggered the outbreak of violent riots in Amoy in the fall of 1852 that, however, did little harm to the bustling business of human trafficking along the Kuroshio route.[32] While no commentary was made *vis-à-vis* Ryukyuan officials regarding the Westerners' claims to principles of jurisdiction on the "high seas," which U.S. Consul Peter Parker had cited so insistently vis-à-vis Qing officials, the *Robert Bowne* incident abruptly showed that conflicts between third parties offshore could end with violent action on Ryukyuan or Japanese territory.[33]

Encounters with foreign sailors landing in distress or in pursuit of trade had become more frequent over the preceding decades, but the violence demonstrated in the aftermath of the *Robert Bowne* mutiny evidenced a new, frightening level of maritime threats. Shimazu Nariakira, ruler of Satsuma domain and overlord of Ryukyu, informed the shogunate that the incident in Yaeyama was by no means the

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Americans and the U.S. Flag from involvement with coolie trade to South America, though changing little more than the harbor enrollment of American coolie ships. (Meagher 2008, 146–7.)

[32] A detailed account of the abuse endured by the coolies is given in a *Letter from Qing official Seu Kwang Tsin to Peter Parker*, in; *United States Diplomatic and Public Papers*, vol. 17, doc. 129, 312–4, ed, in: Davids 1979.

[33] "Had the piracy been committed within the jurisdiction of China, the 21st article of the treaty would consign the pirates to the government of China, but occurring upon the high seas and under the flag of the United States, strictly speaking, it comes under the exclusive cognizance of the laws of the United States." U.S. Consul Peter Parker to Secretary of State Daniel Webster, in *United States Diplomatic and Public Papers*, vol. 17, doc. 143, 340–2, ed, in: Davids 1979. The legal principle usually cited in this regard is, as Henry Wheaton wrote in 1836, "*terrae dominium finitur, ubi finitur armorum vis* [territorial rule ends where the power of weapons ends]; and since the introduction of fire-arms, that distance has usually been recognised to be about three miles from the shore." Wheaton 1836, 216.

only intrusion, but that over the preceding half a year, at least three times, the Ryukyus were approached by foreigners who "appeared exhausted and were therefore given porridge and hard vegetables."[34] In one incident, surprisingly, the landing party even included a woman.[35] It seems that after the revocation of the order "not to think twice but shell and repel" any foreign vessels in 1842, some captains began seeking out remote islands of the Ryukyus, where requests to purchase fresh food could only be dealt with pragmatically. In the spring of 1847, for example, the American whale ship *Franklin* approached an island that may be Iheya north of Okinawa, where several poised officials, seated on straw mats, awaited the sailors on shore. While they lacked a common language, the officials readily procured two live cows which they traded to the captain for two rolls of fine cotton cloth.[36] Years before the establishment of formal diplomatic relations with the great whaling nations, Japan's outlying islands had become an integral part of the oceanic food web that supported the growth of economic activities at sea. The *Robert Bowne* incident made it painfully clear that such peaceful encounters were but the harbingers of much cruder imperial interests in on the high seas.

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[34] "草臥候体相見得候ニ付粥并堅菜等相与候" *Shiryō kōbon*, *Kaei 5 nen shōgatsu kara shigatsu made*, pp. 200–1, in: HEN, Kinsei Hennen Database.

[35] *Shiryō kōbon*, Kaei 5 nen shōgatsu kara shigatsu made, pp. 200–1, in: HEN, Kinsei Hennen Database.

[36] *Nakahama Manjirō den,* p. 95, in: OVBE, Acc. No.: dehumidified closet B-31.

The Quest for Access and Fossil Fuel

The emergence of steam-powered shipping along the major river systems in the 1810s, and, by the 1820s, along the most densely travelled maritime routes, brought about major changes to the infrastructural management of riverine and coastal shipping.[37] Pacific steam navigation had first become commercialized with the founding of the British-financed *Pacific Steam Navigation Company* (PSNC) that started operating a steam-powered mail line along the Chilean coast around 1840.[38] Though costly and financially risky, such enterprises served a strategic purpose as they facilitated transport and communication according to a regular schedule, particularly in regions dominated by seasonal wind patterns or strong currents, such as in the Humboldt Current off western South America. Alexander Keith Johnston, author of *The Physical Atlas* cited above, having traveled on the PSNC line at some point in the 1840s, reported that the trip from Guayaquil to Lima against the current, which on average took 25 days, could now be traveled in a mere five days.[39] Steamboats were closely tied to a coastal network of coaling stations, a factor that sharply reduced their scope of operation. The benefit of sailing according to exacting schedules in defiance of seasonal winds and weather only outweighed the cost of coal on certain stretches. As Daniel Headrick has pointed out, steamboats provided a particular military advantage on rivers, as warfare and economic incorporation along

[37] Headrick 2012, 181–91.

[38] Smith, C. 2018 *Coal, Steam, and Ships*, 213–8.

[39] Johnston 1850, 40.

the Mississippi, or British river warfare in the Opium war shows.[40] In China, British and American steamboats began operating coastal steamer lines in the mid-1840s, but commercial oceangoing voyages remained chiefly wind-powered for decades thereafter.[41] It was not until 1871 that the British navy commissioned their first mast-less, or steam-only warship, and until the close of the century, developing an empire-wide network of coaling stations remained an essential security task for the British navy.[42]

Steam-powered access to East Asia was chiefly a race between Britain and the United States. The British *Peninsular and Oriental Steam Navigation Company* extended its regular route network from London as far as Hong Kong in 1845, and to Shanghai in 1850.[43] For the United States, steam-powered shipping year-round elevated the "environmental independence" of naval communication, to use John Law's term, but it remained tied to coaling stations along the Indian Ocean route.[44] From their inception, American plans for trans-Pacific steam routes stood in the sign of out-speeding the routes controlled by Britain.[45] Accordingly, projects to establish steam-powered routes across the Pacific had been in discussion in the U.S. Congress

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[40] Headrick 2012, 182–8.

[41] Meagher 2008: 149.

[42] Gray 2018, 1–10.

[43] Motozuna 2004, 144–5.

[44] Lagw 1984, 244.

[45] As Perry later articulated this vision, "Shanghai might be considered the terminus of the English and the commencement of the American mail; and thus an original letter could be sent west by way of Europe, and its duplicate east by way of California, the first arriving at Liverpool about the time its duplicate reaches New York." Perry 1856, 212.

since 1848. The task of examining Engelbert Kaempfer's (1651–1716) and Philipp Franz von Sieblod's reports of abundant coal in Japan was entrusted to the U.S. Navy's Commodore Matthew C. Perry.[46]

The fierce competition between the British and American navies also evolved around the exploration of local coal resources. Peter A. Shulman shows that since the late 1830s, Borneo had been at the focus of coal exploration for both empires, but by the 1840s, the race's scope had broadened.[47] The discovery of "heavy, brilliant" coal, "easily ignited & burning with a bituminous gassy flame"[48] by a naval expedition to northern Taiwan shifted the quest for fossil fuels north. Though trade with Taiwan was limited due to the absence of treaty ports until 1860, Americans feared that the island's coal resources may motivate a British occupation. In 1857, Gideon Nye (1812–1888), a businessman and later U.S. Consul in Macao even urged the United States to pay ten million dollars to purchase the island from the Qing.[49] This suggestion remained unanswered, however, as the focus of coal exploration in the Far East was shifting from Formosa to Japan.

Like ore, petroleum and other natural resources, coal is manyfold in quality and value. Transport accessibility and availability of labor in the vicinity of coal fields was just as central, since coal mining, more so than petroleum drilling, is heavy, labor

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[46] Shulman 2015, 79–80.

[47] Shulman 2015, 70.

[48] "Letter from Commodore Ogden to Commodore Geisinger, June 27, 1849," in: *American Diplomatic and Public Papers*, vol 12, doc. 2, 1973, 3, ed, in: Davids 1979.

[49] "Letter from Gideon Nye to Caleb Cushing, April 10, 1857," in: *American Diplomatic and Public Papers*, vol 12, doc. 43, 1973, 269. ed, in: Davids 1979.

intensive, and prone to strikes or infrastructure failure.[50] Steven Gray, in his study of steam navigation in the British empire, shows that mining coal and supplying it to coaling stations in an empire-wide supply web came with both logistical and social challenges: the properties of coal from different locations vary greatly in caloric value, storability, and cleanliness––the clearer the smoke, the later a ship was detected, and the higher the caloric value, the better the fleet's performance.[51] Since the allocation of coal over vast distances was costly, labor-intensive, and exposed to disruption, appropriating local coal resources was front and center in Perry's explorations since the mission's inception in 1851, as Peter Shulman has found, though initially with mediocre results. It was known from Kaempfer's and Siebold's reports that the Japanese mined coal at a considerable scale, but to determine its quality and caloric value remained one of Perry's tasks.[52] The Japanese were well aware of the Western interest in coal, though they were reluctant to reveal its true quality to the Americans, intentionally supplying them with coal of low quality, as Perry suspected.[53] On the longer term, the old reputation of Japanese coal proved true: the sinking of the Takashima coal mine in Hizen province under an Anglo-Japanese joint venture in

[50] Timothy Mitchell argues that the dependence of entire national economies on carbon augmented the impact of strikes and elevated the agency of labor in political negotiation. The shift to less labor-intensive oil regimes was a move to outsource tensions and reduce the system's vulnerability. Mitchell 2011.

[51] Gray 2018, 67–8.

[52] Perry 1856, 60.

[53] Perry 1856, 481–3.

1866 boosted Japanese coal exports, and by the 1880s, Japanese coal became the preferred type among navies cruising Asian waters.[54]

The quest for coal was a race against domestic and international competitors. The navy's plan to purchase large quantities of foreign coal for its Asian missions was kept discretely hidden even from the U.S. Senate to avoid pushback from the domestic coal industry.[55] At the same time, business refusals on the part of deposit operators complicated Perry's attempts to purchase fuel for his squadron, which burned between 26 and 36 tons daily, at an approximate value of US$ 800.[56] Concerned about French or Russian missions that may get ahead of his negotiations with Japan, Perry, as well, installed agents in Shanghai to obstruct Russian Admiral Yevfimiy Putyatin's attempts to purchase coal.[57] Once the American squadron had reached Shimoda, Perry's negotiator Captain Adams investigated the availability and location of Japan's best coal and conducted comparisons with coals from Formosa and England.[58] The first verdict was ambivalent:

> "The Japan coal produces considerable s[c]oria and ashes … Whether the shrewd Japanese supplied an inferior quality to deceive their visitors, or whether from ignorance of the article and want of mining skill they innocently brought that which was inferior, cannot be certainly decided; but as good coal certainly exists in Japan, and as the natives not only use it, but, according to Von Siebold, know very well how - to mine it, the probabilities are that they purposely furnished the poorest samples."[59]

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[54] Gray 2018, 83. The coal mine of Takashima near Nagasaki was located in immediate vicinity of the sea and was therefore particularly convenient for shipping and export. Checkland 1984, 139.

[55] Shulman 2015, 80–1.

[56] Shulman 2015, 86.

[57] Shulman 2015, 85.

[58] Perry 1856, 341.

[59] Perry 1856, 483.

Like in England, where coal became used widely since the seventeenth century when wood became scarce, the Japanese had indeed mined and burnt fossil coal long before the emergence of steam engines. Fossil energy was used for industrial purposes, though without use of steam engines or other mechanical translations of heat into movement. Chiefly, fossil energy was used to boil down sea salt, to heat houses, as well for other industrial practices such as boiling out whale blubber.[60] The western provinces of Hizen, Chikuzen and Nagato were famously rich in coal fields, the latter alone reaching an estimated annual output of 27,000 tons around 1857.[61] In short, in the mid-nineteenth century, imperial navies in East Asia were in fierce competition over energy resources with Japanese coal as a major object of contention.

[60] Yasuba 1977, 43; Fujimoto 1973, 5.

[61] Sakamoto 2018a *Bakumatsu, ishin-ki ni okeru jōkisen un'yō*, 27.

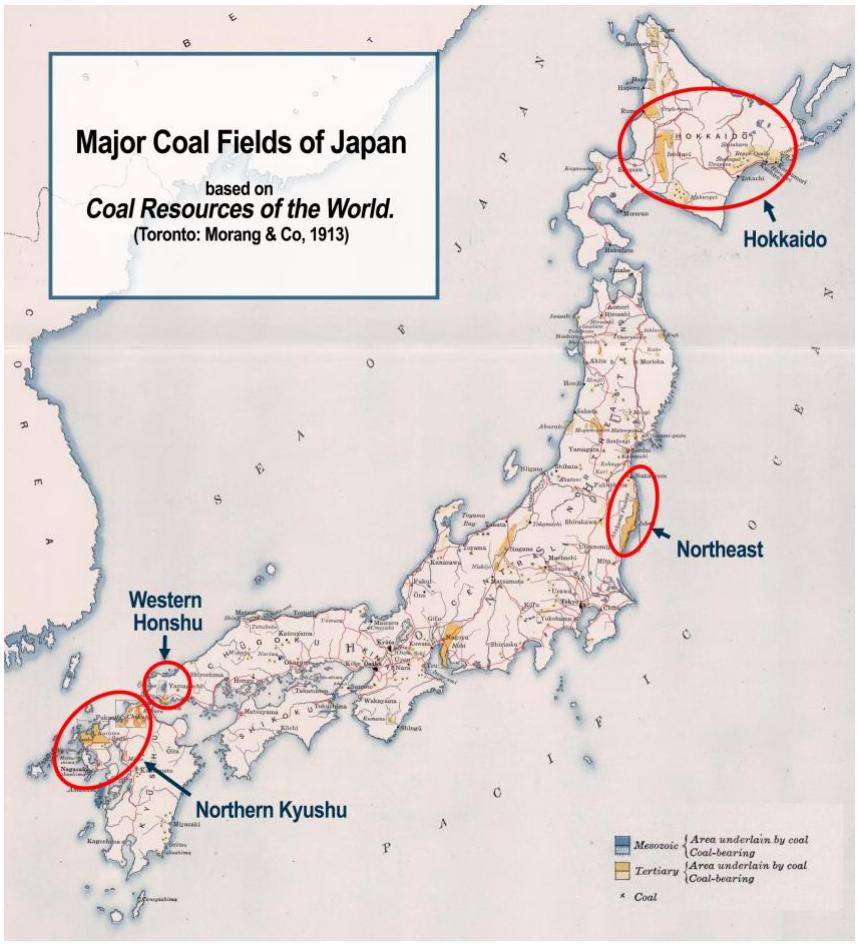

Fig. 5.2) Map showing the major coal fields of Japan. Compiled based on *Coal Resources of the World*, in: UC Berkeley, David Rumsey Map Collection, Acc. No.: 2249.019.

Infrastructure and a Proto-Mahanian View of Sea Power

As I have argued in chapter 4, the expansion of U.S. power to the Pacific in the mid-nineteenth century was based on an intimate connection between navy, commerce, and science. Jason Smith finds that up until the Civil War, America's naval presence consisted chiefly of a whaling and trading fleet, and military missions were generally subservient to the nation's commercial interests. A Mahanian impetus emphasizing proactive expansion of naval infrastructure and the occupation of strategical sites gained dominance after the Civil War, which had left the commercial fleet

decimated.[62] Towards the close of the nineteenth century, Alfred Thayer Mahan (1840–1914) provided the intellectual basis for naval modernization with his magnum opus *The Influence of Sea Power Upon History*, much along the lines of Perry's vision for American presence in the Pacific. Mahan was acutely conscious of geography, defining sea power as the "the necessity to secure commerce, by political measures conducive to military, or naval, strength."[63] Perry, in some way, anticipated the role the navy would play in the *fin-de-siècle* imperialism as he pursued intelligence on geography and access to infrastructure in strategic locations *ahead of* commercial fleets.

Before approaching Japan proper, Perry had prepared coal deposits for up to 500 tons in Naha; in the Bonin islands, he purchased a sizeable coastal plot measuring a thousand yards to construct a harbor and coaling station.[64] Besides the common Kuroshio route south of Honshu, the eastbound routes envisioned for steamboats at Perry's time, were to lead across the Tsushima strait to Hokkaido and the Aleutians

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[62] Smith, J. 2018 *Boundless Sea*, 5–6. Alfred Thayer Mahan's theories, articulated compactly in 1891, see maritime geography as one of the essential factors of naval power. The survey of geographical circumstances and the development of a supply infrastructure was the core priority for naval warfare. (Holmes 2014, 61–3.)

[63] Alfred Thyer Mahan, cited in Holmes 2014, 61.

[64] The contract between Matthew C. Perry and Nathaniel Savory "Title Deed of Property" is part of *Matthew Calbraith* Perry *Additional Correspondence, 1799–1945.* In: HOU, Acc. No.: MS Am 1815.2. Also see: *Untitled collection of Documents created during Commodore Perry's visit to the Bonin Islands, 1853*, p. 3. In: OVBE, Acc. No: Great safe, Compartment 6, 6-2. Perry 1856, 212; 282. Fifty dollars were paid in purchase of land to the American-born Nathaniel Savory, whom Perry had installed as an informal authority in the islands.

before turning south along the American coast.[65] The harbor of Hakodate in the strait of Tsugaru, compared to Gibraltar by the commodore, lay just along this route. Accordingly, the harbor's opening was the first concession stipulated in the Convention of Kanagawa of 1854.[66] Steam shipping based on the arrangements for coal infrastructure he made, Perry later advertised his deeds, would reduce the shipping time from Shanghai to New York to 52 days, bringing the two metropoles closer than London and Hong Kong.[67]

Perry's proactive take on the navy's role is reflected in the plans he harbored for the expansion of American commerce along naval infrastructure provided by the military. The quest for strategically located supply nods led the commodore's fleet to the Bonin Islands, the main supply hub for the pelagic whalers that plied the seas south of Japan. For the navy base Perry envisioned, the islands were in an extremely advantageous location, just a few day's sail off Edo bay. At a time before the opening of Japanese harbors was codified, the commodore's main goal was to provide infrastructural support for the coolie trade:

> Already many thousands of Chinamen are annually embarking for California, paying for their passages each $50, and finding themselves ill everything, excepting water and fuel for cooking their food. These provident people are the most patient and enduring laborers, and must, by their orderly habits, add greatly to the agricultural interests of California ... The importance of the Bonin Islands to the advancement of commercial interests in the east is so great that the subject has more or less occupied the mind of the Commodore since his return.[68]

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[65] Shulman 2015, 83.

[66] Perry 1856, 437. *Convention of Kanagawa,* Article II. The full text of the convention is given in Perry 1856, 378–9.

[67] Perry 1856, 212.

[68] Perry 1856, 212.

Despite the controversies within the U.S. administration in view of unequivocal evidence regarding the abusive nature of the coolie trade, the hypocritical but dominant opinion remained that it is unnecessary to discourage the trade since "there are many Chinese who are willing to go under the terms offered."[69] To expand this highly problematic business, Perry envisioned the Bonin Islands as a supply station for passers-by, and as a base to police the region for deserters and mutineers.

A frontier settlement of 30-odd Pacific migrants, attracted by the opportunity to farm and trade in the heart of the frontier, the colony in the Bonin Islands was founded in 1830, underwritten by the settlers' private funds.[70] The islands were, not unlike the mountainous *Zomia* in James Scott's study of Southeast Asian frontiers, a lawless space whose mere existence undermined the precepts of state rule. Scott describes the frontier as "a rough and ready homeostatic device; the more a state pressed its subjects, the fewer subjects it had ... Mobility allowed farmers to escape the impositions of states and their wars."[71] Much alike, the ship-jumpers that passed through or gathered in the colony were subverting on-board hierarchies. Doing away with this valve for sailors driven harshly at sea was high on the commodore's agenda and subservient to the interest of America's whaling industry.

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[69] *United States Diplomatic and Public Papers,* vol. 17, doc. 37, p. 81. ed, in: Davids 1979.

70 Chapman 2016a *The Bonin Islanders*, 23–24. Chapman also concludes that the 1830 settlement was "more a product of opportunism and ambition by adventurous individuals rather than grand imperial designs of colonization planned by leaders in Britain" (Chapman 2016a *The Bonin Islanders*, 23–24).

[71] Scott 2009, 4.

Policing and state interference undermined the autonomy of those who had come to the stateless frontier town fleeing the harsh and precarious conditions of life aboard a whaler. A few individuals, namely three Anglo-Saxon men that formed an informal authority on the islands, saw an opportunity to expand their influence as representatives of the U.S. navy. In a legal "constitution" Perry stipulated for the colony, the commodore installed the settlers Nathaniel Savory, James Motley (1810–1866) and Thomas H. Webb (*d.* 1881) as Chief Magistrate and Councilmen, the islands' formal authority. In his later publication, Perry claimed that the wording of this constitution was "an interesting specimen of this original effort at constitution-making by wanderers from many lands, civilized and savage … prepared, concurred in, and adopted by [them] in assembly,"[72] but a form stipulating the constitution's paragraphs held in the local archive of Ogasawara Village, with date and signatures left blank, indicates that most likely, Perry or his middlemen presented the islanders with a ready-made text. The thirteen paragraphs of this constitution banned physical punishment and cemented the privileges of the Anglo-Saxon councilmen. Perhaps most importantly, they addressed the problem of ship-jumping:

> Section 4th It shall be unlawful for any resident, settler, or other person in this island to entice any body to desert from any vessel that may come into this port, or to harbor or secrete any such person, as may desert of his own accord.

[72] Perry 1856, 383–5; "Constitution of Peel Island." In: *Untitled collection of Documents created during Commodore Perry's visit to the Bonin Islands, 1853,* p. 4, in: OVBE, Acc. No: Great safe, Compartment 6, 6-2.

> Section 5th Any person who shall entice, counsel, or aid any other person to desert from any vessel in this port, or shall harbor or conceal him to prevent his apprehension, shall be liable to a fine not exceeding fifty dollars.[73]

To enforce his law, Perry enrolled Nathaniel Savory of Bedford in Massachusetts, one of the first settlers in the Bonin Islands, as a member of his mission and sent one of his men to assist him "for advice and instructions."[74] For Savory, who until the islands' take-over by Japanese in 1862 continued to hoist the stars and stripes over his bamboo hut, the position at the order of the U.S. Navy came with status and authority.[75] It also meant protection from pirate raids, a threat Savory had experienced firsthand. When pirates plundered the island in the fall of 1849, they stole a sum of $2,000 in cash and a value of $2,000 in livestock from Savory alone, moreover abducting his underage wife, as one visitor recorded two years after the fact. Savory's wife, "a young girl born on the island," seemed to have little reason to feel attached to her husband, "for by all accounts she gave information as to where his money and valuables were hid, and departed nothing loth."[76] Unlike the ship-jumpers that fled the harsh conditions aboard a whaler by absconding into the hills until their ship had departed, Savory had all reasons to welcome protection and cooption by the powerful commodore.

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[73] *Constitution of Peel Island,* in: *Constitution of Peel Island,* in: *Untitled collection of Documents created during Commodore Perry's visit to the Bonin Islands, 1853,* p. 3, in: OVBE, Acc. No: Great safe, Compartment 6, 6-2.

[74] *Letter from Matthew C. Perry to Nathaniel Savory*, in: *Constitution of Peel Island,* in: *Untitled collection of Documents created during Commodore Perry's visit to the Bonin Islands, 1853,* p. 11–2, in: OVBE, Acc. No: Great safe, Compartment 6, 6-2.

[75] *Ogasawara-tō go-takkai ni tsuki go-yō dome*, ed. in Tanaka 1983, 57.

[76] Cholmondeley 1915, 26–28.

Fig. 5.3) Photography of Bonin Islanders in front of a straw hut, taken in 1875 by Matsuzaki Shinji. Standing on the left is John Bravo from Brava in the Cape Verde islands (see introduction). *Photographs of Bonin Islanders*, image 10, in: OVBE, Acc. No.: Steel Closet, Compartment B1 (top), no. 157.

Perry was convinced that the Bonin Islands could carry a substantial settler population and strengthen American presence in that part of the Pacific. Rather than a commercially profitable colony, the Bonin islands would serve as a supplier of fresh food for the vessels that had to remain at sea over extensive periods of time. Perry observed that

> Savory (…) carries on a trade in sweet potatoes of his own raising and a rum of his own distillation from sugar cane, with the whaling ships which frequent the place; and he had prosecuted his business with such success as to accumulate, at one time, several thousands of dollars. (…) The plains on the bay only have been cultivated as yet, but there is every

> reason to believe that the others are equally fertile, and might be made to yield sufficiently to support a large population.[77]

At a time when scurvy or vitamin deficiency was an ongoing challenge for long-distance voyages, and Japanese harbors were still closed to American vessels, the islands could not only serve as an entrepot of imported coal and foodstuff, but as a central node in the supply web for naval activities in the western Pacific.

Perry's men unloaded several cows, sheep, and goats on the islands which the commodore strictly prohibited to hunt for five years.[78] The cows should have become providers of protein for hungry crews stopping by. Introducing "useful" species to non-agrarian––or be it, 'less civilized'––places, also carried symbolic meaning as an act of imperial magnanimity since the Pacific voyages of James Cook (1728–1779).[79] It was technically difficult, however, to introduce large mammals to distant islands by ship. The settlers of the Bonin Islands, colonizers in their own right, had managed to introduce goats and smaller game for an occasional hunt, but the traffic Perry anticipated for his prospective navy base required more systematic protein production. Having planted his flag on the Bonin Islands, Perry steered his squadron north, reaching Uraga on July 8th, 1853.

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[77] Perry 1856, 200, 209.

[78] *Letter from Matthew C. Perry to Nathaniel Savory, June 17, 1853,* p. 10, in: OVBE, Acc. No: Great safe, Compartment 6, 6-2.

[79] Fischer 2017, 18–22.

Defending Maritime Edo

The sight of the smoking black ships triggered turmoil among Japanese leaders and commoners, but it did not come unexpectedly, as his mission stood in a series of western attempts to negotiate trade treaties with Japanese authorities. "Perry's arrival came as a shock," writes David Howell, "but it was the shock of an earthquake to people living on a fault."[80] Not only had the Japanese been regularly updated about third party attempts to approach their islands in diplomatic missives from the Dutch, they had been informed of Perry's mission specifically by their spies in Naha, the capital of the Ryukyu kingdom, where the commodore had paid a visit ahead of his mission to Uraga.[81] On May 26, 1853, at over a month's notice, the senior council in Edo had received a speed note from Naha that the American squadron was taking course on Edo by way of the Bonin Islands.[82] While he had noted the presence of Japanese vessels at Naha, Perry's intention was to impress the Japanese by pretending his steamboats had crossed the Pacific straight from California, underpinned by his president's faulty claims that American steamboats would cover that distance in a

[80] Howell 2014, 297.

[81] On the Dutch 'special news' or *betsudan fūsetsugaki* sent to the shogunate, see Matsukata 2011, 99–122. In 1852, in view of Perry's upcoming mission, the Dutch governor fitted out the new *opperhoofd* of Nagasaki with plenipotentiary powers to negotiate a formal treaty ahead of the Americans. (ibid., 110.) Thus, the Japanese were informed specifically of the American intent to sail into Edo bay. (Sugiura 1996, 292.)

[82] The 04/19 in the year Kaei 6 in the Japanese calendar. *Shiryō kōbon, Kaei 6 nen shōgatsu kara gogatsu made,* pp. 159–61, in: HEN, Kinsei Hennen Database.

mere eighteen days.[83] In reality, Perry's fleet had crossed the Atlantic, traveled along the African coast and entered East Asian Waters through the strait of Melaka.[84]

The squadron of steamboats that approached Edo Bay, unleashing energy at an unparalleled scale, left a profound impression on those who first witnessed the power of their turning wheels. As one sensationalist *kawaraban* or 'wall newspaper' from circa 1854 told,

> The steamboat, also known as 'fire wheel boat' is a vessel originally used in Europe and other regions, but in our age, it is told, [the technology] has spread to America, where they are being built [as well]. As they run, these vessels cover thirty *ri* [118 km, *sic!*] per hour, that makes three hundred sixty *ri* [1414 km] in one day and a night, regardless of wind, rain, and opposed waves. Once they depart, they ply the oceans like dragons![85]

The appearance of such behemoths doubtlessly elevated the sense of public discomfort about the eerie maritime world that closed up on the Japanese islands.

Yet, the perplexity of the reading public about the black ships overshadows the fact that officials among the shogunate as well as several domains had been preparing specifically for the American incursion. Steam engines were by no means unknown in Japan, but imitating the appallingly expensive technology was not necessarily the most effective way to enhance naval strength. Over the previous years, projects to

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[83] "By some it is said to be a dependency of the Prince of Satzuma, of Japan; others suppose it to belong to China. The probabilities, however, are all on the side of the dependence, more or less absolute, of Lew Chew on Japan, and probably, also of some qualified subordination to China, as they undoubtedly send tribute to that country." Perry 1856, 151–2. Fillmore's letter to the "Emperor" of Japan in Perry 1856, 256–7.

[84] Shulman 2015, 84–5.

[85] "蒸気船一名火輪船ト云元ヨウラツパ其外諸方にて用し船なり、今世ハ亜メリ加州へ渡り造立スと云、此船走時ハ一時三十里一昼夜三百六十里を走、大風大雨逆浪をいとわず、発る時ニハあたかも大海を龍之渡事が如し" *Jōki karin sen no zu*, in: NDL, Acc. No. 亥二-92.

improve maritime defenses had been expedited, yielding some handsome achievements that reached from high-tech cannon forging to the reverse-engineering of steam engines.[86] While Perry's bold action produced a plethora of vernacular testimonies that in hindsight elevate his coming into a pivotal moment for Japan's perception of the world, a series of institutional and infrastructural reforms had been under way for years at that time. Since the appointment of then twenty-six year old Abe Masahiro to the position of Chief Senior Councillor (*rōjū shuseki*) in 1845, and his assumption of the self-instituted position of Coastal Defense Officer (*kaibōgakari*), defense projects had begun preparing for the new naval threat.[87]

After the *Morrison Incident* of 1837, the unsuccessful attempt of an American merchant ship to land at Uraga under the pretext of repatriating seven Japanese castaways, the preparations were made for a renewed approach at the entrance of Edo Bay. After 1843, the Uraga magistrate permanently had a Dutch translation service at his disposition, and in 1849, the shogunate awarded the magistrate the authority to negotiate with foreign vessels in order to effectuate their departure. Naval preparations around the capital gained further urgency when James Biddle's *USS Columbus* attempted to enter Edo Bay in 1846.[88] As Noell Wilson puts it, Senior

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[86] Specifically, these improvements included landfill barriers to channel harbor entrances and the construction of a reverberatory furnace first by Saga domani, then by shogunal magistrate Egawa Tarōzaemon in Izu province. Efforts to construct a steamboat were first tackled by Satsuma lord Shimazu Nariakira in the late 1840s. (Wilson 2015, 142–4; Motozuna 2004, 189–90.)

[87] *Kokushi Daijiten,* keyword Abe Masahiro, in: JK. Abe was named Senior Councilor (*rōjū*) at age 25 in 1843.

[88] Wilson 2015, 135.

Councillor "Abe [Masahiro] was crafting Uraga as an indispensable defensive and diplomatic portal—adding a fifth "*guchi*" to Arano's four-site rubric (of Matsumae, Tsushima, Nagasaki, and the Ryūkyūs)—a new "gateway" on par with that of Nagasaki."[89]

Almost immediately after Perry's departure from Uraga, the senior council entrusted Egawa Tarōzaemon, the shogunal intendant of Izu province, with some core defense improvements to be tackled right away.[90] The realization that not just Uraga, but the very city of Edo was exposed to immediate maritime threats called for new, and more comprehensive defense strategies. The technology projects tackled in the aftermath of Perry's first visit were threefold in nature. Harbor defense positions or '*daiba*' were constructed in a dash off Edo, flanked by a series of robust and versatile schooners able to steer steeply into the wind. More powerful cannons were forged in cutting-edge reverberatory furnaces, and crews were trained on the first series of western-style schooners constructed in Japan.[91]

Lessons taken from the Opium Wars in China a decade earlier were informative for the scenarios of naval attacks Japan presumed. In their decisive move against China, the British, equipped with thirteen steamboats and seventeen sailing vessels, had navigated up the Yangzi delta and blocked the Grand Canal that

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[89] Wilson 2015, 137–8.

[90] Nakada 2001, 192–8.

[91] The schooner *Heda-gō,* which was constructed based on Russian plans, was the first in a series of schooners in the service of "flanking" the cannon positions off Edo. Crews were recruited from fishermen of the Izu peninsula, though lack of familiarity with the open sea complicated the project at first. *Zushū Heda-mura ni oite o-uchitate ainari sōrō schooner…,* in: EGAN, Acc. No.: S2770.

connected the southern granaries to the northern capital.[92] Vernacular narratives of the war had been received with fear and fascination among the Japanese public. The best-selling, though largely fictional account of the war, *Kaigai Shinwa* or 'News from Overseas' published in 1849 prominently brought out the British strategy of targeting supply routes:[93]

> First, [the British] seized strategic positions from the Qing and with those as a foothold, they used the power of wind and currents over thousands of miles of coasts to rob in the morning and menace at night; or they stole rice and grain from the cargo vessels at sea *en route* to Beijing, in order to exhaust the soldiers of that country. No strike-back could ever succeed, and they imposed their terms of peace.[94]

The novel, which originally circulated in a small run of only about fifty copies, within a few months drew book-length responses pondering about naval defense, and was subsequently banned by the censorship authorities. Since the novel sparked concerns about Japan's naval preparedness, it circulated for just a few months before censorship stroke down on the author Mineta Fūkō 嶺田楓江 (1817–1883) and his publisher. Even after Fūkō was imprisoned, an unknown group of activists reprinted his novelistic warnings in a much greater run.[95] Though Fūkō was imprisoned and

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[92] Headrick 2012, 204.

[93] In its final offensive in the first Opium War, Britain deployed sixteen warships, among which five steamboats to block the Grand Canal that connected the granaries of the Yangzi delta to the capital of Beijing. River navigation had been the chief advantage of early steamboats over sailing and rowing vessels. Headrick 2012, 2014.

[94] "先清国千要の地を奪ひ、爰に據りて足溜りとなし海辺数千里の間風潮の勢に任せ朝に掠め夕に撟劫し、或ハ沖合にて北京へ運漕も米穀を奪ひ取り、彼の国の兵士をして奔命に疲弊せしめハ必ず計策の出る所なく終に和睦を我に請んのみ." *Kaigai Shinwa*, vol. 2, 12, in: WUL, Acc. No. リ 08 05488.

[95] Okuda 2008, 214.

later banished from Edo, his narrative of the British naval onslaught was read and cited by prominent intellectuals such as Sakuma Shōzan 佐久間象山 (1811–1864) and his student Yoshida Shōin 吉田松陰 (1830–1859), as Bob Tadashi Wakabayashi has shown.[96]

Perhaps the shogunal intendant in Izu Province, Egawa Tarōzaemon Hidetatsu "Tan'an" (1801–55), had studied the development of naval warfare in China based on similar accounts. The magistrate pointed out repeatedly that while overall military preparedness was high, the scenario of an attack on the maritime supply routes to Edo posed a major risk. In a report to the shogunate submitted around the time of Perry's arrival, Egawa wrote:

> Should it happen that the foreigners realize that they can strangulate (*yakkō*) Edo, and suddenly mobilize a great number of gunboats, they could easily come ashore and thoroughly explore the land and geography, since our [coastal] defense is not prepared … If bad years and tumultuous times continue, and the wrongdoers launch an attack, we are afraid, this would turn into a terrible debacle. If, again, we allowed them to get hold of Ōshima or the eight other islands, and they would install many cannons on its mountain slopes, it would be impossible for our weak Japanese ships to approach them, and the maritime path to Edo would be severed. … As long as we don't have any gunboats, we may find ourselves in plight. Normal Japanese boats will not suffice as gunboats, even the large ones. If they cannot be constructed solidly enough, they cannot become the wings of our defense positions.[97]

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[96] Wakabayashi 1992, 4.

[97] "異国ノ人若其ノ扼喉ナル事ヲ識リ，不意ニ多クノ軍船ヲ乗付候共，元ヨリ防禦ノ御備無御座候間， 心易上陸仕十分ニ土地ノ形勢ヲ察シ (…) 且又凶年等打続騒々敷時節賊等右弊ニ乗候ハヽ，一大事可相成可懼ノ甚ト奉存候, 且又大島外八嶋為賊掠ラレ数多ク大銃ヲ岼上ニ被設置候ハヽ、手弱日本船ニテハ寄付候事モ相成間敷、且江戸表エノ海上運送ノ道絶可申ト奉存候 (…) 御軍船モ無之候テモ果シテ不都合ノ儀モ可有之ト奉存候、右御軍船ハ平常ノ日本船ニテハ中々間ニ合不申、縦大船ニ無御座候共、丈夫ニ仕立不申候テハ、御備場ノ羽翼トモ相成間鋪奉存候、"*Izu no kuni go-biba no gi ni tsuki zonjiyose mōshiagesōrō kakitsuki*, p. 3, in: EGAN, Acc. no. Q3-14.

Unlike earlier defense strategies for Edo Bay, inspired at Nagasaki's harbor defenses, Egawa's assessment emphasized the importance of maritime supply routes. Accordingly, the shogunal intendant urged to expand defense dispositions offshore, a task that required the construction of large and solid vessels. As Jakobina Arch discusses in more detail, under the Pax Tokugawa, Japanese shipbuilders had adapted to wood scarcity and the pressure of commercialized shipping markets by designing cheap vessels easy to handle, but inapt for pelagic sailing, not to mention naval warfare.[98] The use of steam engines was immediately recognized as a key component of naval power, but both technological and financial considerations curtailed their attractive power for domestic shipbuilding. More essential than constructing a steam engine was designing solid hulls and versatile rigging to patrol the maritime highway.

Technological Competition Within

The house Egawa had belonged to the trusted inner circle of shogunal security policy for generations. Despite the loss of several bright members of his intellectual entourage to censorship strikes and incarceration, as well as other setbacks, his projects suffered under the conservative Tempō reforms of the late 1830s, Egawa remained the most senior official in the Izu peninsula, and was therefore among the leading policy makers concerned with maritime defense. Besides their responsibility for a mountainous stretch of the main highway to and from Edo, the Tōkaidō, and the

[98] Arch 2023 (forthcoming). *Early citation kindly granted by the author.*

checkpoint at Hakone, the family was responsible for policing maritime traffic into the city.[99] Vessels bound for Edo from both western and northeastern Japan were required to undergo a preliminary inspection at Shimoda before entering Edo Bay at Uraga. In the function of the Shimoda Magistrate, Egawa controlled and monitored the most important shipping routes between the western domains and the shogun's capital.[100]

In order to enhance maritime defense, Chief Senior Councillor Abe Masahiro chose a strategy of incorporation and cohesion that would remain his signature throughout his career. The involvement of remote and traditionally less-trusted *tozama* daimyo such as Nabeshima Naomasa 鍋島直正 (1814–1871) of Saga domain into the new defense exigencies granted access to technological achievements financed by the domains, but the act also caused concerns about a loss of authority for the shogunate.[101] In fact, as Wilson shows, a shift of military power towards the domains had been ongoing since the shogunate had begun paying for domainal defense services in Ezo.[102] Unlike the spatially defined defense responsibilities of each coastal domain, the incorporation of frontier regions and international entrepôts created new exigencies that went at the shogunate's expense and were therefore tackled but hesitantly.

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[99] Nakada 2001, 96.

[100] Nakada 2001, 81–3. This office the family held since the 17th century, with a brief punitive removal in the 18th century.

[101] Wilson 2015, 136.

[102] Wilson 2015, 15.

Productive collaboration with certain key domains did not change the fact that the political entities of Japan were acting independently and in competition with each other. The ascent of Saga domain's Nabeshima Naomasa into a key position for naval defense, for example, granted access to his domain's technological achievements, such as high-quality cannons forged for Edo batteries at his reverberatory furnaces in 1855, or the steam power technology developed by Tanaka Hisashige 田中久重 (1799–1881) in the same year.[103] Other domains, however, saw themselves competing against the shogunate and among each other. Most tellingly, with Satsuma and Chōshū, the most fierce competitors over defense technologies were those domains that would ultimately confront the shogunate and claim leadership in the construction of a new political order after 1868. Shimazu Nariakira 島津斉彬 (1809–1858), the ruler of Satsuma domain had given the order to translate Gideon Jan Verdam's *Volledige verhandeling over de stoomwerktuigen,* a Dutch work dating to 1837 that represented the state of the art of steam engine technology at its time. Completed in 1849, Mitsukuri Genpo's 箕作阮甫 (1799-1863) translation provided the guidance for the reverse engineering of a steamboat watered in 1855 after years of trial and error.[104] Long before their ultimate confrontation, the shogunate found itself in a technological race against the southwestern domains.

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[103] Morris-Suzuki 1994, 58.

[104] Motozuna 2004, 189–90. Though this first steamboat of Japanese making only reached an output of two to three rather than the planned twelve horse powers, the case shows that research into steam power technology had been well on its way years before Perry landed a steam-powered model train in Edo.

Sakamoto Takuya points out that by 1868, the shogunal navy controlled just about one-third of the 86 steamboats in Japanese services.[105] Chōshū domain harbored particular ambitions in the creation of a domain navy and reached a force of eight steamboats by that time. The domain was rich in coal fields in favorable locations, reaching an estimated annual output of 27,000 tons by 1857. This coal it traded with Satsuma, especially after the bombardment of Shimonoseki in 1863, which opened an irreparable abyss between the shogunate and the two powerful domains. The shogunate, however, remained in control of Japan's only wharf capable of carrying out major engine repairs, the *Seitetsu-jo* in Nagasaki.[106] Though the founding of a machine factory and a wharf were expedited in the vicinity of Edo, the shogunate's first and only self-made steamboat, the 60-horsepower gunboat *Chiyoda-gata* was not commissioned until March 1867, just months before the fall of the Tokugawa shogunate.[107] The race for naval technology was and remained a competition among the autonomous entities of fragmented Japan.

Over the 1840s and 50s, Japan proved quick at adopting novel technologies for naval defense, and at building up a steam-powered navy. Despite its abundance in coal, however, Japan did not immediately shift gears and use fossil energy as its motor

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[105] Based on Katsu Kaishū's *Kaigun rekishi,* Yamamoto counts 29 steam boats sailing for the shogunate versus 57 under domain flags. Sakamoto 2018, 22.

[106] Sakamoto 2018, 27, 32.

[107] Motozuna 2004, 100. Delays on the part of the shogunal shipbuilding projects are related to both organizational back-and-forth, and to diplomatic interference that deflected the technological impetus towards investments into Dutch and American-made steamboats. Besides the *Chiyoda-gata,* the shogunate succeeded in the construction of two steam-powered cargo vessels. Motozuna 2004, 189.

for industry and transportation. In fact, mastery of naval technology alone was not a single game changer, as its implementation relied on specific structures of communication and order. John Law has pointed out in his 1984 assessment of tools for remote rule over long-distances that naval technology only gains relevance if combined with disciplined crews and "environmentally independent" navigational information.[108] As the next chapter will elaborate in more detail, naval modernization in mid-nineteenth century Japan was by no means limited to the appropriation of novel technologies, but it necessitated the construction of transferable and non-place-specific navigational knowledge, as well as direct structures of order and communication.

Conclusion

This chapter has shown that the so-called opening of Japan was not a sudden event that programmed the downfall of the Tokugawa shogunate. Rather, economic development and technological change on the 'high seas' had gradually enmeshed the country into a contracting Pacific World. Ongoing tensions with maritime powers had inspired a strategical turnaround in Japan that involved a more proactive appearance at sea, inspiring reforms in the shogunate's defense strategies. Commercial use of the ocean had made locations such as the Bonin Islands and outliers of the Ryukyus central nodes in a supply web of protein, vitamins and fresh water. By 1850, the emergence of trans-Pacific coolie trade and the advent of steam-powered navigation

[108] Law 1984.

shifted the geopolitical interest of maritime powers, chiefly the United States and Russia, towards strategic harbors and coal resources along the Kuroshio route. American naval strategists, competing against Britain for naval access to East Asia, recognized Japan's abundant coal fields as a source of high-quality energy supplies essential to steam shipping, and Japan's harbors as ideal infrastructure positions for the new trans-Pacific shipping routes.

These developments changed Japan's situation in various ways: observations from the Opium War in China had made it clear that maritime security threats were no longer centered on specific harbors, but they threatened to sever the vital circulation of goods along Japan's maritime highways. Since the approach of American vessels to Edo bay in 1837 and 1846, a most sensitive risk to national security was perceived to virtually unprotected naval supply routes to the maritime capital of Edo. The revocation of the order to fire at foreign ships "without thinking twice" in the aftermath of the Opium War as well as the disposition of Mizuno Tadakuni and Torii Yōzō, the architects of the conservative strike-downs of the Tempō era, from the apex of shogunal and urban policy making, paved the way for naval reforms. The new Chief Senior Councilor, young Abe Masahiro of Fukuyama domain, chose an integrative strategy of naval improvements with domainal know-how. These projects, reaching from harbor defense to cannon forging and research into steam power technology, had to cope with financial restraints and the fragmented structure of regional defense. Meanwhile, maritime confrontations such as the *Robert Bowne* incident of 1852 called to mind that that commercial traffic on the "high seas" had already yielded to a naval *realpolitik* that turned the sea itself into

a jurisdiction ruled by the law of the stronger. For Japan, reorienting itself amidst this new geopolitical environment necessitated reforms that would enable deployments of state power offshore. Accordingly, the offshore was made a frontier of Japan's technological and institutional transformations.

CHAPTER SIX

Tokugawa Colonialism and The Symbolism of Modern Statehood

> While I was stationed on this island, we sent out a pilot whenever a whaling vessel or other ships of different countries appeared outside the harbor, in order to inform them of the hidden reef and their anchoring place. Since Mr. Webb lived in Kiyosaki village, from where one can easily see the harbor entrance, [I] handed him our national flag (*kokki*). I ordered him to go and guide the arriving vessels as soon as they were sighted.
>
> Shogunal superintendent Obana Sakunosuke on his administration in the Bonin Islands, 1863. [1]

On January 18, 1862, the Japanese steamboat *Kanrin-maru*, weighed down by cannons, entered the harbor of Port Lloyd in the Bonin Islands some 1,000 kilometers south of Honshu. Magistrate of Foreign Affairs Mizuno Tadanori 水野忠徳 (1815–1858) informed the inhabitants, an eclectic group of Westerners and Pacific Islanders, that Japan had claimed the archipelago as part of the Japanese territory.[2] Only thirty-two years earlier, a group of whalers had for the first time settled permanently on the

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[1] "予此嶌に在嶌中、各国の鯨漁船其他の船、港外に見ゆれば直ちに水先案内を出して、右の暗礁と碇泊の所とを告知せしむ. ウヘブ儀、洌崎村に住し、港外を望むに便なれば、此者にも我国旗を渡し置、入港船を見掛次第、案内に出べき旨を兼て命じ置たり. 右案内料軍艦は十五トルラル、鯨漁船其外商船は五トルラルづつ取立たり. 是は以前より島民の極め置たるにて、新たに此料を極めたるにあらず." *Ogasawara-tō fūdo ryakki*: 57–58, in: NAJ, Acc. No. 173-0185.

[2] I have previously published on the innovations in cartographic technology first applied during this colonial experiment. See Rüegg 2017.

islands, creating an eclectic community of retired sailors, ship jumpers, and settler-farmers that catered to the international whaling vessels that had come to cruise the Kuroshio Frontier.[3] Once the magistrate had staked his claim in front of the islanders, the Japanese expedition started to map and explore the island. Captain Ono Tomogorō was dispatched to map the coastlines and measure the depth of harbor beds, while exploration squads were sent inland to inventory the islanders' gardens, examine the soil and attempt the introduction of familiar crops. They invented new Japanese toponyms to label the land and occupied space culturally through land reclamation, carefully documented in maps and landscape paintings. Soon, however, they noticed that the land they had found represented much more than merely another patch of newly cleared farmland. The forty-eight settlers present at the time had immigrated from Hawai'i, Pacific Islands, Europe and America that had first reclaimed arable soil in the remote harbors, had created an ecosystem just as cosmopolitan as their own community. With whaling ships steadily pulling into the harbor, the seemingly remote islands were in fact an *entrepôt* of people and species, with high fluctuation and a quick pace of trade and exchange. Having come with the intention to subject and inventory a minor patch of new Japanese soil, the explorers soon realized that the Bonin Islands were in fact a window to the Pacific and its networks of trade and know-how. At this sixth open harbor, now under Japan's

[3] On the early settlement in the islands, see Cholmondeley 1915.

proactive control, they could collect intelligence on technology, people, and formerly unknown species.

The simple plan to incorporate a remote periphery with a handful of settler-farmers in fact became a formative moment in Japan's institutional reforms on the eve of the Meiji Reform. This chapter discusses the innovations, institutional and intellectual, necessitated to gain control over the quickly fluctuating society and its eclectic environment, and the intellectual challenges this posed to the inventorying of climate and culture. *Honzō* botanist Abe Rekisai observed that through their mere presence in such an unlikely place, plants revealed their own history of migration and kinship, inspiring new narratives of settlement, colonization and claims.[4] Magistrate Obana Sakunosuke 小花作之助 (1829–1901), again, contributed his part to 'civilizing' the land by re-domesticating feral chickens, allegedly the living proof of an earlier Japanese colony in the islands.[5] Japanese intellectuals and administrators constructed historical narratives of the human and feral realm they discovered through the realization that the supposedly remote island were actually the gateway to a much larger network of exchange and migration spanning all of the Pacific.

During a moment of proactive foreign policy in the early 1860s, the Tokugawa shogunate undertook a small-scale colonial experiment that reveals changing Japanese attitudes toward foreign ethnicities, modern technology, and maritime

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[4] *Nansho kōki*, p. 93, ed. in Suzuki 2012.

[5] *Ogasawara-tō Yōroku,* vol. 1, entry 3, p. 17, in: OVBE, Acc. No. Great Safe 2-3-1.

space. Contact with whalers and earlier inhabitants brought new people, knowledge, and species to Japan. The shogunate's resolute annexation of the archipelago in 1862 reflects the emergence of a new economic approach to modernizing colonialism: while maintaining an ostensible conformity with the Confucian ideal of agrarian societies, the Tokugawa shogunate encouraged whaling as a means of turning the offshore into a space of production. The step to the Bonin Islands effected a transition from a more static definition of Japanese space to modern expansionism, just as the maps this occupation generated merged earlier methods of mapmaking with the modern features needed for long-distance control.

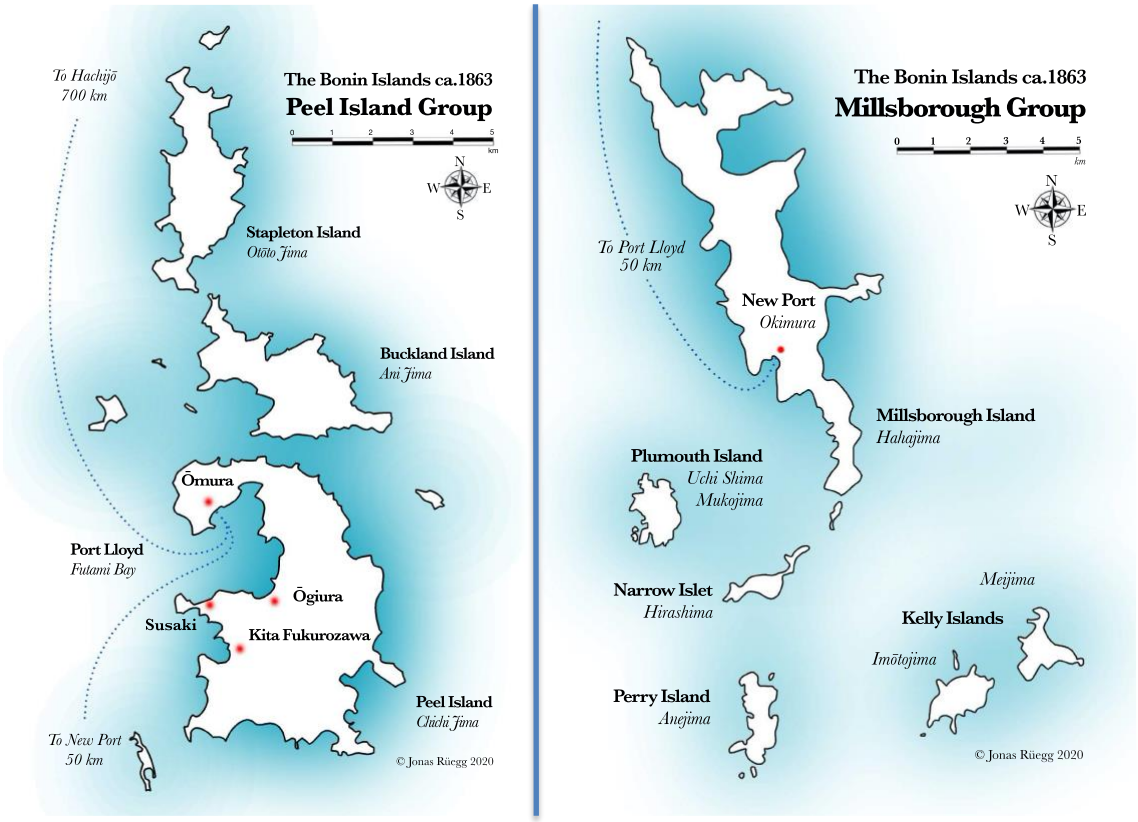

Figure 6.1) Map of the Bonin Islands with English and Japanese toponyms. (Author's design).

The incorporation of the islanders, the establishment of Japanese settlements, and the exploration of maritime resources reflect an ongoing process of redefinition concerning not only territorial boundaries, but also natural limits of development and expansion. Ethnicity and the status order were no longer the cardinal criteria that spatially demarcated 'Japan,' but malleable political and geographical definitions that legitimized the integration of an overseas territory into the Izu archipelago, pushing the Japanese sphere some 700 kilometers farther into the Pacific.[6] In so doing, the Tokugawa government reconciled its earlier experiences in controlling the lands of the Ainu in modern-day Hokkaido with the mechanisms of the Western empires it faced. The explicit subjection of territory by law was thereby combined with the cultural transformation of territory as reflected in maps that defined the new borders of the modernizing nation-state. As long as the Japanese outnumbered the earlier settlers, and rule over people and resources could be enforced the permanent presence of non-Japanese individuals was unproblematic for the Japanese project. This shift toward an internationally comprehensible model of sovereignty necessitated new discursive conceptions of geography. The encounters of Japanese officials, scholars, and farmers with the cosmopolitan community in the Bonin Islands

[6] Especially through the study of borderlands, the performative aspect of this cultural separation of 'Japanese' and 'foreign' becomes evident. Mainly looking at Hokkaido, David Howell argues that individual and political identities of early modern Japan were defined through polity, status, and 'civilization.' Similar performances of otherness were practiced in quasi-colonial Ryukyu. (Howell 2005, Smits 1999, 19).

released a tremendously creative energy as the islands came to figure as an entrepot of species, knowledge, and technology. Seemingly peripheral, the islands were in fact a gateway to the Pacific sphere. Thus, they served as a laboratory for political, economic, and biological globalization as Japan redefined its environment and itself in the last years of Tokugawa rule.

Figure 6.2) The Japanese steamboat *Kanrin-maru* firing salvoes upon its arrival at Port Lloyd in Peel Island, January 18, 1862. Painting by Miyamoto Gendō. In: *Ogasawara-tō shinkeizu* vol. 3, p.25, in: NDL, Acc. No.: W243.

Climate, Agriculture, and a Model for Japanese Colonialism

A watercolor painting by Miyamoto Gendō 宮本元道 (*b.* 1824) records the entry of the steamboat *Kanrin-maru* into the harbor of Port Lloyd in the Bonin Islands as a dramatic instance of Tokugawa gunboat diplomacy (Fig. 6.2). A visual response to the arrival of Matthew C. Perry's black ships in the harbor of Uraga less than a decade earlier, the painting contrasts a group of islanders approaching on a primitive outrigger canoe as the samurai, sailing under the flag of the rising sun, fire salvoes.[7] In reality, the eighty-one Japanese explorers had been wandering for almost two weeks until they finally located the remote archipelago in the open sea.[8] The colonial experiment in the Bonin Islands—even if it lasted for only a year and a half—reveals how Japan, despite facing humiliation through unequal treaties and even a Russian aggressions on the island of Tsushima, was able to enforce a territorial claim against Western competitors on its Pacific side.[9] Thereby, Edo made use of the same language of power that Western nations had just recently used to address Japan. As we shall see, not only was a visual narrative inspired by Commodore Matthew Perry's monumental report on his East Asian missions adapted in order to buttress Japan's territorial claim against imperial competitors. An historical narrative and a legal

[7] *Ogasawara shima fūdo ryakki* (1863 or later), 43, in: NAJ, Acc. No. 173-0185.

8 Thirty-one of these men were officials; fifty more were crew members of the *Kanrin-maru*. See the complete list of names in *Ogasawara-tō go-takkai* (1862), ed. in Tanaka 1983, 38–41.

[9] On the Tsushima Incident of 1861, see Auslin 2004, 77–84.

basis meant to satisfy both Confucian ideals and international customs were constructed as the bedrock for bureaucratic control.

Annexation or Colonization?

When Foreign Affairs Magistrate Mizuno Tadanori went on shore in Port Lloyd, he declared to the islanders that they were by no means ordered to leave, as they were now "just like the people of Japan."[10] The representatives of each household were interviewed and asked to sign a statement that they would "respect the law proclaimed by the Japanese envoys and are willing to live on good terms with the Japanese that will immigrate. They pay tribute to the *tycoon* of Japan in exchange for the guarantee to keep their fields."[11] From the meticulously recorded interviews that were conducted in the process, we get an impression of the population's diversity and the individual destinies that led the settlers to the islands.

What the Japanese faced was a young and continuously changing community of settlers that could claim to have made the islands inhabitable with their bare hands. A man called Charlie "Kanak" (1822–?) who owned some land in Port Lloyd was born on a Pacific island in 1822, and had been working on British and American whaling vessels for several years before he settled down to farm.[12] Many settlers were former

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[10] "則ち日本の国民同様に候" *Nantō kōkai nikki*, cit. in Tanaka 1983, 246–7.

[11] "日本使節御取○相成候法則相守可申且在住之為当島江来る日本人と慈親住居いたし度且植付せし畑地ハ其侭安堵し、免許問し候段日本大君江御報礼有之存候" *Sadame,* p. 12-13, in: OVBE, Great Safe, Comp. 2, 2-5.

[12] *Sadame,* p. 12-13, in: OVBE, Great Safe, Comp. 2, 2-5.

whalers dropped off by their ships when they had fallen ill, and many may had illicitly abandoned their crews to evade the harsh conditions of life aboard a whaler. Others, again, came on purpose to break new grounds, or to marry into a settler household. A family of ten living in Hahajima had apparently set over from a Pacific island on an American vessel in 1860, three years after a woman from their community had married a German settler in Hahajima.[13] The circumstances under which Pacific Islanders migrated to the Bonins aren't documented in detail, but given indications of "blackbirding" and especially trafficking of women in various instances, it must be assumed that not all did so out of their free will. (See chapter 7). The experience of these islanders that became an ethnic minority in their own land stresses the importance of overcoming the misleading distinction between present-day borders and overseas colonies in the analysis of Japanese colonialism.[14]

For Mizuno, appearing as a benevolent ruler was crucial both to buy the population's cooperation, and to assert the project's legitimacy based on the ideal of a filial relationship between a government and its subjects held high among Confucian

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[13] *Sadame,* p. 15-17, in: OVBE, Great Safe, Comp. 2, 2-5.

[14] Sociologist Ishihara Shun has argued that the Bonin Islands, which were returned to Japan in 1968 after twenty-three years of U.S. occupation, remained a colony throughout the prewar period: following a strategic pattern tested in Ezo, the Meiji government "Japanized" the archipelago by funding immigration and land improvement. As will be explained in chapter 7, by 1882, dwellers of all descents were granted Japanese nationality to avoid conflicts with extraterritoriality. Nevertheless, imperial legislation continued to discriminate against "naturalized" islanders (*kikajin*), finally by prohibiting international trade, the main business for English-speaking islanders in the archipelago (Ishihara 2007b *Wasurerareta shokuminchi*, 63).

scholars. Mizuno refrained from collecting taxes from the foreigners, but rather emphasized his offer of protection and care, an offer many islanders may have welcomed, given the islanders' experiences with pirate raids and their earlier collaboration with the U.S. Navy.[15] In an act of demonstrative benevolence, Mizuno stationed several physicians on the islands, thereby procuring medical services to locals and visitors. When an unknown thief stole and ate some of Savory's ducks, Mizuno wanted to compensate Savory for his loss in the name of the Japanese government. When Savory was unwilling to accept the money at first, Mizuno responded: "Since you are permanently living on this island, you are just like the people of Japan. The people are like a child and the government is like a parent… You should accept this as a gift from parent to child, without any hesitation."[16] Like a provident father, the magistrate adopted the stateless orphans and was ready to instruct them for their better.

The drawing of borders to Japan's sovereign space coincided with the empire's gradual expansion into its previously vaguely defined borderlands, where theory and practice of state rule had faded into local society and competing international interests. In fact, it is questionable whether Japan had at any point been a nation state

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[15] In 1849, the islands were raided by the crews of two ships that stole "all they could get hold of," and cajoled the crew of a third vessel at anchor to abandon their ship. (Cholmondeley 1915, 26–8.)

[16] "其方共、当島に永住相願ひ候上は、則ち日本の国民同様に候間(...)国民は子の如く、政府はすなわち親の如くにて、親より子へ与へ候筋合ひに付き、いささかも斟酌に及ばず." *Nantō kōkai nikki,* cit. in Tanaka 1983, 247.

before it became an expansive, multi-ethnic empire.[17] The island of Ezo, seen as beyond the pales of civilization traditionally, had gradually been incorporated into Japan's commercial sphere since the 17th century, though not so much formally as an extension of the *kokudaka* system, as commercially and by cultural contact, as Brett Walker's *Conquest of Ainu Lands* shows.[18] Despite Tokugawa efforts to map the northern frontier as far as the Amur Delta and to define more concrete boundaries to the Japanese sphere of influence, it was not until 1869 that Ezo was formally annexed as the eleven provinces of the Hokkaido region, and only in 1875 was a binding border with the Russian empire defined in the Sea of Okhotsk.[19] Likewise, the Ryukyu islands' ambiguous status as a de-facto colony of Satsuma domain lasted until 1872, when Japan unilaterally declared the kingdom a domain (*han*) and later, a prefecture.[20] The Bonin islands, while a part of early modern Japan's virtual geography, differ from these territories in that they had no history of gradual integration into Japan's commercial and political realm. To the contrary, the islands had long been claimed – though not controlled – by the British, and attracted the interest of the United States, when Japan haphazardly staked its claims.[21] Home to a foreign population, the

[17] David Howell, for example, points to the ambiguous status of the Ainu in Ezo under the Tokugawa, while Mark Caprio stresses the fact that Okinawa it took extensive assimilation policies to culturally incorporate the Ryukyu islands into modern Japan. Howell 2005, 110–2; Caprio 2009.

[18] Walker 2001, 11–12.

[19] Yamamoto 2015, 89.

[20] *Nihon daihyakka zensho*, keyword *Ryukyu han,* in: Japan Knowledge.

[21] Chapman 2017, 501.

overnight colonization was a diplomatic gamble that all the more necessitated pervasive historical and legal narratives supporting a rightful claim.

To be sure, the Japanese made no formal distinction between the Bonins as a colony and Japan as the motherland, or not more so than the Tokugawa state was fragmented within itself. After all, the shogunate asserted that they were *re*-claiming an island that had long been a part of Japan. As an ostensible extension of the shogunal lands of eastern Japan, the Bonin Islands were put under the authority of Egawa Tarōzaemon, the shogunal representative in Izu province, also in charge of the seven islands of Izu. In fact, the expedition to the Bonin Islands was announced to foreign representations in Japan as a "preparatory inspection of the islands in Izu Province and opening (*kaitaku*) of the island Ogasawara,"[22] pretending it was a mere detour on a routine inspection.

The term *kaitaku* 開拓 or 'opening,' used to describe colonizing activities at the time, had formerly been used in the context of domestic land clearing projects. The word *shokuminchi* 植民地, used to mean "colony" in the modern period, was introduced to the Japanese language through Shizuki Tadao's 志筑忠雄 (1760–1806) 1801 translation of Englebert Kaempfer's *History of Japan* to describe Western expansionism. The characters meaning 'grow' and 'population' that Shizuki chose for his new creation indeed emphasize the relocation and expansion of a settler population rather than the subjection of natives and exploitation of resources.

[22] "伊豆国附島々備向取調且小笠原開拓" Tanaka 1983, 244.

Kaitaku, by contrast, is a compound of the characters *taku* 拓 'to open' and *kai* 開 that also signifies 'to open' in the modern language. In the classical language, however, *kai* could also mean 'to use' or 'to put something to use,' or as it were, to open its potential.[23] 'Putting to use' embodies the meaning of colonization in the Tokugawa world: defying the Malthusian trap, an ever growing population needed to expand its sphere of production towards an internal frontier of unclaimed forests, marshlands, and valleys, waiting to be put to use as producers of calories. Under the Japanese *kokudaka* system, population growth was seen as a marker of good government, and it rewarded domain lords whose status within Japan was determined relative to the theoretical productivity of their domains. The Tokugawa state ranked lords and vassals by the potential size of their armies, calculated based on their lands' theoretical rice output (*kokudaka*). Accordingly, each ruler had an incentive to expand the agrarian surface within his domain.[24] Though the agrarian frontier's

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[23] The classical dictionary *Kanjigen* further lists 'to free,' 'to warm,' or 'to move' among the meanings of *kai.* In some instances, the broader meaning 'putting to use' for *kai* 開 is still valid in the modern Chinese language, e.g.: *kāichē* 開車 'to *use* a car,' i.e. 'to drive.' This incidentally resonates with the Meiji slogan *bunmei kaika,* often translated as 'Civilization and Enlightenment,' which could alternatively be rendered as 'Civilization and Utility' to convey its classical meaning more accurately. Tellingly, the early modern term for 'colonization' *kaitaku* remained in use until the mid-Meiji period with regards to colonial development of Okinawa and Hokkaido. Only around the colonization of Taiwan did the common term 'colony' *shokuminchi* become used with regards to the Japanese empire. (*Kanjigen* smartphone version 2.2.4.; *Pleco Dictionary*, *Nihon Kokugo Daijiten*, in JK).

[24] Ochiai has shown that increasing tax revenue with population growth inspired Japanese domanial lords in the 18th century to run anti-abortion campaigns. Ochiai 1999, 204–10. James Scott, in his

expansion to the Bonin Islands was, in a way, a continuation of this logic, the stakes were of a completely different nature. As the Tokugawa performed the unity of a nation state, *kaitaku* was reduced to just one aspect in the grander concept of modern colonialism. Only in colonizing Taiwan in 1895, when they saw themselves at eye's height with Western imperialism, did the Japanese adopt the modern term for *colony* in the context of their own empire.[25] Given the former use of *kaitaku* in the expansionist visions of Hayashi Shihei, Satō Nobuhiro, or Tōjō Kindai (see Chapter 4), and their realization in the colonization of an extraneous Pacific island in 1862 through a modernizing practice of land occupation, the etymological distinction between these two concepts for analytical purposes can be misleading.

A new narrative of legal possession was needed to counter competing claims such as those made by the British, and thus had to be framed in an internationally intelligible narrative. The name Ogasawara, which the shogunate used in stating its claims toward foreign powers in 1861, replaced the formerly used toponym Munin Jima, or "No-Man's-Land," which had well captured official Tokugawa's disinterest in the Pacific since the seventeenth century.[26] As explained in chapter 3, the new name

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work on Southeast Asia, remarks that rice-based states regarded population density as "the key to authority and power." Scott 2009, 42.

[25] *Nihon kokugo daijiten* 2007.

[26] To my knowledge, the first official use of this toponym in shogunal documents dates to 1838, when an expedition with Watanabe Kazan and other prominent intellectuals was supposed to be dispatched to the islands. This mission was cancelled at last minute due to internal upheaval. *Kaitō tsuide Ogasawara jima e makarikoshisōrō gi ni tsuki gonaii ukagai sho*, in: EGAN, acc. No. N68-51.

for the islands was derived from the Ogasawara family's notorious claim dating back to the late 16th century, but it hardly disguised the fact that the colonization was an appropriation of territory by the Tokugawa family in the name of Japan. The shogunate had examined and rejected the claims of Ogasawara Sadatō who, in the 1720s, claimed that his ancestor Sadayori had obtained permission from no lesser than Toyotomi Hideyoshi to colonize the islands between 1593 and 1626.[27] Put under the authority of Egawa Tarōzaemon, the shogunal representative in Shimoda, the islands became part of the shogun-owned lands of eastern Japan. The expansion of Tokugawa lands was carried out under the *hinomaru* flag, which had been used as a common emblem for Japanese ships since 1854. (See Fig. 6.2). The flag was used exclusively in the context of international exchange, and was thus the privilege of the shogunate and those hired to engage in border control or maritime defense. It was usually flown in combination with the flag of the ship's domain, Tokugawa or hired. Flying the *hinomaru* alone in the Bonin Islands, the Tokugawa thus asserted their claim to be acting as the central government of a unitary state.

Even though Ogasawara Sadayori's colonization in the sixteenth century was a myth that had been officially repudiated by the shogunate in the 1730s already, Mizuno's rendering made the newly gained territories a long forgotten colony waiting for its rightful owners to return. One day after his arrival in Port Lloyd, Mizuno went

[27] Ogasawara Sadatō's story is summarized in the central text block on Tōjō Kindai's 1843 map, *Izu shichitō zenzu*, in: author's private collection, no Acc. No.

ashore to meet village headman Nathaniel Savory. Asked whether he knew of the British claim on the island, Mizuno stated: "Three hundred years ago, [we] built buildings here… This continued for two hundred years, but then we interrupted [the project] in the year of the rooster [1753?]."[28] After all, this widely known story was the best material available to substantiate a territorial claim.

Agriculture and Cultural Occupation

Mizuno and Obana soon realized that colonizing the Bonin islands would mean much more than asserting territorial integrity and regulating traffic. It meant to administer Pacific travelers with all sorts of backgrounds and a variety of plants and animals that were just as evidently migrants. Just as the foreigners had put an uninhabited island to use by bringing useful species there, the Japanese had to stress their own agency in Japanizing the Bonins. This meant to appropriate the islands by crafting a historical narrative, and by introducing useful species from Japan. Subsequently, they forged plans to develop the islands into a Japanese whaling base, where the state would exert control and provide indiscriminate services to Pacific travelers.[29] The strategy

[28] "此方にては三百年前建物等致し(…)二百年程相続け居り候得共、酉年以来中絶致し候." *Nantō kōkai nikki,* cit. in Tanaka 1983, 245.

[29] The push for active engagement with international trade partners in Port Lloyd resonate in Obana Sakunosuke's reporting to the shogunate, e.g. *Ogasawara Shima Fūdo Ryakki*, pp. 58–9, in: NAJ, Acc. No. 173-0185. This did not necessarily match the attitude of the entire shogunate, but was rather the project of a progressive faction. Conrad Totman has made the case that during what he calls the "Bunkyu Reform," occurring contemporaneously with the colonial expedition, the shogunate

Mizuno later outlined is surprising, given the fact that he had gained fame as a conservative force that tried to keep contact with foreigners around the treaty ports to a minimum when he negotiated the opening of Japanese harbor towns.[30] The Bonin Islands at this point represented a seventh open harbor, but one without treaty and bearing less risk if trade grew out of control. In the Bonins, Japan could control trade and traffic out of the comfortable position of a sovereign harbor master.

On the occasion of their second meeting, Mizuno asked village headman Savory whether the island was home to any cows or deer. Savory replied: "There are no cows or deer, but goats. However, those goats have not been here forever, I have brought them over from my country and set them free."[31] Thus, Savory made clear that those goats were his property. Mizuno stated that "even if [you] released those goats, they are feeding on grass and trees on Japanese land, and are thus not to be considered *free* [*jiyū*]."[32] The settlers and the invasive state settled for the right to hunt upon permission. Since the Japanese did not have many mammals on their menu plan before the mid-19th century, this was a formal act of administering, rather than

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sought to make concessions to the xenophobic faction for the sake of national cohesion. (Totman 1980, 64).

[30] Auslin 2004, 39–40.

31 "牛・しかハ無之候得共、やき[山羊]と申四ツ足ハ御座候得共、是も当島ニ元ゟ有之候ニハ無之、私し（sic）本国ゟ右島へ罷越し候節、相はなし置候間、やきの儀は私し之物ニ有之趣申之." *Ogasawara-tō go-takkai ni tsuki go-yō dome*, ed. in Tanaka 1983, 61.

32 "右やぎ其方共相はなし置候とも、日本土地ニて其地の艸木を喰ひそだち候間、自由ニハ不相成旨申聞候." *Ogasawara-tō go-takkai ni tsuki go-yō dome, ed. in Tanaka 1983*, 61.

monopolizing natural resources. For foreign affairs magistrate Mizuno, Japanese control over people and goods became defined through their permanent presence within Japanese space, and the spread of Japanese-style agriculture was taken as a guarantee for prosperity and a stable social order.

Figure 6.3) Landscape painting of Ōgiura village by Miyamoto Gendō, 1862–1863. In the lower right, there are two grass-thatched Bonin houses contrasting the Japanese dwellings and administrative buildings. *Ogasawara-tō zue furoku ikkan*, p. 8, in: OVBE, Acc. No.: great safe 6–6–13.

Having demonstrated his authority, Mizuno had his men unload a ready-made memorial stela for the ill-fated Japanese sailors who had died on these remote islands

in the past. This stela was erected above village headman Savory's house, a center of gravity for political issues of all kinds in the archipelago. It was there that the Japanese officials opened their first administrative headquarters.[33] As they began to cultivate land, they relocated their offices across the bay to Ōgiura, where there remained plains to clear beyond those found near the two major settlements. Ōgiura's location oversees both the bay's entrance and the two "foreign" settlements, and was thus well situated as a center of control (Cf. Figures 6.1 and 6.3). This created two distinct spaces of settlement. Most Japanese settlers resided near the administrative offices in Ōgiura and farmed newly opened fields in the south of the main island, avoiding conflicts over agrarian space with the "foreign" inhabitants of Ōmura and Okumura villages across the bay. No taxes were collected yet from foreigners, but the ultimate goal of farming-centered settler colonialism promised an expansion of taxable lands. In an early phase, the Japanese colony on Peel Island was focused on 'opening' as much new land as possible. Within only a year and a half, the thirty-eight settlers had expanded the agrarian space on Peel Island by 37.5 percent, to approximately 9.6 hectares.[34] In some instances, land was bought from previous owners, such as in the case of an old hut in a valley called Kita Fukurozawa, but, for the main part, the Japanese cut down forests on narrow plains along the creeks in the southern half of Peel Island. (Cf. Fig. 6.4).

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[33] *Ogasawara shima fūdo ryakki*: 18–19, in: NAJ, Acc. No. 173-0185.

[34] Tokyo-fu 1929, 15.

At the same time, the Japanese engineered the environment according to their needs. The preliminary plan Mizuno had forged before his trip envisaged a settlement based on the cultivation of rice and various types of grain and beans (*gokoku* 五穀).[35] Oranges, peaches, and plums were added to this plan after Mizuno's visit. Cedar, pine, bamboo, and cypress were to be grown for construction materials.[36] As a matter of fact, two separate waves of what Alfred W. Crosby has called "ecological imperialism" reached the Bonin Islands.[37] The two biological spheres created by Westerners and Japanese clashed on the archipelago. It is not clear how many of these species were actually brought to the islands during the brief duration of this first attempt at colonization. Whatever the case, Obana's records document that the Japanese took an active interest in the species they found on their explorations and fantasized about their use in Japan proper. Instead of a neo-Japan, the island had become a middle ground of biological globalization. By the Meiji period, it incorporated both Japanese species and the cosmopolitan ecosystems created in Pacific island colonies.

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[35] *Gokoku* 五穀 ("five grains") is a general term for grains, as the specific five species the term refers to changed over time and varied regionally. In the late Edo period, the term generally referred to rice, wheat, soy beans, and two types of millet (*Kokushi daijiten,* keyword *gokoku*, in: JK, 2019).

[36] Chapman 2016a *The Bonin Islanders*, 63.

[37] Crosby 1986.

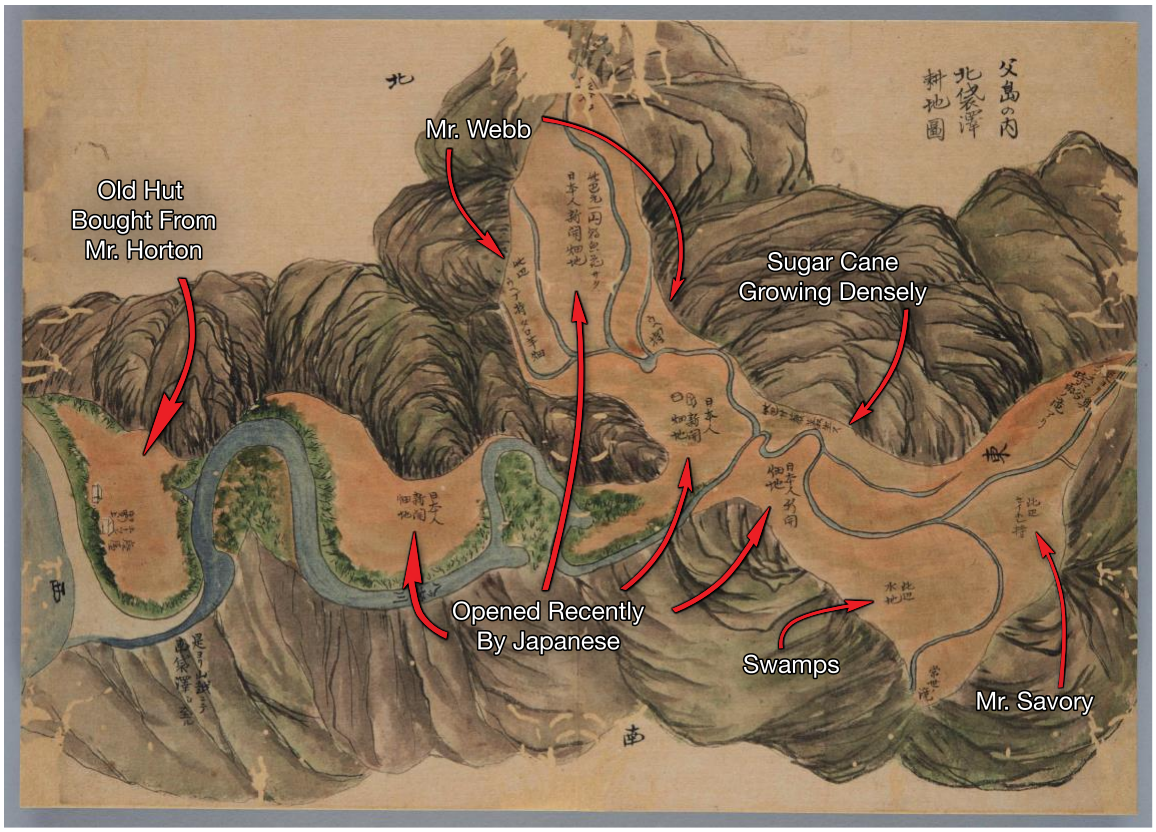

Figure 6.4) Map of newly opened areas in Kita Fukurozawa Valley, Peel Island (Chichijima). *Source*: *Ogasawara-tō zue furoku ikkan*, p. 39, in: OVBE, Acc. No.: great safe 6–6–13.

Bodies and Transitional Geography

The strategy of making the Bonin Islands a southern extension of the Izu Archipelago was based on the idea that peripheries could be expanded gradually, by relocating settlers from the most climatically similar place within Japan. The creed that human bodies were specifically suitable for the 'climate' (*fūdo*) in which they evolved, pervades early modern descriptions of remote and exoticized places. Visitors to southern islands that were troubled by 'climate-related disease' (*fūdo byō*) such as

malaria, in this static conception of bodies and space were believed to be exposed to such disease because of physical incompatibility with the 'climate.'[38]

Mizuno's greatest concern during the preparations was that climatic circumstances could jeopardize the colonial project. To reduce this risk, he chose to transplant people from the nearest location within Japan to the Bonin Islands. Half a century before the colonial experiment was put into practice, shogunal advisor Satō Nobuhiro (see Chapter 3), in his utopic scenario for Japanese world power, had suggested to use subjects from Tosa province in Shikoku as the most physically apt for the islands "straight south from Japan," but by 1860, more accurate maps evidenced that Hachijō would be the better choice.[39] Relocating farmers from this arid isle to the Bonin Islands seemed to be a good idea based on climatic as well as structural considerations. At a preparatory meeting for the expedition, Mizuno stated:

> If we convince children and dependents of Hachijō to move to Ogasawara, there will certainly be individuals who volunteer. This would be [favorable, since] those people, in contrast to the peasants of the mainland, only rarely eat grain as their main nutrient. I hear they live in abject deprivation. We shall put together and provide a set each of materials that can be

[38] The attachment of human bodies to their native environment and the subsequent assumption that place of birth determines compatibility with a specific environment was empirically confirmed, for example, through the observation of higher or lower resistance against diseases such as malaria. (E.g. *Ritei zu*, in: ACLA, no archival number.) As in Li Shizhen's work, early modern science in East Asia regarded the factors place and time as a significant for the outcome of experiments. (Nappi 2009, Introduction).

[39] *Kondō hisaku*, pp. 106–110, in: NDL, Acc. No. 569-361.

> assembled into simple dwellings; [furthermore] construction tools, agricultural and fishing tools, as well as seeds and foodstuff for about one year shall be sent over.[40]

Mizuno was aware that the soil of the Bonin Islands would not yield much at first and proposed that people from the most similar place within Japan, in geographical and climatic terms, be sent to settle in the islands. The island of Hachijō, the southernmost part of the shogunal lands of Eastern Japan, lies to the south of the Kuroshio current in its usual pattern (see figure 1.3, in chapter 1).[41] As discussed in more detail in Chapter 2, for Edoites, Hachijō represented an isolated and often exoticized world at the limit of the human realm. Surrounded by rough and dangerous seas, Hachijō is a volcanic island with limited water resources and some arable soil in its center and along its southern shores. Since sufficient quantities of rice could hardly be grown here, the island was subject to a special form of taxation.[42] Unlike most regions of Japan, yearly duties were submitted in the form of dyed silk cloth.[43] Due to its climate and isolation, Hachijō was prone to famines. By way of relief, the shogunate created

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[40] "八丈島人の子弟厄介等小笠原島へ移住申諭し候はば、願候もの共可有之. 左候得は内地の農民と違ひ、平生夫食に穀物相用ひ候は稀にて、素質を極め候趣に相聞候. (...) 簡便の建家為切組持超候建具, 耕作, 漁猟の具家具の一通充、凡一ケ年分付夫食の品々種物等に至るまで渡遣似積(sic)を以て(...)." *Nanshinsaku to Ogasawara guntō*, pp. 81–82, in: NDL, acc. no. 348-386.

[41] For most of the time, the Kuroshio current passes north of the island of Hachijō and only seldom does it pass between Hachijō and Torishima. According to the Japanese Hydrographic and Oceanic Department, the Kuroshio has an average width of 40 nautical miles (74 km) (Kaijō Hoanchō 2022a *kaiyō sokuhō*).

[42] In early modern Japan, taxes were usually levied from village communities and paid in rice. For regions that were unable to grow rice for climatic reasons, marine products (in Hokkaidō) or silk cloth (in Hachijō) could be substituted for rice (Howell 1995, 58, 95, 101).

[43] Igawa 1973, 167–168.

programs that relocated Hachijō islanders to Honshu for construction and land reclamation projects. Under the supervision of senior councilor Tanuma Okitsugu (in office 1772–1786) a major number of such 'migrating commoners' (*dekasegi hyakushō*) worked to drain a vast area of wetlands in the northeastern Kantō Plain for new agricultural land. Tanuma also envisioned colonizing the Bonin Islands, presumably with the intent of relocating Hachijō islanders.[44] Thus, by choosing to relocate settlers from this Pacific outpost of the Tokugawa realm, Mizuno kept with an early modern conception of transitional geography.

Climate was seen as an important factor that shaped the character of a local population. This geo-deterministic line of thought, which would culminate in the twentieth century with Watsuji Tetsurō's 和辻哲郎 (1889–1960) *Climate and Culture* (1935), had been a common assumption in most *fudoki* (風土記) gazetteers on customs and climate of different regions of Japan. In the spring after Mizuno's expedition, even before the transfer of settlers, the shogunal steamboat *Chōyō-maru* set course for the Bonin Islands, delivering agrarian tools and a stock of rice and grain seeds for the settlers.[45] In fall, eleven married couples and eight minors whose marriages had been arranged in advance were relocated from Hachijō. They were joined by eight craftsmen to assist with land improvement activities.[46] The thirty-

[44] Tanaka 1997, 68.

[45] Tokyo-fu 1929, 15.

[46] Tanaka 1983, 249–250.

eight Japanese immigrants outnumbered the thirty earlier inhabitants of the archipelago slightly, thereby extending Japan's ethnic boundaries some 700 kilometers deeper into the Pacific.

The ideological dimension of assimilating foreign lands through labor migration flows has recently attracted new academic interest. Jun Uchida has recently discussed an early stage of *nan'yō ron* ideology that advocated settler colonialism as a preparation for Japanese expansion around the Pacific.[47] The colonization of the Bonin Islands shows that such ideas, even if not outlined as clearly as in Sugiura Shigetake's 杉浦重剛 (1855–1924) works of the mid-Meiji period that Uchida discusses, had been circulating in Japan for more than a century. Even the idea of relocating outcasts to the island of Ezo (modern-day Hokkaido) to strengthen Japanese influence had already been laid out by Tanuma Okitsugu in the 1780s.[48] The relocation of ethnic Japanese to the Bonin Islands was thus not unheard of, but the different geopolitical situation *vis à vis* imperial competitors and their subjects, as well as the lack of a history of commercial or diplomatic interaction with the newly claimed colony make the sudden expansion a break from the gradual frontier expansion under the late Tokugawa.

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[47] Uchida 2016.

[48] Danzaemon, the chief of the outcasts, had approved of the relocation of 70,000 individuals for this purpose (Hall 1950, 125).

Mapping the Forgotten Colony

The expedition's first task was cataloguing and mapping the new territories. Twenty-seven year old magistrate Kikuchi Sakujirō 菊池作次郎 (1834–1889) of Hachijō had been dragged along to Peel Island when his vessel proved unable to stop by his home island due to inclement weather. Mizuno, of course, knew to make the young man a helpful hand for the expedition. In his travel diary, Sakujirō gives way to his frustration with the onerous and sometimes dangerous assignments. Mizuno, who was known for his difficult temperament, sent him out to climb mountains and map the inland, with the comment that it would be an honor to die on such an important mission.[49] Together with physician Miyamoto Gendō, he was dispatched into the mountains of Peel Island to map the territory by land. Gendō created two volumes of landscape paintings and labeled places formerly named in English with Japanese toponyms the explorers apparently invented on the spot. While some of the new names they used were descriptive of geographical characteristics—such as "Mt. Bountyful Rice Bowl" or *Iimori san* (飯盛山) for a mountain shaped like an overfilled rice bowl—others referenced more specific tropes of Japanese culture and geography. A pair of twin rocks in the middle of Futami Bay, which have later given way to a concrete pier, must have reminded the explorers of the famous Meoto (夫婦) rocks near Futami Okitama shrine in Ise, thereby inspiring the new name for the bay (Figure

[49] *Ogasawara-tō go-takkai*, pp. 73–78, ed. in: Tanaka 1983.

6.5 and 6.6).[50] Resonating with Mizuno's family allusion in describing the relationship between ruler and ruled, individual islands were named after family roles: Peel Island was now *Chichijima* or 'Father Island,' north to it lay *Anijima* or 'Big Brother Island,' further north was *Otōto shima*, the 'Little Brother.' Next to *Hahajima* or 'Mother Island' were the female correspondents *Anejima* 'Big Sister,' *Imōtojima* 'Little Sister,' and so on.[51] Historical references were woven into the maps and views as well. Maps indicated the spot where Perry was said to have planned his coal station, and Miyaura or 'Shrine Bay' was named after the – fictional – shrine Ogasawara Sadayori was said to have built there in the sixteenth century.[52] Above all of this, though, on the peak of mount Asahi, hailed the flag of the rising sun. (See fig. 6.6).

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[50] *Ogasawara-tō sōzu*, vol. 1, p. 32, in: NAJ, Acc. No. 271-0519.

[51] Four of these names appear on a map by Mori Kōan 森幸安 dated 1752, but the completion of the family including the 'Marriage Arranger Island' *Nakōdo shima* during the colonization reflects the Confucian allegory of state and family cited by Mizuno. *Ogasawara-tō chizu, ichimei Munin Jima*, in: NAJ, Acc. No. 177-0001.

[52] This shrine already appears on Hayashi Shihei's map of 1785, see Chapter 3. (*Sangoku tsūran zusetsu,* in: WUL, Acc. No.: ル 03-01547.)

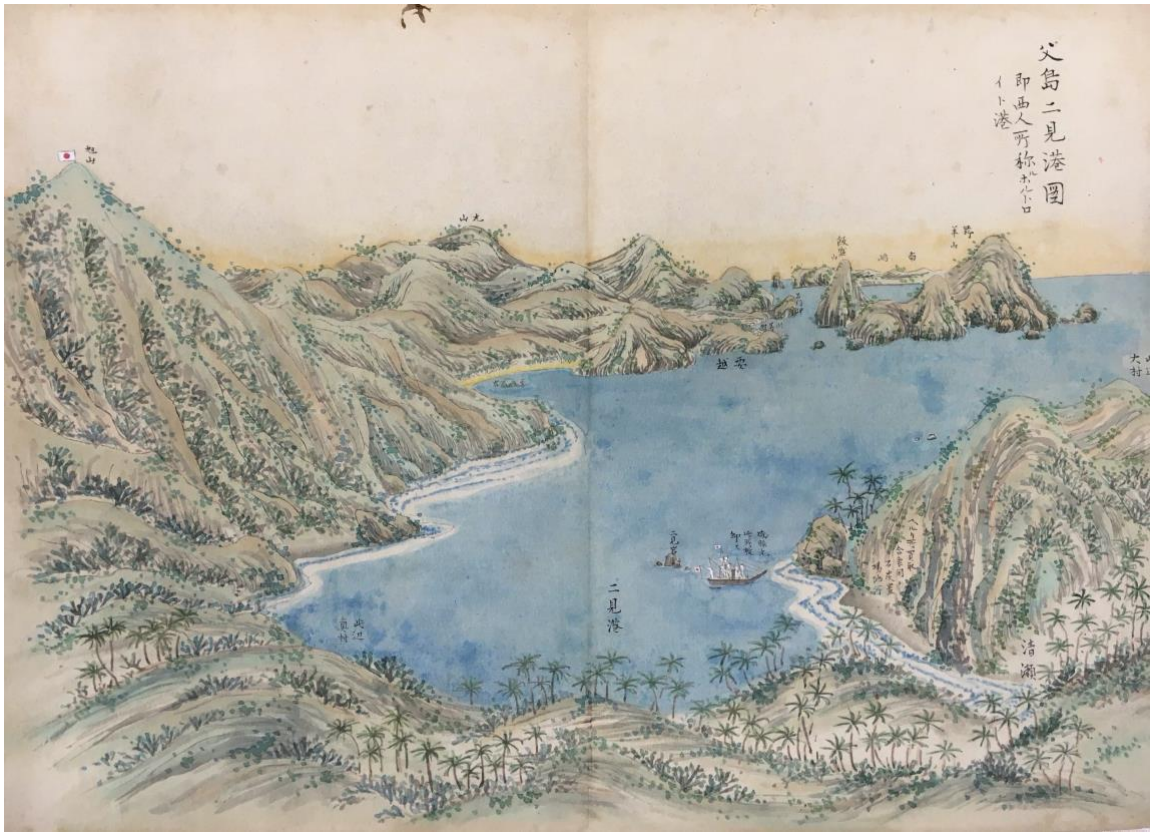

Figure 6.6) The *Kanrin-maru* anchoring between the Futami Rocks and a place said to be the patch of land Commodore Perry purchased in 1853. Note the *hinomaru* flag ontop the mountain peak on the left. *Ogasawara-tō sōzu*, vol. 1, p. 32, in: NAJ, Acc. No.: 271-0519.

The maps drawn by the shogunal explorers document an interesting negotiation of traditional practices and modernizing techniques. Referring back to the maritime maps of the seventeenth century that chart shoals and other obstacles for navigation, these maps record the resurrection of sea-centric mapmaking that had fallen out of favor under the land-centric focus of Tokugawa maps.[53] Captain Ono Tomogorō and

[53] Maps of the Tokugawa period, often designed by urban authors and directed at travelers on land, usually emphasized roads and the places travelers encountered on their way, rather than graphically depicting relative distances between different points on the map. This emphasis on the

his assistant Tsukamoto Akitake 塚本明毅 (1833–1885) mapped the archipelago from the sea. The map they produced was a pioneering project that incorporated earlier styles of land-borne mapmaking with the cutting-edge techniques of hydrography of the day. Sailing around Peel Island and its environs, Tomogorō and his team recorded the coastlines with high precision. Wherever their ship went, they measured the depth, leaving traces on the map like footprints in the snow. The Japanese had first engaged in such hydrographic projects after the treaty ports had opened in 1860. After repeated requests, shogunal authorities had allowed the British to conduct measurements in Japanese bays, but only under supervision of Japanese officials. Water depths had been measured in Japan since the 1840s, but Futami Bay in Peel Island may have been the first underwater landscape mapped with such precision by an exclusively Japanese team.[54] A fine line marks the border of navigability by delineating waters of less than four *hiro* (7.2 meters) in depth. By ensuring safe navigation in the bays, the new authorities prepared to administer future traffic.

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road network can also be observed in Inō Tadataka's geo-figurative maps, where the hinterland is generally left blank. Marcia Yonemoto has cited land-centric maps to argue for a cultural aversion from the sea; this conclusion however fails to distinguish between academic knowledge and vernacular practice in coastal regions. (Yonemoto 1999).

[54] Suzuki Junko discusses a map of Ise Bay compiled between 1862 and 1865, a prestigious project in which the Japanese proved their ability to conduct hydrographic mapping for the first time without foreigners being involved. Earlier maps of the newly opened treaty ports had been made by or in collaboration with Westerners. Ise Bay, being a sacred place, had to be mapped without granting access to foreigners (Suzuki 2016, 129–132).

Tomogorō's sea-centric map, which Gendō carefully reproduced at the beginning of his volume of landscape vistas, merged smoothly with Gendō's own records of land-bound geography. Like Ichizaemon's map from almost two hundred years earlier, Gendō's adaptation of Tomogorō's map depicts mountain silhouettes as seen from the sea, but the interior that the painter had so carefully explored is still left blank. At the same time, his paintings were instructive as maps in and of themselves: often depicting the landscape from an aerial viewpoint, they bend space to depict distant places in relation to one another, even if those places could in fact not be seen together from any point on the ground. (Figure 6.6).

Figure 6.5) Ono Tomogorō's untitled map of Peel Island, Anijima, and the surrounding waters, 1862. Toponyms in Japanese, with English annotations. *Ono Tomogoro's Map of Chichijima,* in: OVBE, Acc. No.: Great Safe, 2-2-3.

Once again, Tomogorō and Gendō integrated earlier styles of Japanese mapmaking with international standards of cartography. Both the silhouettes of coastal mountains and the map's emphasis on coastlines call to mind Inō Tadataka's famous map of Japan, compiled in the early nineteenth century.[55] The ship's route guides the reader across the map like a traveler along the highways that were so central for a reader's orientation on Tokugawa-period maps. At the same time, Tomogorō's map of Peel Island marks a shift from the land-centered maps familiar to historians of Tokugawa Japan back to the sea-centric maps of earlier times. Surprisingly, coordinates long known in Japan are absent from his map. Tomogorō, who had navigated the *Kanrin-maru* across the Pacific on its mission to America in 1860, was known for his skillful use of the lunar distance method to determine longitude.[56] While this technique was helpful in determining a ship's approximate position, lunar distance calculations were by no means precise enough to measure exact coordinates on a mapmaking expedition. Thanks to the context map in Perry's travel account, this lack of coordinates was not a problem. Rather, Tomogorō compiled a detailed, sea-centric map that facilitated navigation at view within the archipelago. Like the portolan charts of the seventeenth century, it emphasized bays, inlets, and other anchorages, thereby shrinking the island's interior, while it respects approximate angles between different points along the shore. (Figure 6.7). In short, through the

[55] On Inō Tadataka's comprehensive map of Japan's coasts and highways, see Suzuki 2016, 129–32.

[56] Fujii 1985, 2–5.

mapping of a completely unknown territory, Japanese scholars and cartographers combined cutting-edge measurements with previously familiar styles of representation to create a navigational tool that made one argument: the Bonin Islands are now Japanese.

Ethnicity of a Cosmopolitan Entrepot

Tomogorō's strikingly detailed map was subsequently used to facilitate communication between Japanese authorities and their local subjects and employees, as English annotations indicate. Since the Japanese toponyms were phonetically unrelated to the earlier place names, the formerly used English toponyms needed to be added in cursive handwriting. From an early point on, the Japanese hired islanders familiar with the territory for different administrative tasks. Obana's report submitted to the authorities in Edo after the Japanese retreat in 1863 documents that an islander named Thomas Webb was entrusted with piloting foreign ships into the harbor, for which purpose he was given a Japanese national flag.[57] The flag Obana gave to Mr. Webb to mark the harbor entrance as falling under Japanese––that is, shogunal––jurisdiction was explicitly a national flag, probably of the same sort as the *hinomaru* flag of the rising sun that waves on the mast of the Kanrin-maru in figure

57 See opening citation on the first page of this chapter. (*Ogasawara shima fūdo ryakki*: 57–58, NDL, Acc. No. 173-0185.) Webb was an American settler who came to the Bonin Islands in 1847 and was appointed councilman by Perry in 1853. As the owner of a Bible, he acted as the spiritual authority on the island and was regularly entrusted with holding funerals and memorial services (Cholmondeley 1915, 32, 99, 122).

6.2. Unlike the schooner *Kimizawa Ichiban maru*, which sailed to the islands under the flag of its owner, the house Egawa, with a lampion that marked its mission with the words "shogunal service"[58] (*go-yō* 御用), vessels and harbor authorities operating in the Bonin Islands used a symbol detached from the fragmented structure of the Tokugawa state, and elevated its bearers into the position of a national representative. In the case of Thomas Webb, regardless of ethnicity and racial appearance.

Episodes like this produced copious administrative records of a few male settlers of European descent that overshadow the fact that the island colony was in fact a highly diverse, pan-pacific melting pot. To this day, the descendants of non-Japanese immigrants in the Bonin Islands are being referred to as *Euro-Americans* (*Ōbei-kei*), both in Japanese scholarship and administration, and within the community itself. This label is a reiteration of an overrepresentation of a few but relatively influential individuals who initiated and financed the original colony in 1830, and who subsequently monopolized the interaction with government institutions for decades. The Japanese who built on the authority of American-born village headman Nathaniel Savory and British-born councilman Thomas Webb's positions, codified by Commodore Perry in 1853, administratively cemented local hierarchies by recording each individual as a member of a patriarchal household, even in absence of kinship connections.[59] As Daniel Long's research has shown, the

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[58] *Zushū Heda-mura ni oite o-uchitate ainari sōrō schooner-sen…,* in: EGAN, Acc. No.: S2770.

[59] The initial colonization had been authorized by British consul Richard Charlton, but was apparently financed by the settlers. Cholmondeley 1915, 17. On the political organization of the islands, see:

frontier community fluctuated greatly as crews of whaling and trade vessels were dropped off or jumped ship. Among the thirty to forty individuals, patriarchal hierarchies persisted with ethnic mixing in marriage and eclectic households. As an effect, the community was quickly turning into a cosmopolitan, pan-Pacific melting pot. Biographical records suggest that by 1862, at least 23% of the population were born in the islands and of mixed ethnicity, whereas only eight out of 48 can unambiguously be identified as *Euro-Americans*.[60] As chapter 7 will show, the trend towards ethnic integration persisted thereafter, as visitors and administrative records in the late nineteenth century suggest. The Japanese, concerned about conflicts that could arise from the foreign citizenship of some islanders under the extraterritoriality principle stipulated in the unequal treaties, automatically produced more copious records on subjects of Western states. As was customary in Japanese population records, only heads of household were interviewed, with wives, children, and other dependents, as well as unrelated co-inhabitants mentioned in passing. The records by this implementation of a Japanese family model to the settler colony buttress the narrative of a *Euro-American* community.

Within a mere three decades, the cultural baggage of each settler had merged into a creole culture reflected in various economic and cultural practices. Thomas

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Constitution for the Colony of Peel Island, in: *Untitled collection of Documents created during Commodore Perry's visit to the Bonin Islands, 1853.* In: OVBE, Acc. No: Great safe, Comp. 6, 6-2.

[60] Individual biographical outlines of each head of household were written down in *Sadame*, in: OVBE, Acc. No.: Great Safe, Comp. 2, 2-5.

Webb, to whom Mizuno had handed a Japanese flag and ordered to act as the harbor's pilot, navigated around the island in an outrigger canoe and caught fish with a spear in shallow places.[61] Like most settlers, he dwelled in a grass-thatched hut perhaps inspired at traditional Hawaiian dwellings, neatly suited for the warm and humid climate in the islands. The Hawaiian Language, which had served as the quotidian language in the settlement's first decade, was slowly giving way to new creole versions of English that absorbed influences of Portuguese and other languages spoken in the ethnically mixed households.[62] Rather than the outpost of a western government the Japanese had feared to find on the islands, they met an eclectic group of culturally flexible Pacific travelers that were slowly creating an original local identity.

Environments in Flux and the Discovery of Exoticism

Having inspected the islands personally, foreign affairs magistrate Mizuno returned to Japan and arranged for medical personal to be sent to the Bonins and provide the state's benevolent services to its new subjects.[63] Foreign sailors that traveled over long periods without medical cure should as well enjoy the magnanimity of Japan that

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[61] *Nansho kōki*, pp. 96–111, ed. in: Suzuki 2012.

[62] Long 1999, 257. In the early phase of the settlement, Hawaiian may have had a higher currency than English since it is partially intelligible with other Polynesian languages. (Long 1999, 255.) Daniel Long has pointed out that the islanders abandoned literacy, with as little as three men able to read and write in 1876. This fact may have accelerated creolization.

[63] So stated in the recruitment letter sent to Abe Rekisai in the 5th month of 1862. *Ogasawara shima e sashitsukawashi sōrō ishi no gi ni tsuki ai-ukagai sōrō kakitsuki*, ed. in: Hirano 1998, 23.

no other government had granted in the islands before. This, as well as the construction of a coal station, would not only substantiate Japan's claim over the Bonins, but become the infrastructure for international traffic, seasonal whaling and agrarian development.[64] Even though the number of whaling vessels cruising the Japan Ground had been declining since the 1850s, the harbor of Port Lloyd in these days was still visited frequently by foreign vessels for trade, refueling or to disembark the sick. (See Chapter 3). The official report *Essentials on the Climate of the Island Ogasawara* that island magistrate Obana Sakunosuke submitted to the shogunate after the Japanese retreated from the Bonin Islands in 1863 documents the interaction of foreign sailors and islanders with the Japanese administration in this forgotten open port of Japan:

> Each captain reported to the office and expressed his delight about Japan cultivating this island. Until now, they brought along some of their products and were helped out with things they lacked on their ships. If there also were prostitutes, this island would certainly flourish. In spite of the number of whaling and trade vessels in the nearby seas, they only land in our harbor to fill up wood and water. For other purposes they do not land here. If we had enough to supply whatever other products they lack, they would probably all stop by. We understand that many whaling vessels travel for a year or a year and a half without landing on shore.[65]

Even though whaling fleets had been on the retreat from the "Japan Ground" for a decade by that time, Obana records that twelve American and Hawaiian whaling

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[64] Ibid. Mizuno explains such plans in the recruitment letter cited in the previous footnote.

[65] "右船長いづれも御役所へ来り日本にて此嶋開拓せしを歓び、向来諸品を持渡り、舩中の欠乏品を助けられ、或は遊女などにてもあらば此嶌さかんなるべし。此近海鯨漁船航海数多なれとも薪水にさし支る船のみ入港せしにて、其他は立寄らされとも諸欠乏品を補ふに足りるは悉く入港すべしといへり。鯨漁船は一ケ年或ひ一ケ年半程も地方上陸せぬもの少なからぬよし語れり。" *Ogasawara shima fūdo ryakki*: 114–116, in: NAJ, Acc. No. 173-0185.

vessels, as well as one Russian transporter traded in Port Lloyd between the second month of 1862 and the fifth month of 1863.[66] Only the British, who had once claimed the Bonin Islands in 1827, seem to have boycotted the Japanese colony.

To prove Japan's benevolent intentions, Mizuno thus hired several physicians to be stationed in the colony. Unfortunately, his original choice had been rather dissatisfying. The doctors Kurita Manjirō 栗田万次郎 and Iguchi Eishun 井口栄春 both petitioned for repatriation after merely three months in the islands. With a collection of 180 leaves – not seeds – they sent the remark that

> "according to our examination of grasses, trees and other species, no products whatsoever that can be of national benefit (*kokueki*) are found on this island. (…) No need to say, this island's climate, by contrast to the mainland, is very warm and there are only the two seasons of spring and summer; therefore, after our stay of two to three months, (…) no further product discoveries are to be expected, no matter how much we search."[67]

Identifying and introducing useful plants to Japan had been one core competence of physicians at the order of shogunal and domain offices in the past, but usually they did so with a specific idea of what they were looking for. Federico Marcon, for example, has shown how mercantilist ideas in the early 18th century inspired the introduction of ginseng from Korea to substitute costly imports. Such projects

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[66] This corresponds to March 1862–July 1863 in the Gregorian calendar.

[67] "草木類其外共取調候処, 当島中御国益相成候程之品類絶而無之義と奉存候. (…) 尤, 当島之義は御内地と違ひ気候多暖に而春夏之ニ候而, 已之地方に御座候間, 二三ヶ月も在留罷在候得は (…) 仕如何様取調候共, 別段発見之品柄も無之義と奉存候." *Letter from Kurita Manjirō to the shogunate*, 6th month of 1862, ed. in: Hirano 1998, 16–8.

necessitated the creation of an enormous inventory of Japan's useful species.[68] However, the criteria of utility Japanese physicians or *honzō* botanists attributed to medical plants were often informed by the specific features sought after, and therefore different from those that hit the eyes of less academic explorers. Obviously longing to be returned home, Kurita and Eguchi submitted a list of medical plants that could potentially be grown in that desolate place—by the next unfortunate scholar appointed to this position.

It was not by coincidence that Mizuno's next choice fell on Abe Rekisai, the head of a renowned lineage of physicians, who had been among the intellectuals prosecuted a quarter-century earlier because of their plans to clandestinely explore the Bonins for 'useful' (*go-eki*) plants.[69] (See chapter 2.) Since allegedly no useful plants could be found in the Bonins, Rekisai took on the mission of growing 32 seedlings of medical plants in the island.[70] His experiments led to modest results, as many of the introduced plants died or were eaten away by mice and other pests.[71] But rather than giving up, Rekisai dedicated himself to his role as the islands' health care provider.

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[68] This enterprise led to a greater effort to "inventory the realm" that resulted in what Marcon identifies as the largest botanical encyclopedia in world history, encompassing 638 Volumes. (Marcon 2015, 145-9.)

[69] The plans are written down in a *Letter from Imai Torakazu to Abe Rekisai*, ed. in: Hirano 1998, 20.

[70] A list thereof can be found in *Ogasawara Shima Fūdo Ryakki*, p. 40–1, in: NAJ, Acc. No. 173-0185.

[71] *Ogasawara shima fūdo ryakki*: 41–2, in: NAJ, Acc. No. 173-0185.

Roughly a month after his arrival, Rekisai's fieldwork notes turned towards exotic plants found in the islanders' gardens, such as pineapples or the Ogasawara Tako, a tree endemic to the islands whose leaves were used to weave hats and baskets.[72] (Figure 6.8). He started paying regular visits to the 'foreign' settlers' homes to cure various maladies, and the settlers, who seemed to welcome his help, usually rewarded his services with foodstuff. On these visits, Rekisai was treated for coffee and roasted potato, experiences he recorded meticulously in his diaries. The shogunal doctor's intellectual excitement was, of course, quite elitist. The Hachijō islanders brought to settle in the islands Rekisai described as "idiots (*oroka*) that don't even understand what a grape or an apple is, they cannot recognize the great and lasting benefit of exotic fruits and trees, they are fools without an exception."[73] With preference, the scholar spent his days in the company of foreign islanders and mingling aboard international vessels that equally appreciated his medical services.[74]

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[72] *Nansho kōki*, pp. 92–3, ed. in: Suzuki 2012.

[73] "嶌人愚にして, 蒲萄, 林檎の何のものなる事を知らず, 奇果異木後年の大利益ある事をしらず, 愚にして弁別なし." *Nansho kōki*, p. 118, ed. in: Suzuki 2012.

[74] *Nanshjo kōki,* ed. in: Suzuki 2012, and *Zusho kōki,* in: NDL, Acc. No.: 特 1-2970.

Figure 6.8) Miyamoto Gendō's depiction of the Ogasawara Tako, an endemic species of the Bonin islands. (*Ogasawara-tō sōzu,* vol. 2, p. 29, in: NAJ, Acc. No. 271-0519.)

Meanwhile, island magistrate Obana reported the discovery of oranges, bananas, yams, taro, pineapples, and many other plants the settlers had brought to the islands. The observation that the Bonin islands had become enriched with useful species from countries far away brought a new plan on the Japanese agenda: the exotic fruits that could be grown in the Bonin Islands could perhaps be brought to Japan and be beneficial to the population there. Talking to the islanders, for example, Obana came across a particularly tasty, exotic fruit:

> The thing they call *pineapple* is similar to our *omoto* and carries fruits on a stem. It is about five to six *sun* [15-18cm] in circumference and its skin looks like fish scales. When ripe, it

> turns yellow and tastes good, it is juicy like a pear. It would be good if we had them in our country, but I have not seen any of them yet.[75]

Rekisai, the herbalist, had a similar idea when he came across a wild-growing pineapple on an excursion inland:

> When I was looking for medical herbs in the hermit's valley, I ate the fruit *ananas* [pineapple] and stored two or three pieces of leftovers from other edibles I had collected, but as they made a smell of decomposition, I threw them away. All of them sprouted. When I returned to Japan, I collected the sprouts and gave them to Hanado Chōtarō who nourishes them in his greenhouse. Judging from the fact that they grow sprouts from the ripe fruit, they must be *hōri* pineapples, and, given their taste, we may call them *yellow pear*.[76]

In order to catalogue his discoveries, Rekisai ordered the botanical works of Linnaeus, Oskamp and van der Waters from Edo.[77] However, accurately understanding the global context of slightly familiar plants soon became a process of negotiating empirical observations against diverging theses. Just the naming of new discoveries imposed discussions of kinship and thereby, historical entanglement. On the endemic Ogasawara Tako, Rekisai wrote:

> Mr. Ono called it *tako tree.* This product was first brought [to Japan] from Ryukyu in the year Bunsei 6 [1823]. As I write in the second volume of my *Cultivation of Trees and Grasses*, it is the same as the *atani* [adan tree] mentioned in the *Chronicle of Chūsan*, or the '*hōri'* pineapple

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[75] *Ogasawara shima fūdo ryakki*, p. 39, in: NAJ, Acc. No. 173-0185.

[76] 蔓（つる）ロワラ (...) 葉は勢ありて両辺に刺あり, 茎の太さ大栂指の如く一丈余を延蔓す (...) 実は一茎に三箇又二茎ほと分ちつく, 菖蒲の実の如く六稜（ろくかく）のものゝ多くあつまりつく, 末は紅熟して本の方は青くありし (...) 仙境谷の辺りに薬草を探索す, アナゝスの実を食し, 又多く採り来れり食し残りしもの両三を貯へしに腐敗の気味なりけれは地に捨てしに悉く新芽を生しけり, 予帰国の時にこの芽をあつめて, 花戸長太郎の方にあづけ置きしもの, 発芽して暖窖に養ひけり, 塾せる顆より芽を生する形状を以て鳳梨といひ, 味を以て黄梨といふ可. *Nansho kōki*, p. 90, ed. in: Suzuki 2012.

[77] Hirano 1998, 29.

> in the *Gazetteer of Taiwan*, or the 'yellow pear' mentioned in the *Historical Outline* [*of Taiwan,* 1752]. (…) Mr. Ono's *tako tree,* the local Englishmen call *rowara.*[78]

Ono moved on to categorizing the *tako tree* as a family of three apparently related plants he called *screw rowara* (according to its Hawaiian name *lau hala*),[79] *wild bashō,* and *vine rowara* (pineapple). The *screw rowara*, he related to its Ryukyuan relative, the adan tree, and thereby filled in a missing piece to connect the adan, the pineapple, and the banana altogether to the basho tree found in Japan. Japan's vassal state of Ryukyu had served botanists as a subtropical archive since Arai Hakuseki's *Survey of Southern Islands,* a role the Bonins took on for Rekisai. The Taiwanese pineapple's surprising kinship with the endemic *tako* tree and *bashō* – a fruitless Japanese type of banana tree – Rekisai assumed based on the leaves sprawling their fingers twisted around a mono-stem, and the hexagon patterns on the fruit.

Fieldwork in the Bonin Islands brought together a variety of sources and theories that had to be reconciled, but ultimately, empirical observations made the difference. By the time of his return, Rekisai had identified 89 species which he categorized as "same as in Japan," "somewhat different than in Japan," and "nonexistent in Japan."[80] However much he had observed in his eight months on the

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[78] "小野氏はタコの木と名つけられし, この品文政六年癸未の歳に始めて琉球より渡り来れり, これ中山傳信録の阿阻泥（アタニ）にして, 台湾府志の鳳梨, 志略の黄梨なりと, 予草木育種の後編に誌るせり (…) 小野氏はタコノキと名つけられし, 在留の英人はロワラといふ." *Nansho kōki*, p. 93, ed. in: Suzuki 2012.

[79] Long 1999, 273.

[80] *Nanshō kōki*, p. 185, ed. in: Suzuki 2012; *Ogasawara shima fūdo ryakki*, pp. 50–3, in: NAJ, Acc. No. 173-0185.

island, there were still many plants awaiting a place within the Japanese family of flora and fauna.

Natural Histories of Claim

The botanists soon realized that the islands' environment as they found it was the product of recent human migrations. Like most uninhabited islands, the Bonin Islands did not offer many plants or animals of use for human immigrants. Crops and livestock 'made useful' in millennia of domestication and crossbreeding had to be introduced. What Alfred Crosby in the 1980s called *Ecological Imperialism*, however, proves to be a multidirectional process of ecological exchange. The feral pigs foraging the hills were apparently of Hawaiian origin, and taro fields dominated Bonin backyards.[81] Japan could not simply reproduce its own flora and fauna in the islands, rather it absorbed foreign plants by embracing the Pacific entrepôt. As I will show in chapter 7, later explorers and planners perceived the creation of colonial ecosystems as a global process of exchanging useful plants in exchange with other imperial powers.

Isolated ecosystems are highly sensitive to invasive species. In the Bonin Islands, rats were proliferating wildly, competing with endemic animals over local herbs, shrubs and trees, or even preying on indigenous birds and snails.[82] Ecological

[81] A recent study has shown that 70% of wild pigs in Hawai'i descend from an ancestry introduced by Polynesian settlers around the year 1200. Their black skin is most characteristic, as well as their appearance more similar to wild-boars than to European domestic pigs. (Linderholm et al. 2016).

[82] Sugiura 2016, 161–2.

transformations can easily result in chaotic transitions to new equilibria each time a new predator or competitor challenges an endemic species. In the 1860s, the Bonins were undergoing such a chaotic transition that has still not come to a new equilibrium.[83] Rats had perhaps the greatest impact on insular environments, as they preyed on birds, snails and small animals, while goats caused rapid deforestation.[84] While such inconveniences were perhaps not understood in their complex correlations at the time, the foreign descent of introduced species soon provided the base for arguments about ownership and historical claims.

Curious to understand how within a few years mammals released by the settlers had made an abandoned island a public pantry, Obana Sakunosuke, the new island magistrate at the order of the shogun, joined the islanders to hunt. In his report to the shogunate, he describes wildlife as follows:

> Feral pigs. They have tusks and some are like wild boars, however they must have descended from pigs that turned wild. Therefore, none of them are ferocious, and if one leads a hound to hunt them, they are easy to catch. Their taste is no different from that of pork. There are many of them near the northern bay of Hahajima. During his inspection, Lord Mizuno caught

[83] The Japanese government is investing vast amounts of money on a yearly basis to fight invasive species ranging from goats to lizards in the entire archipelago. Since the Bonin Islands' registration as UNESCO world heritage, the protection of endemic species has become a significant basis of local economy. (Shimizu 2003).

[84] Sugiura 2016. Governor Obana Sakunosuke also noticed the problem of deforestation, but attributed it to the islanders' consumption of construction wood. (*Ogasawara Shima Yōroku*, vol. 2 entry 40, pp. 94–6, in: OVBE, Acc. No. Great Safe 3-3-11).

> four of them in one day, and when Obana Sakunosuke's men were on the island, they again released several tens of domestic pigs. They must have prospered since.[85]

In a different place, he continues:

> I also raised birds and pigs and by the spring of 1863, they had multiplied to 340 or 350. (…) When we had to leave the island, I released all of them as they were. They will multiply prodigiously over the years to come. Of course, I prohibited the barbarians to hunt the pigs in the mountains for three to five years. We agreed that for the future, we should have them learn to be natural wild boars like the boars in Hahajima.[86]

The need to introduce domestic pigs on top of the already extant population of feral pigs expresses a sense that active Japanization of the environment would translate into control. The feral pigs of the Bonins were likely the offspring of pigs brought to Hawai'i by Polynesian settlers around 1200. There, "Polynesian" pigs had only gone feral when traditional forms of economy and religious taboos transformed in the early 19th century making them the target of hunters.[87]

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[85] "野豚. 牙ヲ生スルコト野豚ノ如キ者アリ, 然レトモ其源豚ノ野生セシモノナルヲ以テ嘗 (かつ) テ猛獰 [sic] ナラス, 猟犬ヲ率ヒテ之ヲ狩ル容易ニ之得ヘシ, 味家豚ニ異ナラス, 母島北港最野豚多シ, 水野筑後守巡島ノ際一日四頭ヲ得タリ, 小花作之助等島ニアリ, 亦家豚数十頭ヲ放テリ, 今日ノ繁殖想フヘシ." *Ogasawara Shima Yōroku,* vol. 1, entry 3, p. 69, in: OVBE, Acc. No. Great Safe 3-3-11.

[86] "我輩も又鳥豚を飼おきて文久三年春の頃ハ鶏三百四、五十羽にも及ひ (…) 此島立払の節ハ鶏豚とも其儘に放ちおけ也, 後年益繁殖なるへし, 尤此より島夷にも命して三五年の間山にある豚を猟すへからす, 後年の為に自然生の習猪毎嶋の如くなすへしと約しおけり. (…) 予輩巡見之節四頭を得けり, 味ひ豚に異ならす." *Ogasawara Shima Fūdo Ryakki,* p. 42–4, in: NAJ, Acc. No. 173-0185.

[87] On the ecological transformations in Hawai'i under the impact of changing social organization since 18th century, see Fischer 2017. Linderholm et al. write that pigs could probably only have thrived in Hawai'i after the introduction of species on which those feral pigs are nurturing now. (Linderholm et al. 2016, 6).

The idea that Japan's ahistorical earlier colonization of the Bonin Islands is incised into the biological landscape finds expression in Obana's description of a strange type of wild chicken:

> Chickens. They are numerous in villages, mountains, and fields, but most of them are wild. Their feathers are of black color, and their flight imitates that of a pheasant. Certainly, they are the thriving [offspring] of those that Shimaya Ichizaemon had released. Thereafter, when Obana Sakunosuke's men were on the island, they released an additional 350 chickens, they must have proliferated by now.[88]

Shimaya Ichizaemon had obtained the mission to explore the islands in 1675 after a group of castaways had managed to return from there. His mission was to examine the islands for useful resources, mainly with a focus on mineral ores. (See chapter 2.) His travel report describes 36 types of plants, animals, and minerals, some of which he presented to the shogun, but no attempt was made to bring Japan's species to the islands.[89] The ahistorical introduction of chickens to the Bonins that Obana describes, however, reflects the dynamic understanding of human and natural history controlling the Pacific Entrepôt necessitated – in both material and discursive terms.

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[88] 鶏. 村落山野皆生ス, 而シテ野生ノモノ最モ多シ, 羽毛黒色ヲ帯ヒ飛翔雉翟ニ異ナラス, 豈島谷市左衛門等カ放テシ者ノ繁殖セルカ, 其後小花作之助等島中ニアル時亦鶏三百五十羽ヲ放テリ, 今日ノ繁栄知ルヘキナリ. *Ogasawara-tō Yōroku,* vol. 1, entry 2, p. 17, in: OVBE, Acc. No.: Great Safe 2-3-1.

[89] *Muninjima no kakitsuki,* pp. 16–9, in: Author's private collection, no Acc. No.

Industrial Whaling at the Entrepôt of Knowledge and Technology

In early January 1863, the entry of a group of whales into the bay of Port Lloyd announced the start of the whaling season.[90] The islanders became busy at once and soon, the whaling vessels started pulling in. Nakahaman Manjirō, who had earlier served as Mizuno's interpreter, had been expected back with a newly purchased vessel, but bureaucratic issues had delayed his departure from Edo. It may have helped his project that Mizuno had been particularly impressed at the scene of five whales that entered the harbor playing around in the shallow waters. In Japan, such scenes had long become a rare sight, but the Bonin Islands seemed to be thriving still. Even in the 1860s, when the whalers of the Kuroshio Frontier had been struggling with declining catch for about a decade, the waters around the Bonin islands seemed bountiful to the Japanese. In fact the whales targeted by pelagic whalers in the open sea targeted a greater variety of whales that fed on deeper layers of the ocean. The pelagic populations of sperm, blue and fin whales resisted longer than the Humpback, Right and Gray whales usually caught by coastal whalers. As discussed in chapter 4, Whalers sailing out of Atlantic harbors gradually expanded the geographical scope of their hunt, or be it, their resource base. American whalers first tried out blubber at sea in 1762, thus initiating the shift to long-distance voyages targeting oil exclusively.[91] By the 1770s, New England whalers sailed as far as the Caribbean, and

[90] *Zusho kōki*, p. 185, ed. in: Suzuki 2012.

[91] Lund et al. 2010, 1.

by 1800, 60% of all voyages went to the Pacific.[92] By the time Mizuno and his expedition went ashore in the Bonin islands, Western whaling industries had reached the limits and were in sharp decline.

Japan, as well, had a considerable domestic demand for whale products long before the mechanical industrialization of the Meiji period. Rather than a whaling boom in the early nineteenth century enabled by a quick expansion of the whaling frontier, Japan's demand for whale products grew steadily and inspired occasional attempts at opening new regions to the local practice. Not until the 1930s did Japan claim a major share in the world's whale catch.[93] Until the early twentieth century, whalebones were popular as a fertilizer, ground and mixed into the soil. A book by Rekisai published posthumously in 1879 describes how whale oil could be burned in the fields to drive away pests, or spilled upon the water to kill their eggs.[94] But various commodities gained from the body of whales, such as baleen, guts and tendons were traded across the archipelago to build tools and accessories.[95] The hunt was limited to a distance of 15 to 20 kilometers from the coast and necessitated the coordination of several hundred people distributed over thirty to forty boats, usually orchestrated with flags and fire, and smoke signals from an elevated lookout on the

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[92] Lund et al. 2010, 10.

[93] Tsutsui 2013b *Landscapes in the Dark Valley*, 298. While whale oil was needed as a machine lubricant and lamp oil starting in the early phase of industrialization, by the twentieth century, it was mainly used for margarine and soap production.

[94] *Kuchū hōhō,* pp. 7–14, in: TUGL, Acc. No. XA10:286.

[95] Arch 2018, 102; Walker 2010, 47–52.

coast.[96] Western whaling techniques, in contrast, enabled the hunt in offshore or 'pelagic' areas, and caused lower labor costs. Large-scale whaling vessels equipped with a harpoon allowed a much smaller crew to extract oil from a greater number of whales on expeditions that lasted several months or, in some cases, even several years. The whale's greasy meat was boiled on board the whaling vessel and only the final product, the whale oil, was stored until landing. Waste materials were dumped into the sea to make space for the next kill. If perishable products had been the decisive factor, then the open sea would have remained economically unattractive until the invention of the heat pump and its application in cooling storages aboard. The industrial approach of harvesting only the oil, however, turned the maritime space into a productive place.

Even before the first settlers were brought over from Hachijō, preparations were made for a whaling campaign.[97] In the summer of 1862, the merchant Hirano Renzō 平野廉蔵 (*life dates n.k.*) had chartered the schooner, the *Kimizawa Ichiban Maru,* the first in a series of six Western-style vessels built in Heda bay in 1856.[98] Hirano offered the vessel and the necessary funds to Manjirō for his whaling enterprise. While the considerable capital was sponsored by the entrepreneur from Echigo province, Manjirō sailed at the order of Egawa Tarōzaemon, the magistrate for

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[96] Yamashita 2004, 159–169. *Kansei yon nen goyō dome,* in: EGAN, Acc. No.: S19.

[97] *Nanshinsaku to Ogasawara guntō*, p. 85, in: NDL, acc. no. 348-386; Tōkyō-fu 1929, 15; Fujii 1985, 81–83.

[98] *Zushū Heda-mura ni oite o-uchitate ainari sōrō schooner-sen*… . In: EGAN, Acc. No.: S2770.

Izu and the Bonin islands, with shogunal approval.[99] The authorities ordered Manjirō to sell the meat of whales caught at any nearby harbor, but to bring oil and bones back to Japan.[100] Oil could support the profitability of the colony and "bring eternal benefit to the nation (*kokueki*)," as the officials had recognized.[101]

By 1863, Manjirō's training aboard the *John Howland* in 1841-43 had long become outdated. Thus, he relied on the islanders to introduce him to the most up-to-date whaling techniques using explosive harpoons.[102] In the meantime, American whalers had developed more effective techniques killing whales with explosive harpoons, the so-called *bomb-lance* method patented in 1861.[103] Once in the Bonins, Manjirō bought a harpoon and munition and hired a group of Western settlers, one of whom had relocated on purpose from Hawai'i when he heard that the Japanese would hire foreign experts at lavish salaries.[104] Within a month, the crew of hired foreigners,

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[99] *Nakahama Manjirō den*, pp. 337–40, in: OVBE, Acc. No.: dehumidified closet B-31. Hirano's *Ichiban-maru* was of the type *kimizawa-gata* schooner, a vessel built in Japan in the late 1850s copied from a Russian model. Hirano also provided the tools needed for whaling and oil production, which amounted to over 700 gold ryō. (*Kujira ryō goyō dome*, pp. 7–10, in: EGAN, Acc. No. S 続 0008.)

[100] Letter from Nakahama Manjirō to the shogunate, 1862/10th month/28. Yoshihara 1982: 60. Egawa, again, forwarded Manjirō's request on whether to sell the oil produced to the *kanjō bugyō*, the finance department of the shogunate. (*Geiyu sono hoka torihakaraikata no gi,* in: EGAN, Acc. No. Egawa/S00220.)

[101] "永世広大ノ御国益ニモ可成奉存候" Letter from Nemoto Shinzō to Nakahama Manjirō, 1862/8th month/14, ed. in: Yoshihara 1982, 59.

[102] Fujii 1985, 82–83.

[103] Arch 2018, 73–5.

[104] Yoshihara 1982, 61; Fujii 1985, 68, 82.

Japanese settlers, and Manjirō's disciples caught two sperm whales and successfully harvested 96 barrels of oil near Anejima island.[105] Abe Rekisai, the botanist, joined a foreign crew on a brief whaling trip. In his diary he wrote:

> "we sailed near the whale and hit one *bomb lance* directly into it, (...) we followed it and as we hit it [again] in the stomach, I heard the explosion inside. The fish hit waves in pain and sank in a horrible spectacle. The foreigners also say it certainly died."[106]

The bomb lance technique had been the industry's last blow before 'yankee whaling' collapsed. It was a technique efficient at killing, but as it happened when Rekisai went along, the danger of losing the quickly sinking prey afterwards was considerable.

Whaling had been a source of expertise on navigation and local marine conditions since the beginning of the early modern industry in the 1600s, when former soldiers and sea rovers had to find a new livelihood under the Pax Tokugawa. Equipped with quick ships, the seasonal industry also performed security duties for governments.[107] During the geopolitical shifts of the 19th century, whalers were recruited repeatedly as experts on navigation and maritime defense, but the failure of the industry's expansion to the sea of Okhotsk shows that such experience-based knowledge was yet to be integrated into a theoretical understanding of marine geography and ecology. Manjirō's expedition was in fact experimental and somewhat

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[105] Yoshihara 1982, 61.

[106] "鯨魚ニ近ヨリ船ヲノリカケ, 一発ホルランス [sic] 打込候 (...) 腹ニ打入リ, 中ニテ破裂ノ響モアリ, 魚モ苦シミ浪ヲ立テ, スサマシキ様子ニテ沈没ケレトモ, 死セルコト必セリト異人モ申候." *Zusho kōki*, p. 179, ed. in: Suzuki 2012.

[107] Morita 1994a *Kujira to hogei no bunkashi,* 141; Amino 1995, 256.

haphazard. In a letter submitted to the shogunal finance department (*kanjō sho*) after his vessel's return, Manjirō inquired what he was supposed to do with the gained oil – whether to sell it at Yokohama, or to store it away until further notice.[108] Nevertheless, the competition over a dwindling global commons had begun with completely new methods, and in a new environment formerly unknown to the Japanese.

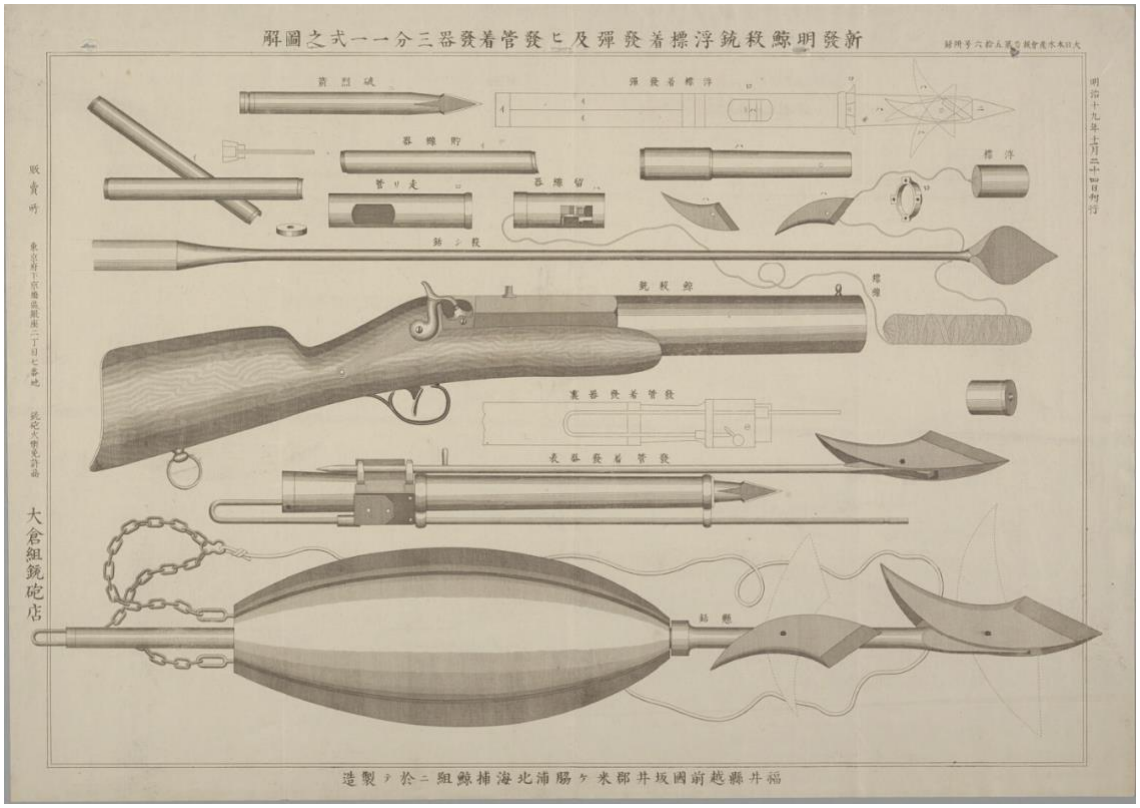

Figure 6.9) Depiction of a bomb lance model from the early 1870s in the collection of botanist Tanaka Yoshio, the later chief of the office for agriculture and founder of Ueno Zoo. (*Shin hatsumei kujiragoroshi jū*, p. 165, in: TUGL, Tanaka Yoshio Fund, Acc. No. A00:6010, vol. 95.

[108] *Geiyu sono hoka torihakaraikata no gi*, in: EGAN, Acc. No. Egawa/S00220.

With Japan's integration into global markets, gearing up for the race for resources in the frontier meant learning from globally active competitors. Relying on such formal interaction with foreign captains, Obana compiled a list of whale species that the foreigners had caught in the vicinity of the archipelago and enumerated the market price of each species' oil per barrel in dollars. The oil of killer whales was traded for sixteen dollars per barrel, a light whale's oil for twenty, and the precious sperm whale oil for up to forty-five dollars per barrel.[109] The fact that Obana could relate only three of the nine species listed in English to a Japanese name suggests that some of the species the Westerners caught offshore were not yet familiar to the Japanese. The Japanese were used to catching coastal baleens, but many of the pelagic toothed whale species were rarely found in shallow whale grounds. Had governmental planners spoken indifferently of 'whale fish (*geigyo*)' in correspondence with Nakahama Manjirō, the officials sent to the Bonin islands meticulously recorded names and characteristics of each species as understood from interviews with foreign whalers.[110] This brought new types of whales to the officials' attention. Interestingly, English dialect differences and non-native accents among whalers split the – already known – humpback specie into *homubekki, 13.2 m.*, *hōbekki, 20 m.* and *himubekki, 13.2 m* whales.[111] The systematic collection of knowledge shows that the Bonin Islands were more than a mere expansion of Japan's periphery. It was an outpost for

[109] *Ogasawara shima fūdo ryakki*, pp. 109–110, in: NAJ, Acc. No. 173-0185.

[110] *Kujira ryō goyō dome*, in: EGAN, acc. No. S 続 0008.

[111] *Ogasawara shima fūdo ryakki*, pp. 56, in: NAJ, Acc. No. 173-0185.

collecting technological, geographical, and biological knowledge crucial to the Tokugawa project of colonizing the sea.

In the summer of 1863, foreign pressure mounted against the shogunate over the murder of an English merchant near Namamugi village. In August, the British attacked Kagoshima from the sea, and Japan's international political predicament worsened dramatically.[112] As the shogunate was at first unwilling to pay an indemnity of 440,000 Mexican silver dollars to Britain, roughly one third of its annual revenue, Japan and an alliance of four western powers found themselves on the brink of a war.[113] At that moment it was not hard to imagine that the British, who had claimed the Bonin Islands as early as 1827, could attack the island as a subsequent power play against Japan. In this context, the shogunate could no longer guarantee for the safety of its subjects and risked another military humiliation. Prudently, they aborted the colonization of the Bonin islands and called back all settlers. The land and supplies the settlers had developed during their short stay were divided among the non-Japanese islanders with the understanding that this retreat was only temporary.[114] At this point, it was not the inability to appropriate local knowledge or to manage an exotic place that brought the colonial experiment to a premature end.

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[112] Mōri 1992, 344–5.

[113] Totman 1980, 68–73.

[114] Tanaka 1983, 250.

Rather, internal unrest and foreign pressure forced the shogunate to bundle its disintegrating forces at home.[115]

Conclusion: The Tokugawa Origins of the Pelagic Empire

The Tokugawa shogunate's decision to colonize the Bonin Islands was more than an assertion of territorial integrity. In a bold geopolitical gamble, the Japanese confronted their competitors at sea and seized the most important whaling base in the heart of the Kuroshio Frontier. This move far beyond the gradually expanding frontiers of the early modern *bakuhan* state necessitated a fundamental redefinition of ethnicity, national space, and Japan's appearance on the international stage.

A stateless space, the islands were home to a cosmopolitan community that included citizens of Japan's imperial competitors who, knowingly or not, enjoyed the protection of unequal treaties. Extending the government's patriarchal protection to its new subjects, foreign affairs magistrate Mizuno Tadanori reconciled Confucian ideals of government with the new discursive constructs necessary to rule a multiethnic overseas colony. An emphasis was put on the control of resources such as wild animals, and the occupation of uncultivated valleys through Japanese-style agriculture. Even though they lived in separate spaces, the interaction with islanders was of great importance to the Japanese. Proficient in foreign languages, the islanders

[115] Totman 1980, 68–81. Arguably, the abortion of the project was part of a greater austerity program begun in the previous year to concentrate resources on military modernization and political cohesion.

fulfilled an indispensable role in the interaction with the global community of sailors whose movements connected the Bonin Islands to geographically distant colonial societies of the Anglophone world.[116] Since they were unfamiliar with the new territory and its exotic produce, and since linguistic hurdles complicated the handling of international traffic, shogunal officials incorporated the 'foreign' settlers into their small colonial project. Integrating the new subjects transformed definitions of Japan's own ethnicity, nationality, and identity. 'Ethnically' different subjects in the borderlands of the Tokugawa realm, such as the Ainu or the Ryukyuans, were required to perform their otherness in language, hairstyle and dress. Standing outside this extended status order, the Bonin Islanders were made subjects of the "*tycoon*"––noticeably named in a Western term––in the indiscriminately personalized manner of national subjects, regardless of status and affiliation. In this way, regionally specific categories for culturally distinct members of the Tokugawa polity were made compatible with those Western models of empire and sovereignty that clashed over the Bonin Islands.

At a time before Japan partook proactively in a global discourse of science, the short-lived colonial experiment was also a moment of biological globalization. What Alfred Crosby has called *Ecological Imperialism* was in fact not a one-way imposition of the colonizer's domestic fauna and flora, but rather, a global process of biological

[116] *Ogasawara shima fūdo ryakki,* pp. 113–114, in: NAJ, Acc. No. 173-0185.

homogenization.[117] On-the-ground encounters with the cosmopolitan community of settlers and their eclectic portmanteau biota formed a channel of technological exchange and species migration. The early modern priorities of *materia medica* or *honzōgaku*, locating and acclimatizing useful species from the medical canon, were soon turned into excitement for the unknown. Cataloguing familiar, yet somewhat different species that had migrated to the remote islands imposed a historical dimension of kinship and evolution onto the description of macroscopic properties. But rather than constructing mere narratives of ownership and claim, the Japanese explorers sought to make their seventh open harbor an Entrepôt of knowledge, species, and technology. Island magistrate Obana Sakunosuke interviewed captains of international vessels about their catch and sail, and made plans accordingly to expand traffic around Port Lloyd. Whaling expert Nakahama Manjirō was dispatched by the shogunate to hire Bonin islanders as a crew for pelagic whaling, and purchased the industry's most cutting-edge technology: a *bomb lance* harpoon that enhanced the efficiency of killing in the global competition over crumbling whale populations. Physician Abe Rekisai, again, was sent to represent the government's benevolent care. A member of an intellectual group that had planned to explore the islands in the 1830s already, inventoried Bonin backyards and recorded the cultural practices he observed among islanders and foreign visitors to Peel Island. When the order came to abort the colonization in summer 1863, Rekisai collected local plants and brought

[117] Crosby 1986.

them to a greenhouse in Edo. On-the-ground encounters facilitated multidirectional ecological transformation.

The colonization of the Bonin Islands was an attempt to reconcile the gradual expansion of its early modern frontiers with modern ideas of sovereignty and colonialism *vis à vis* Western empires. The sudden expansion into the Kuroshio Frontier also reflects a change in the geographical orientation of the shogunate's strategies. It was an attempt to secure Japan a place in the sun while modern empires closed in on its maritime frontier. In this way, the Tokugawa initiated a pivot to the sea, half a decade prior to the Meiji Restoration.

CHAPTER SEVEN

Frontier Triangle: Business, State, and Piracy

> The whalers in olden times visit this beautiful spot no more, and but twice a year the monotony is broken by the arrival of the government steamer (...) The 50 or so savage natives did not take kindly to the encroachments of the foreigners, but, like the Red Indians of America, they were pushed ahead of the advancing tide, till now they are as strangers in their own land. Here and there, on some isolated coral beach or in the dark depths of the mighty volcanic gorges, one occasionally stumbles upon a miserable, grass thatched hut, from which the savage owner peers threateningly with sullen visage at the venturous traveler who has invaded his domain–his last retreat before the progressive Japanese.
>
> Jack London on his visit to the Bonin Islands in 1893.[1]

Rumor had it that the disappearance of the Benjamin Pease, a disreputable businessman in the Bonin Islands, was the work of Spenser (*d.* 1875), a black man brought over from Pohnpei to serve in Pease's dubious enterprise.[2] Known for his rough ways on the island, Pease had threatened Spenser at gunpoint, it goes, shortly before he went missing in September 1874. Pease had a documented history in slave trade and other unspeakable atrocities against Pacific Islanders, chiefly in collaboration with the infamous pirate Bully Hayes (*d.* 1876). Previously, when Pease commanded the brig *Waterlily,* newspapers warned of the armed buccaneer that

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[1] London 2009 [1896], 100.

[2] *Dispatch from Mr. Robertson to Sir Marry S. Parkes concerning the Bonin Islands*, Dec. 23, 1875, in: STAT, Acc. No.: Papers Relating to the Foreign Relations of the United States, Transmitted to Congress, With the Annual Message of the President, December 3, 1877, No. 186.

camouflaged his malfeasance by flying British and American colors interchangeably.[3] Sued for piracy in New Caledonia over attempted murder and ship theft from a French citizen, the pirate refuged to the Bonin Islands in 1869. In the power vacuum left by the retreat of the Japanese several years prior, Pease moved swiftly to make the village of Port Lloyd the base of his trading business. With the two schooners Lotty and Tori of his *Bonin Company*, he began trading in foodstuff, goat hides and human labor between China, Japan and the western Pacific. It is reported that Pease abused the "kanaka" servants and coolies whom he brought to the islands and sold them off to visiting vessels, and the women he recruited at Yokohama, he offered to seafarers and islanders as wives and prostitutes, thereby fostering his control over the island community.[4]

Having established himself at the apex of the local law, the blackbirder reached out to U.S. consul Charles E. De Long (1832–1876) in Yokohama to request governmental protection and to offer his service as a consular agent to the United States. The community of seventy-two, he lamented, was "governed wholly by lynch law," a fact that was ironically affirmed the following year by Pease's own violent end.[5] The case remained unsolved, for also Spenser, the suspected murderer, was found assassinated before an investigator reached the island in 1875. Russell

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[3] *Manaro Mercury, and Cooma and Bombala Advertiser*, Friday 7 May 1869, p. 6, in: TROV; *Sydney Punch*, Saturday 17 April 1869, page 8, in: TROV. Pease's biography is also featured in Dunbabin 1935, 223–37.

[4] Ishihara 2007a *Kindai Nihon to Ogasawara*, 217–3. On Pease's treatment of the Pacific Islanders he abducted and sold, see Dunbabin 1935, and Lubbock 1931.

[5] *Mr. De Long to Mr. Fish.,* April 21, 1873, in: STAT, Papers Relating to the Foreign Relations of the United States, Transmitted to Congress, With the Annual Message of the President, December 7, 1874, No. 398.

Robertson, who reported to the British consulate "questioned Pease's widow in respect to his disappearance," as he reported, "but all my questions were answered by monosyllables, accompanied by a silly laugh ... No one seems to regret [Pease's] loss, nor does one hear a single compassionate remark about him."[6] In the absence of state power, the implosion of the pirate's regime raised fundamental questions about the community of renegades' legal status and escalated concerns about the very nature of rule over the islands to an international level.

Pease's claims to American protection reverberated as they brought a shelved debate back to the table over the lawful belonging of an archipelago that had, since the decline of the whaling industry, escaped the attention of distant empires. The opening of treaty ports in China and Japan had diverted regional traffic north, leaving the once-bustling whaling entrepôt in the "Japan Ground" as a remote hideaway for offshore business. With the re-emergence of Japan under a new form of government, claims and responsibilities for the unruly frontier islands were to be re-negotiated among the parties invested in this part of the western Pacific. Given the conflicting claims over the islands that had been made over previous decades – British, American and Japanese navies all once planted their flag on the Bonins – meticulous consideration had to be paid to the risks and potentials of claiming this refuge of outlaws.

[6] *Dispatch from Mr. Robertson to Sir Marry S. Parkes concerning the Bonin Islands*, Dec. 23, 1875, in: STAT, Papers Relating to the Foreign Relations of the United States, Transmitted to Congress, With the Annual Message of the President, December 3, 1877, No. 186.

As Catherine Phipps points out, "Japan holds a unique position in world history in that it added to its territorial holdings (and became an imperial power) while its sovereignty was compromised through asymmetrical treaties with Western powers."[7] This anomaly is best understood through the lens of Takahiro Yamamoto's "Balance of Favor" between Japan's treaty partners who jealously prevented each other from carving out exclusive colonial territories from Japan, and instead shared privileges under the most favored nation clause.[8] In the case of the Bonin Islands, the situation was even simpler: appeasing a hideaway of ship jumpers and other renegades came as a nuisance to Western powers. Japanese leaders, on the other side, made the taming of the frontier a flagship project that provided an ideological compass for their new empire's modern ambitions.

This chapter discusses the emergence of competing agents in the frontier that blur the boundary between state and commercial agency. Whereas the islands of the Kuroshio region – mostly uninhabited and poor in resources – attracted little interest from Western governments, the reclamation of the oceanic frontier after the downfall of the Tokugawa shogunate affirmed Japan's colonial ambitions in the Pacific. This process unfolded at two levels: the flagship colony in the Bonin Islands became the site of state-funded agrarian experiments centered on exotic fruits and medical plants such as cinchona bark. Underpinning the modern and scientific character of Japanese colonialism, and the Meiji government's emphasis on national prestige, these experiments granted access to scientific exchange at international agrarian

[7] Phipps 2020, 149.
[8] Yamamoto 2015, 23.

conferences. The opening of remote isles where state control faded, by contrast, was initiated by petty entrepreneurs of often questionable reputation and ambivalent attitudes towards state interests. Some daredevil businessmen, such as Mizutani Shinroku 水谷新六 (*life dates n.k.*) who claimed an isle some 1,200 km east of the Bonins, ran counter to state policies and tested the government's resoluteness. Others, like Koga Tatsushirō 古賀辰四郎 (1856–1918) who colonized the Senkaku (Diaoyu) islands in 1895, enjoyed full approval of their island reclamations.[9]

Private business proved central to the colonization of frontier islands early on. Outsourcing colonization was an economic choice, but more than that, it was the result of a strong expansionist thrust originating among self-made businessmen. These frontier entrepreneurs mostly went after albatrosses which they monetized as downs, decorative feathers, or carcass-based fertilizers. Hiraoka Akitoshi has called this phenomenon the "bird rush."[10] The incorporation first of the Bonin Islands, and then of a number of uninhabited isles towards the close of the nineteenth century was perceived prominently in the public sphere and unfolded its ramifications in the crafting of expansionist ideologies in the realm of *Nan'yō-ron* or "South Sea Expansionism." Under the aegis of elite strategists such as navy minister Enomoto Takeaki, the autonomy in seclusion many of these petty tycoons enjoyed proved formative in the emergence of a new type of corporate capitalism. Reminiscent of the "chartered company governments" European businessmen set up in the scramble for

[9] Kreitman 2015, 56–9; Hiraoka 2005, 49.
[10] Hiraoka Akitoshi 2012, 110–12.

Africa around the same time, these Japanese entrepreneurs tested the boundaries between business and statehood.[11] The opening of the Kuroshio Frontier to state and private enterprise in the 1870s and 80s created a momentum formative for the empire's public and private institutions that redirected the thrust of domestic unrest towards the Pacific as a space for Japanese expansion.

Incorporating the Bonin Islands

The word that Benjamin Pease had established himself as the new hegemon in the Bonin Islands reached finance minister Ōkuma Shigenobu 大隈重信 (1838–1922) in the form of a British newspaper article. The article was translated and re-published in late 1873 by the *Tōkyō Nichinichi Shimbun*, a widely-read illustrated wallpaper that communicated to the Japanese public that Pease was flying the American flag on the islands which "Japan had colonized marginally but then abandoned them."[12] The public attention to the apparent loss of territory embarrassed the government. Just two days after the publication, Minister of the Right Iwakura Tomomi 岩倉具視 (1825–1883) called to reclaim the forgotten colony. At a moment of legal fluidity and institutional reinvention, the reclamation of an island inhabited by citizens of foreign governments – holders of unequal treaty privileges in fact – raised fundamental legal questions. As Ōkuma pointed out, the reclamation would have necessitated expropriating Pease, an act that, though found legal according to a specific reading of the French civil law, could have met resistance on the ground.[13] Letters were

[11] Press 2017, 6–8.
[12] Ishihara 2007a *Kindai Nihon to Ogasawara*, 231.
[13] *Ogasawara-tō yōroku*, vol. 1, entry 2, pp. 8–9, 01/20/1874, in: OVBE, Acc. No. Great Safe 2-3-1.

exchanged and documents collected between the ministries to discuss strategies that included budgeting 10,000 yen to purchase the islands from Pease, or to allocate 100 dollars monthly to hire the apparent owner of the islands as a Japanese official.[14] It was found "hard to estimate what sort of a person this famed Mr. Pease is. Since it is reported in the newspapers that he seems to wield such unchallenged power, it is furthermore difficult to estimate whether the islanders would support his objections to our intervention."[15] The plan was put forward that Pease should be made chief magistrate if he proved apt for the mission, for "if it turned out that the foreigners in the island are a mob of villains, it would be unthinkable that a normal person can govern the island by administration."[16] The relationship between the young empire and a new type of colonial population was yet to be defined.

For Britain and the United States, who had both formerly stated claims to the Bonin Islands, appeasing a nest of renegades and offering protection to a horde "of whom but four are classed as white persons,"[17] would have caused major costs at the prospect of marginal commercial or strategic benefits. After the decline of the whaling industry, and with the opening of treaty ports in Japan, the Bonin Islands had lost their appeal in the eyes of Western empires. Accordingly, the British indicated their

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[14] *Ogasawara-tō yōroku*, vol. 1, entry 4, pp. 72–3, 1874, in: OVBE, Acc. No. Great Safe 2-3-1.

[15] "兼而風聞御座候ヒールス[*sic*]儀其為人如何也もの二御座候哉， 難相計候へ共, 新聞紙之趣二而ハ， 頗ル其力罷在候模様二御座候、就而ハ島民とも協同本邦より着手相成候儀， 異議可申立も難計[候]." *Ogasawara-tō yōroku*, vol. 1, entry 5, pp. 80–81, 06/13/1874, in: OVBE, Acc. No. Great Safe 2-3-1.

[16] "同島占居之外人ハ悉ク悪漢等之輻轄なれハ凡常人物二而ハ治島之事務覚束なし." *Ogasawara-tō Yōroku*, vol. 1, entry 5, p. 84, 05/30/1874, in: OVBE, Acc. No. Great Safe 2-3-1.

[17] *Mr. Bingham to Mr. Fish*, Dec. 29, 1875, in: STAT, Papers Relating to the Foreign Relations of the United States, Transmitted to Congress, With the Annual Message of the President, December 3, 1877, No. 186.

reluctance by forwarding information about the islands and their American inhabitants readily to the U.S. Legation in Yokohama.[18] From Washington, the local circumstances that surfaced in the aftermath of Pease's disappearance elicited the explicit statement that the claims Commodore Perry had staked to the islands "has never been expressly sanctioned by Congress, and we are not aware that any other-act of the Government has since taken place which would show a disposition to support the claim of the naval officer adverted to."[19] Japan's intent to enforce its law, and, by extension, the interests of treaty powers on the islands, thus came as a convenient solution for both governments, so that the British consul Harry Smith Parkes (1828–1885) indicated that he would acknowledge Japan's reclamation of the abandoned colony.[20] Even Ōkuma, the planning mind behind Japan's intentions to reclaim the islands, acknowledged dryly that "owning (*yū suru*) this island won't yield any profit for our country, but it also won't cause much loss."[21] The ideological meaning of seizing a group of Pacific islands, on the other hand, could hardly be overestimated.

Clarifying the belonging of the islands was also part of the government's efforts to define clear boundaries for the empire. Negotiations over the northern borders in Sakhalin and the Kuril Islands were in full process in 1874 under chief

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[18] *Sir Harry S. Parkes to Mr. Bingham*, Dec. 27, 1875, in: STAT, Papers Relating to the Foreign Relations of the United States, Transmitted to Congress, With the Annual Message of the President, December 3, 1877, No. 186.

[19] *Mr. Fish to Mr. De Long*, May 31, 1873, in: STAT, Acc. No.: Papers Relating to the Foreign Relations of the United States, Transmitted to Congress, With the Annual Message of the President, December 7, 1874, no. 399.

[20] Ibid.; also cited in Chapman 2016a *The Bonin Islanders*, 79–81. Also see Yamamoto 2015, 206.

[21] "是を有するも以て我国を益する二足らす、之を有せるも以て我国を損る二足す." *Ogasawara-tō yōroku*, vol. 1, entry 2, p. 7, 01/22/1874, in: OVBE, Acc. No. Great Safe 2-3-1.

negotiator Enomoto Takeaki in St. Petersburg and ended on May 7th 1875 with Japan's cession of Sakhalin in exchange for the entire Kuril Islands chain.[22] With a breakneck expedition to Taiwan in 1874 in retaliation for the murder of a Ryukyuan ship crew, Japan had moreover asserted its claims to the Ryukyus and tested out the reactions of the neighboring Qing empire. As Danny Orbach has pointed out, the campaign to Taiwan was an act of military disobedience – Leutenant General Saigō Tsugumichi 西郷従道 (1843–1902) had willingly ignored the order to withhold – and yet, plans to establish a permanent presence on the island were forged in the background.[23] Each of these frontiers was subject to a different geopolitical situation, but as Yamamoto Takahiro recognizes, "the Japanese government's boldness was to a great extent driven not by the existence of competing claims, but by the fear of losing the balance in other edges of the archipelago as a result of losing out in the south."[24]

Attempts to establish an exclusive border in the frontier zone was never meant to exclude international business from the Bonin Islands. Rather, installing a customs authority to suppress tax evasion was seen both as a source of revenue, and as an ultimate assertion of sovereign power. As Ōkuma had stated: "Since the Ogasawara Islands' belonging to our country is unquestioned ... it shall be considered to establish an open port with a [harbor] authority (*chōkan*) that enforces general administration and taxation over the entire islands."[25] Just like the Tokugawa shogunate had

[22] Yamamoto 2015, 134–5.
[23] Orbach 2016a *By Not Stopping*, 51.
[24] Yamamoto 2015, 168–9.
[25] "小笠原島既二本邦属島たる事確然たる上ハ . . . 開港場ヲ相開, 長官を置キ島中之取扱向並税務等総轄候様被仰付, 可然相考候事" *Ogasawara-tō yōroku*, vol. 1, entry 2, p. 7, 01/22/1874, in: OVBE, Acc. No. Great Safe 2-3-1.

attempted a decade prior, the Bonin Islands could be made the model for a sovereign port for international trade, outside the framework of unequal treaties.

Ethnicity, Citizenship and the Making of Imperial Subjects

With the Bonin Islands, Japan was to incorporate an ethnically diverse population that, unlike the populations of Ezo and the Ryukyus, had no significant history of interacting with the Japanese. This process, which ended with the naturalization of all inhabitants by 1882, raised questions about the nature of subjecthood and citizenship. This section discusses how the Bonin Islanders, most of whom had only feeble ties with foreign governments or national identities, were accommodated within Japan's imperial reinvention.

In late 1875, more than a decade after the Japanese settlers had abandoned their colony in the Bonin Islands, the Emperor's steamboat *Meiji Maru* entered Port Lloyd. The newly appointed island magistrate Obana Sakunosuke, who had already served as the local magistrate during the first colonization in 1861–63, declared the harbor regulations enforced. The colonization began with a plan strikingly similar to that attempted under the Tokugawa. The inhabitants were granted the right to remain on the island under the condition that they sign the new law, read to them in English during a short ceremony.[26] Since the population had more than doubled in the meantime and counted seventy-one individuals by 1875, the government encouraged Japanese individuals to settle in the Bonin Islands by granting the

[26] Cholmondeley 1915, 164–170.

construction of houses and land improvement, even as trade with foreigners remained mostly in the hands of English-speaking islanders.[27]

The whaling vessels that had been cruising all around Japan in the mid-nineteenth century carried sailors of the most diverse backgrounds – Hawaiians and other Pacific Islanders, Europeans as well as Africans – across an increasingly connected Pacific world. For a few, Pacific integration opened business opportunities, but for many more, it meant displacement, coercion, or even enslavement. Initially, the need for workforces aboard whaling vessels, and later, a more systematic trade in indentured laborers and slaves to plantations and mines in Australia and South America displaced thousands. 100,000 indentured laborers were brought from Melanesia to Queensland, Australia, between 1860 and 1900, an experience that cost one-third of the workers their lives. More deadly even was the slave trade to Peru that, among other places, nearly depopulated the Easter Islands. Of 3,500 slaves brought to Peru in 1862–63, almost all were dead by 1866.[28] Though tribal societies sometimes took part in the slave trade, the systematic kidnapping at the hands of so-called "blackbirders" like Bully Hayes and Benjamin Pease exposed island communities to rampant violence at large.[29] It must be assumed that even before the pirates' arrival in the islands, many of the settlers in the Bonin Islands did not migrate out of their free will. Given the racial bias reflected in the records of both western and Japanese governments, only fragments are known about the circumstances under

[27] Ishihara 2007b *Wasurerareta Shokuminchi,* 62.
[28] McNeill 1994, 315–6.
[29] Matsuda 2012, 220.

which Pacific Islanders were recruited for the colony. The party of thirty that reached the islands in 1830 was led by the Italian Matthew Mazarro (*d.* 1848), joined by the Briton Richard Millichamp, the New Englanders Nathaniel Savory (1794–1874) and Alden B. Chapin, as well as Charles Johnson (*d.* pre-1853) from Denmark. Besides these "Euro-American" men, only the names of Harry Otaheite from Hawai'i and John Marquese from the Marquesas are recorded.[30] One historian later cited Mazarro referring to the twenty-five Hawaiian members of the expedition as "slaves." Especially the recruitment of women – six were ordered and delivered from Hawai'i in 1831 – indicates that the colony was firmly embedded in Pacific networks of human trafficking. Mazarro's ways with these people were rough as various accounts suggest.[31] As Chapman found, one visitor in the late 1830s reported that the Italian tried cajole John Bravo to murder a girl, a crime the latter refused to commit.[32] In 1843, Millichamp sailed to Guam where he enticed a married woman to join him in the Bonin Islands, and by way of it, also abducted her fifteen year-old niece, Maria (1828–?), who soon found herself married to Mazarro, an old man at that time. When Mazarro passed away in 1848, Maria became the wife of Nathaniel Savory.[33] Though few of these women's destinies are documented in detail, their biographies indicate that the gendered and racialized violence that displaced individuals across the Pacific did not halt in the Bonin Islands. (Fig. 7.1)

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[30] Chapman 2016a *The Bonin Islanders*, 27.
[31] Dunbabin 1935, 120–3.
[32] Chapman 2016a *The Bonin Islanders*, 33–4.
[33] Dunbabin 1935, 120–3.

The community of migrants that had started catering water and foodstuffs to visiting vessels at the height of the whaling boom was never static. A settlement of merely thirty to forty inhabitants for decades, the community fluctuated greatly, as crew were dropped off by their ships when they had fallen ill, while others moved on to pursue their opportunities elsewhere. Many jumped ship to evade the harsh conditions of life aboard a whaler, or to sign on to another vessel.[34] (See chapter 6). Like the family of Tewcrab, a Pacific Islander who immigrated – who knows under what promises – after a woman from his community had married a German settler there, or Nathaniel Savory from New England, who shipped goat skins to merchants based in Shanghai, Honolulu and Boston, the islanders were internationally connected and traded over vast distances.[35]

[34] An overview of 70 immigrants arriving on 18 voyages between 1830–37 can be found in Long 2007, 43.

[35] *Sadame*: 15-17, in: OVBE acc. no: Great Safe, Comp. 2, 2-5. On language, trade, and culture in the Bonin islands at that time, ref. to Cholmondeley 1915, and to Long 2007a *English on the Bonin Islands*, as well as to Chapman 2016a *The Bonin Islanders* 2016.

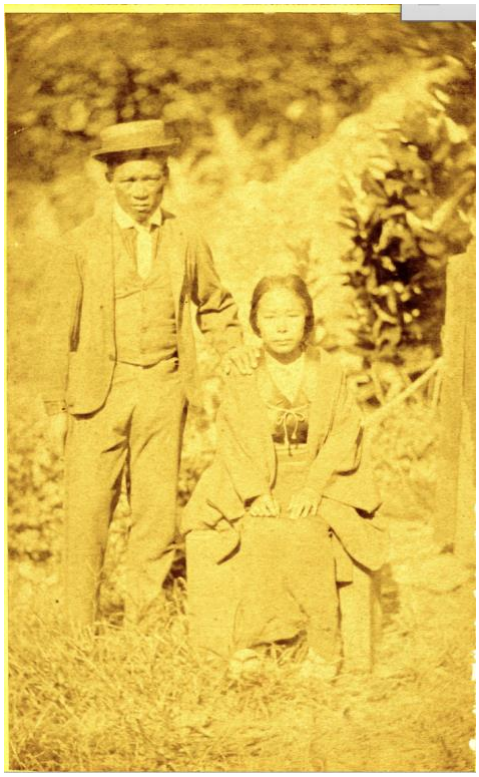

Fig. 7.1) Portrait of a couple of Bonin residents in late 1875 by Matsuzaki Shinji. Probably Robert Morris, age 24, born in the Bermudas, and his wife O-Yoshi, age 19, born in Ōnuma near Yokohama. O-Yoshi was one of two Japanese women residing permanently among the Islanders in 1875, apparently brought there by Benjamin Pease. (*Photographs of Bonin Islanders*, no. 157, image 3, in: OVBE, Acc. No.: Steel Closet, Compartment B1 (top).)

As mentioned in chapter 6, since Japan's incorporation of the Bonin islands, the inhabitants of non-Japanese descent have been commonly referred to as *Euro-Americans* (*Ōbei-kei*) in scholarship and administration, and within the community itself. This representation is rooted in the earliest records of the colony. British and American government representatives since 1830 corresponded exclusively with a small group of white men whom they installed as a quasi-authority in the islands. The Japanese who also built on the authority of American-born village headman Nathaniel Savory and British-born councilman Thomas Webb in key positions, reiterating their

status codified in thirteen "articles of government" Commodore Perry had drafted for the "Colony of Peel Island," administratively cemented racial and gender hierarchies by recording each individual as a member of a patriarchal household, even in absence of kinship connections.[36] The Japanese, as well, with their plans to name Benjamin Pease the Japanese officer (*Nihon shikan*) followed the practice of building on, rather than replacing, local power structures.[37]

Apparently, the community dominated by white men was quickly turning into a cosmopolitan, pan-Pacific merger. The frontier community had fluctuated greatly as crews of whaling and trade vessels were dropped off or jumped ship. The social organization was rudimentary, but patriarchal hierarchies persisted with ethnic mixing in marriage and eclectic households. As I have already mentioned in chapter 6, Japanese biographical records of 1862 suggest that at least 23% of the population at the time were born on the islands and were of mixed ethnicity, whereas only eight out of 48 can unambiguously be identified as *Euro-Americans*.[38] (Fig. 7.2) Later surveys show that by 1876, when the population had almost doubled, the share of immigrants from Pacific islands had increased to some 45%, with an additional 34% of the population being mixed-blooded islanders of the second generation. At that

[36] The initial colonization had been authorized by British consul Richard Charlton, but was apparently financed by the settlers. Cholmondeley 1915: 14–22. When Matthew Perry's fleet stopped by Port Lloyd, he named Nathaniel Savory, James Mottley and Thomas H. Webb councilmen of the Colony of Peel Island. (*Constitution for the Colony of Peel Island*, in: *Untitled Collection of Documents Created During Commodore Perry's Visit to the Bonin Islands, 1853*, in: OVBE, Acc. No: Great safe, Compartment 6, 6-2.

[37] *Ogasawara-tō yōroku*, vol. 1, entry 4, pp. 71–2, 1874, in: OVBE, Acc. No. Great Safe 2-3-1.

[38] Individual biographical outlines of each head of household were written down in *Sadame*, in: OVBE Acc. No: Great Safe, Comp. 2, 2-5.

point, only four individuals were left that were born in a Western country.[39] Even though political power was concentrated in the hands of a few men of European descent, the settlement was quickly merging into a cosmopolitan, pan-Pacific melting pot.[40]

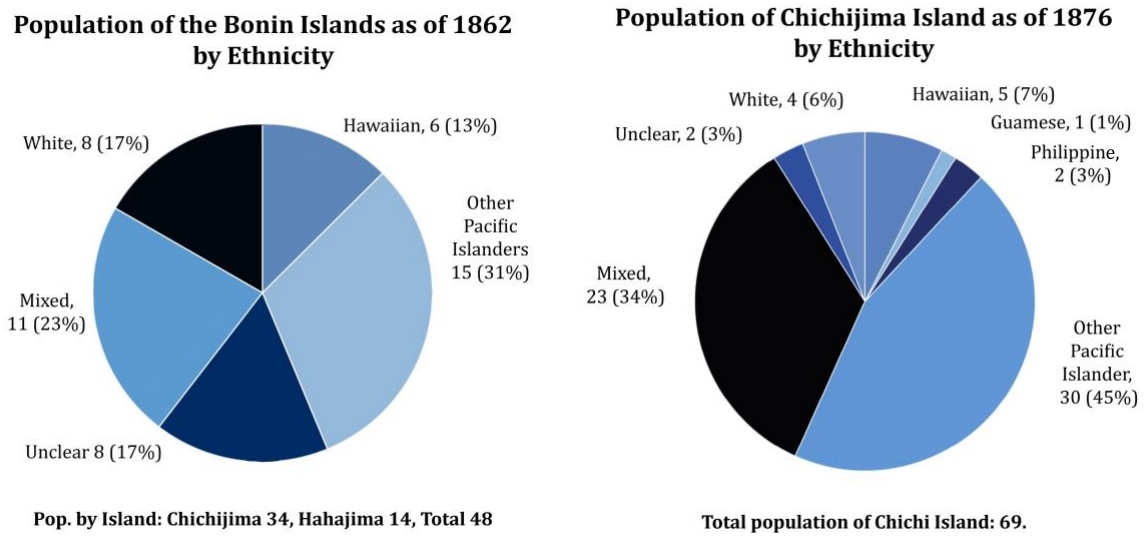

Fig. 7.2) Ethnic composition of the Bonin Islands as of 1862 and 1876, based on Japanese demographic records. *Sadame*, vol. 2 entry 18, in: OVBE acc. no: Great Safe, Comp. 2, 2-5.

Language and material culture was fluid and eclectic, as a Japanese castaway record indicated as early as 1840. Of 53 expressions the Japanese visitors picked up, 36 were

[39] *Ogaswara-tō yōroku,* vol. 2, entries 18–9, pp. 34–41, in: OVBE, Acc. No. Great Safe 3-3-11.

[40] Long shows that around 1840, languages spoken in the islands were strongly influenced by Hawaiian. (Long 2007a *English on the Bonin Islands*, 53–4). As of 1862 only eight out of 48 islanders can be unambiguously identified as 'Euro-Americans.' By 1876, the share of immigrants from Pacific islands among the growing population had increased to some 56%, with an additional 34% belonging to a mix-blooded second generation. (*Ogaswara-tō yōroku,* vol. 2, vol. 2, entries 18–9, pp. 34–41, in: OVBE, Acc. No. Great Safe 3-3-11.)

of Hawaiian, 6 of unknown origin, and only 11 can be identified as English words.[41] The Hawaiian Language, which, at least in the settlement's first decade seemed to prevail as the quotidian language, was slowly giving way to new creole versions of English that absorbed influences of Portuguese and other languages spoken in the ethnically mixed households, as Daniel Long concludes.[42] The lifestyle of Thomas Webb, Councilman at Perry's order and harbor pilot under the Tokugawa government, furthermore indicates a high degree of creolization in everyday practice as well. The Japanese botanist Abe Rekisai in 1863 observed that Webb navigated around the islands in an outrigger canoe and caught fish with a spear in shallow places.[43] Like most settlers, he lived in a grass-thatched hut, perhaps inspired by traditional Hawaiian dwellings, neatly suited for the warm and humid climate on the islands. Within a few decades, the small community in the Bonin Islands had given birth to a local creole culture.

It can be assumed that by the time of the Japanese takeover, the island community had developed an original local identity. An ethnically mixed generation emerged as the men passed away who wielded control over the colony during the first decades of its existence, backed by official appointments from the British, then American, and, for a brief period, the Tokugawa governments. After Mazarro's death in 1848, Savory appeared to represent leadership in the islands until the emergence

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[41] Long 2007a *English on the Bonin Islands*, 53–4.

[42] Long 1999, 257. In the early phase of the settlement, Hawaiian may have had a higher currency than English since it is partially intelligible with other Polynesian languages. (Long 1999, 255.) Daniel Long has pointed out that the islanders abandoned literacy, with as little as three men able to read and write in 1876. This fact may have accelerated creolization out of an initially simple pidgin.

[43] *Nansho kōki*, pp. 96–111, ed. in: Suzuki 2012.

of Pease, but after the two died in 1875 and 1874 respectively, Thomas Webb, who had been in the Bonin Islands since 1847, was the last member of the council installed by Perry. When the British investigator Robertson asked Maria, the widow of Nathaniel Savory who had been abducted from Guam by Millichamp in 1843, whether her hoisting the American flag conveyed that her family considered themselves under American protection,

> She answered in the negative, merely saying that it had been the dying wish of the late Mr. Savory that the flag should be shown on the arrival of a vessel or on any gala day. I invited her confidence and that of her family as to any wishes she might have on the subject of nationality or protection by reason of her alliance with Savory, but she said that, in common with her children and the settlers generally, they had no other wish than to be regarded as Bonin Islanders, and to be protected in their rights of property on the island.[44]

A growing number of islanders had come to see themselves as members of their immediate local community rather than protégés of an abstract, distant government to which they had never had any personal or ethnic ties whatsoever.

Naturalization and the Definition of Citizenship

The question of citizenship is a blurry territory on an island with this degree of ethnic mixing. According to Benjamin Pease, among the sixty-eight islanders in 1873 there were twenty-five Americans, seventeen British, four French and "a number of Hawaiians,"[45] though Pease obviously had all reasons to inflate especially the number of American subjects. The British consul Parkes confirmed three years later that

[44] *Dispatch from Mr. Robertson to Sir Marry S. Parkes concerning the Bonin Islands*, Dec. 23, 1875, In: STAT, Papers Relating to the Foreign Relations of the United States, Transmitted to Congress, With the Annual Message of the President, December 3, 1877, No. 186.

[45] *Mr. De Long to Mr. Fish*., April 21, 1873, in: STAT, Papers Relating to the Foreign Relations of the United States, Transmitted to Congress, With the Annual Message of the President, December 7, 1874, No. 398.

fifteen or sixteen individuals retained claims to British citizenship, though there seemed to be some uncertainty still regarding the national affiliations.[46] The largest group of settlers, the Hawaiians, also stood under the extraterritorial protection of a Treaty of Amity and Commerce since 1871, at least in theory.[47] The presence of foreign citizens on the islands, with claims to extraterritorial privileges as stipulated in the unequal treaties, was a source of concern for both the Japanese and the respective foreign governments, as will become clear below. This issue raised questions about the meaning of sovereignty, citizenship, and the scope of extraterritoriality.

For Japan, asserting sovereignty became a balancing act, given the extraterritoriality granted to the islands' foreign residents. There had been an embarrassing precedent to this scenario. In 1863, when Nakahama Manjirō hired whalers in the Bonin Islands to train a Japanese crew in the handling of the explosive "bomb lance" harpoon, an English and an American whaleman were caught with stolen property and a handgun aboard the schooner *Kimizawa number one*. They were transferred to Yokohama to be tried for piracy at their respective consular courts. It was found that the American George Horton (1778?–1864?), aged 84, was innocent, having been cajoled by his companion.[48] The U.S. Minister Robert H. Pruyn (1815–1883) instead ruled that the Japanese government was to pay 1,000 Mexican dollars as a redemption for the false accusation. The money was received and

[46] *Ogasawara-tō yōroku*, vol. 1, entry 97, p. 246, 12/20/1876, in: OVBE, Acc. No.: Great Safe 2-3-1.
[47] Auslin 2004, 211.
[48] Eldridge 2014a *Iwo Jima and the Bonin Islands*, 27.

subsequently administered by Pruyn, illustrating how treaty powers could use their judicative power for their own gains.[49]

Nevertheless, asserting the extraterritoriality of their citizens in the Bonin Islands also came as an inconvenience to foreign governments, as they feared that the Bonins' sheer remoteness would make the protection of extraterritorial privileges so troublesome that the principle would risk being undermined. As one observer in the U.S. Department of State recognized, the Japanese harbor regulations for the Bonin Islands were "to be regarded with favor; but we should jealously guard the right of trial and of punishment of our own citizens secured to them by the treaty."[50] Internally, it had already been decided in reaction to Pease's request for U.S. protection that "if citizens of the United States have repaired to those islands for the purpose of taking up their abode, (…) they may fairly be held to have deliberately abandoned the United States without purpose of returning, and therefore to have relinquished the rights as well as duties of citizens."[51] Abandoning the extraterritorial rights of citizens, however was a balancing act. The British Consul Harry S. Parkes stated openly in conversation with the Japanese foreign minister Terashima Munenori 寺島宗則 (1832–1893) that "regardless of the scale of crime, British

[49] *Mr. Pruyn to the Gorogio*, Dec. 21, 1863, in: STAT, Papers Relating to Foreign Affairs, Accompanying the Annual Message of the President to the Second Session Thirty-eighth Congress, Part III, no. 464; *Mr. Pruyn to Mr. Seward*, July 2, 1864, in: STAT, Papers Relating to Foreign Affairs, Accompanying the Annual Message of the President to the Second Session Thirty-eighth Congress, Part III, No. 491.

[50] *Mr. Fish to Mr. Bingham, December 20, 1876*, in: STAT, Papers Relating to the Foreign Relations of the United States, Transmitted to Congress, With the Annual Message of the President, December 3, 1877, No. 185.

[51] *Mr. Fish to Mr. De Long*, May 31, 1873, in: STAT, Acc. No.: Papers Relating to the Foreign Relations of the United States, Transmitted to Congress, With the Annual Message of the President, December 7, 1874, no. 399, also cit. in: Chapman 2016a *The Bonin Islanders,* 79.

citizens are subject to British government. This is unalienable; even for petty crime they cannot be processed by your government ... yet, it is unconceivable that we dispatch a vice-consul to the said island."[52] When Terashima informed Parkes of his intent to naturalize the inhabitants of the Bonin Islands, Parks agreed that "should the presence of British citizens become a source of concern, it will be necessary to evacuate them, or to grant them the citizenship of your country."[53] In the interest of the principles stated in the unequal treaties, British and American governments found it opportune to encourage the naturalization of their subjects in the Bonin Islands.

Within the first year of the Japanese takeover, it was decided to naturalize the Bonin Islanders as a precaution to avoid conflicts with the extraterritoriality clause stipulated in the unequal treaties.[54] The *Essential Records of the Island Ogasawara* document how the naturalization of 64 Individuals in the Bonin Islands, the first of its kind in Japanese history, figured as a diplomatically supported step towards a new understanding of sovereignty based on population control. On February 24, 1877, the Briton Robert Myers of Chichijima (Peel Island) in the Bonin Islands informed his consul in Yokohama that he had become a Japanese subject and renounced British protection. Together with four others, Myers was to be granted Japanese citizenship at a time before sovereignty (*ryōyū*) and citizenship (*kokuseki*) were legally

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[52] "英人ハ軽重罪共英政府ノ支配ノ下二有之, 他ノ管理ハ相受ケ不申, 軽罪タリトモ貴政府ノ處分ニハ難任候 ... 副領事ヲ同島へ派遣候儀も難計候." *Ogasawara-tō yōroku*, vol. 1, entry 97, pp. 248–9, 12/20/1876, in: OVBE, Acc. No. Great Safe 2-3-1.

[53] 一在島ノ英人ハ英人トシテ差置候事ナラハ宜敷候， 万一英人トシテ差置ク事御不都合ナラハ，同島ヲ追出歟，其［貴］国籍へ入ル歟ノ処分セネハナラス." *Ogasawara-tō yōroku*, vol. 1, entry 97, pp. 248–9, 12/20/1876, in: OVBE, Acc. No. Great Safe 2-3-1.

[54] Ishihara 2007b *Wasurerareta Shokuminchi*, 61–64. On the process of naturalization, see Chapman 2016b *Britain and the Bonins*, 71–5; and Chapman 2009.

formalized. Though foreigners could enter the *koseki* family registry by marriage or adoption according to a law of 1871, the naturalization of foreign families or single persons based on their abode in Japan was unprecedented, as David Chapman has pointed out.[55] Under the Tokugawa, grouping the Bonin Islanders into households pinned down the population in a bureaucratic system, rendering individuals "legible" for the state. As James Scott puts it, "modern statecraft is largely a project of internal colonization, often glossed, as it is in imperial rhetoric, as a "civilizing mission." The builders of the modern nation-state do not merely describe, observe, and map; they strive to shape a people and landscape that will fit their techniques of observation."[56] With the Bonin Islanders' integration into the *koseki* family registry, which had been harmonized nationwide in 1871, the state not only asserted sovereign rule about the frontier islands, but it created a new category of "naturalized foreigners" or *kika gaikokuji*, that set the inhabitants of the southern colony apart from the "former natives" *kyūdojin* of Ezo.[57] The naturalization drew exclusive borders around the ethnically distinct colony, as also the islanders noticed. As the *Essential Records of the Island Ogasawara* document, most inhabitants were highly skeptical of the new government's offer of naturalization:

> Except for [these] five persons, no one stated an interest. Let alone the holders of British, American, French, Portuguese or Spanish citizenship, even the stateless *Kanakas,* whom we tried to convince in various ways, for lack of common language indicated merely that they are disinterested. It is impossible to force the conversation. ... Having pursued their business

[55] Chapman 2009, 2, 6.
[56] Scott 1998, 82.
[57] Chapman 2009, 7.

> here with no constraints for decades, the are concerned what sort of constraints will be imposed on them if they accept Japanese citizenship at this point.[58]

Given the skepticism on the part of the islanders, it took five years until the government had succeeded in naturalizing all of them with treats and threats by 1882, turning them into imperial subjects and obliterating their extraterritorial rights.[59]

Imperial Cosmopolitanism

Despite their acceptance of Japanese citizenship, the Bonin Islanders became the constructed other of Japanese colonial superiority. The double standard of this naturalization becomes evident in the conflicting representation of the islanders as "Western" in appearance and "primitive" in material culture. As David Odo has pointed out, this representation of 'exotic' islanders began in 1875 with the photographic documentation of the colonial enterprise and the commercial distribution of *carte-de-visite* images of the colonial population.[60] The dual topoi of South Sea exoticism and the alleged western-ness of "naturalized foreigners" carried through to touristic photography of the prewar period, as a collection of postcards at the Ogasawara village archive illustrates.[61]

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[58] "五名ノ外ハ不相好旨申立, 英米仏葡西等之籍名アル者ハ暫ク措テ, 「カナカ人」ノ無籍ノ輩抔二至リテ種々説諭二及候ヘハ, 辯答ノ詞ナク, 只管二不好趣申出, 然ルヲ強テ可談事二も相成兼候 . . . 従来数十年間不羈自由二生業罷在、今更二日本籍二相成候上ハ如何様之束縛ヲ蒙リ可申哉ト之掛念も可有之." *Ogasawara-tō yōroku*, vol. 2, entry 17, pp. 29–31, 04/01/1877, in: OVBE, Acc. No. Great Safe 3-3-11.
[59] Chapman 2016a *The Bonin Islanders,* 91–4.
[60] Odo 2009, 205.
[61] *Prewar Postcards from Ogasawara,* in: OVBE, Acc. No.: Dehumidified Closet, Compartment B-76.

Fig. 7.3) A Sailor from the Japanese expedition is sitting in an outrigger canoe on a beach in the Bonin Islands. Photograph by Matsuzaki Shinji, 1875. (*Ogasawara Shashin*, in: NAJ, Acc. No.: 附Ａ00084100.

The photographer Matsuzaki Shinji 松崎晋二 (1850–?), who accompanied the expedition to the Bonin Islands in 1875–76, was a commercially successful and politically well-connected young artist. The year before, Matsuzaki had followed the expedition to Taiwan, of which, however, only one photograph has survived. In the Bonin Islands, Matsuzaki portrayed the "natives" (*dojin*) connected to their straw huts, outrigger canoes, and western-style clothing.[62] (Fig. 7.3 and 7.4) Later photographs, such as a collection of 36 images by an unknown author presented to

[62] On Matsuzaki's work, see Odo 2009. The original photographs are held at the Ogasawara Village Board of Education Archive: *Photographs of Bonin Islanders*, in: OVBE, Acc. No.: Steel Closet, Compartment B1 (top), no. 157.

the Meiji Emperor several years into the colonization, are focused on the achievements of colonization, including a school, sugarcane farming, and a substantial town harboring a steamboat.[63] In a manner reminiscent of the exhibition of the Ainu in the celebration of colonial achievements in Hokkaido, even if less condescending in nature, the Japanese distributed handy photographs of the islanders among the paying public.[64] (Fig. 7.1). When the American novelist Jack London (1876–1916) visited the Bonin islands in 1893 as a crew member on a seal hunter, he was told about the history the mix-blooded 'natives' that struck the visitor in stark contrast to the Japanese colonizer:

> Two hundred and fifty years ago (…) the Japanese government took possession and colonized [the islands]; but fifty years later they were deserted. During the next two centuries their few inhabitants, abandoned by their mother county and cut off from all intercourse with the outside world, relapsed into semi-barbarism. This beautiful but remote group of islets was forgotten, actually forgotten.[65]

Ethnically different subjects were used to convey a patronizing narrative of ahistorical Japanese presence *vis à vis* foreign visitors. At the same time, an evolutionary rationale constructed racial hierarchies that elevated the Japanese into the position of a colonizer, in both cultural and institutional terms. Like the exotic plants exhibited proudly at the exhibitions of domestic produce, the diverse subjects now under the rule of Japan affirmed the young nation state's greater ambitions.

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[63] *Ogasawara-tō tsuki Hachijōjima shashinchō*, in: KUN, Shoryō-bu, Acc. No. B9-32.

[64] David Odo remarks that such photographs may as well have been paid for by the islanders themselves as *cartes de visite*, a bourgeois custom in the late nineteenth century. (Odo 2009, 205–8.)

[65] London 2009 [1896], 98.

Fig. 7.4) Mid-or late Meiji period photograph of Bonin Islanders in front of a church. Note the mingling of Western and Japanese clothing styles. (*Ogasawara-tō tsuki Hachijōjima shashinchō*, in: KUN, Shoryō-bu, Acc. No. B9-32.)

The Bonin Islands were colonized with a proactive immigration policy that boosted the population within just a few years. In order to farm the islands more intensively, the government first sent convicts to the islands for corvée labor, and generously incentivized the construction of dwellings for poor emigrants. The government initially granted 50 yen to each individual or couple for the construction of homes and lent household and work tools for free. This immediately attracted a large number of immigrants, chiefly from Hachijō, but also displaced former samurai from other regions were among the immigrants.[66] In 1879 already, this policy was inverted and it was temporarily prohibited to set over to the colony. With the introduction of special permits in 1883, the population continued to grow fast, reaching 2,000 in

[66] Ishihara 2007b *Wasurerareta Shokuminchi,* 63–4.

1890 and 5,550 in 1900.[67] Even though Japanese immigrants outnumbered the small community of Pacific migrants, the Bonin Islands continued to be represented as a piece of the exotic South Sea within Japan. (Fig. 7.5).

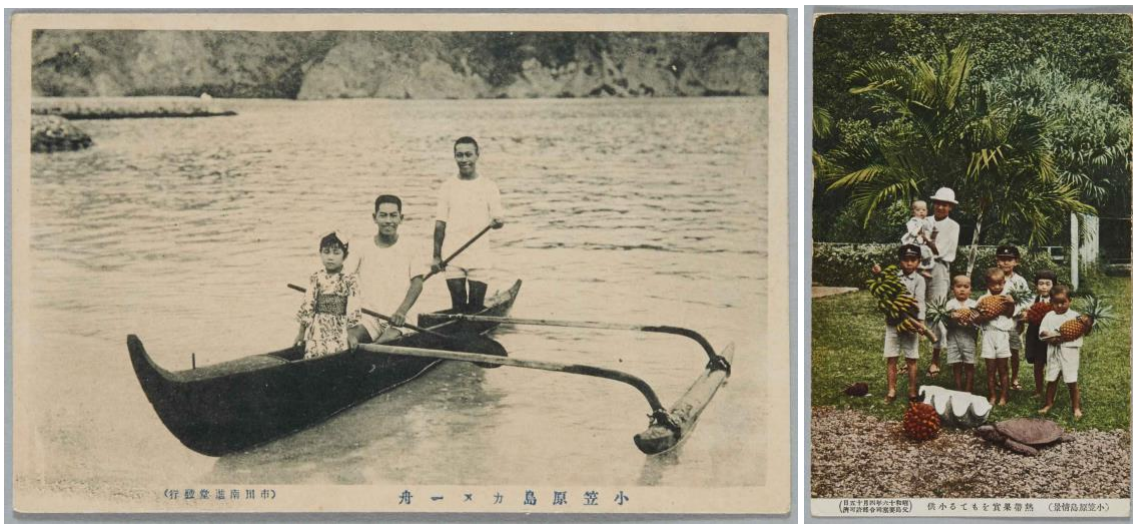

Fig. 7.5) Left: A Japanese family riding an outrigger canoe in the Bonin Islands (Taishō/early Shōwa periods). Right: Children holding tropical fruits, with the remark "approved by the military command of the Chichijima base, Apr. 15, 1941." (*Senzen no Ogasawara no ehagaki*, images 28 and 68, in: OVBE, Dehumidified Closet, Compartment B-76.)

Science and Agriculture

Like in the systematic colonization of Hokkaido around the same time, the scientific promotion of agriculture stood high on the Meiji government's agenda for the "South Sea." [68] The Bonin Islands' southerly climes gave the experimentation with subtropical plants a special strategic value. Finance Minister Ōkuma Shigenobu had

[67] Ishihara 2007b *Wasurerareta Shokuminchi,* 63–4.
[68] On scientific agriculture in the colonization of Hokkaido, see Walker 2004, 248–74.

expected that the military campaign to Taiwan in the summer of 1874 in retaliation for the murder of a Ryukyuan ship crew by Taiwanese natives would translate into a lasting colonial project, and acquired seeds of foreign plants to be grown in the colony. The breakneck expedition, however, ended in a disaster for the Japanese, leaving 70 to 80 percent of their troops sick of tropical disease – lethal for 561 out of 3,600 men.[69] Ōkuma was therefore painfully aware of the importance of tropical medicine for southward ventures.

In preparation for the expedition to the Bonin Islands the following year, the botanist Tanaka Yoshio 田中芳男 (1838–1916), head of the Ministry for the Promotion of Agriculture (*kannō kyoku*) and disciple of Abe Rekisai, the physician who had explored the islands at the order of the Tokugawa shogunate, requested the Dutch consul to send him cinchona seedlings from Java half a year before the colony was reclaimed.[70] The bark of the cinchona tree, originally endemic to the Andes, yields quinine, the most effective treatment for malaria known at the time. The Dutch had sent an agent to Peru in 1855 to obtain seedlings of the valuable plant, and within a few years, their plantations in Java became the world's leading quinine producers. Exporting cinchona seedlings from the Dutch empire was strictly prohibited, but the consul offered nine types of coffee to grow in the Bonins instead.[71] When the seedlings turned out to have withered on the transfer, Tanaka sent a close collaborator to the British colonies in India and Ceylon and then to Java to purchase

[69] Orbach 2016, 51.
[70] Suzuki 2005 vol. 1, preface, p. 9.
[71] Nagumo 2011, 1530.

additional seedlings. At this time, the emissary returned with 42 cinchona seedlings and 50 kg of various seeds. Perhaps the Dutch had come to realize that they were already losing their monopoly on quinine to the British and the French, who were also growing cinchona by the early 1860s, and found it opportune to play the diplomatic token before others did.[72] With their subtropical climate, the Bonin Islands served as an agrarian laboratory.

The quickly mutating institutions of the Meiji state introduced a centralized regime of systematic planning to the experimental fields of Chichijima island. Tanaka Yoshio, the expert-in-chief, had built up a formidable scholarly network at international conferences and world exhibitions that allowed him to correspond and exchange seedlings with agronomists all around the world.[73] In 1877, for example, he purchased a handful of 'sea island cotton' seeds from South Carolina. The seeds were sent to the Bonins with exact instructions on the plant's treatment and fertilization.[74] (Fig. 7.6) Along with the cotton seeds, gummi, coffee and olives were sent as projects of priority, but all of them were later given up. A later project in the early 1880s returned to the species originally grown by the islanders such as banana, sugar cane, citrus fruits, pineapples and betel.[75] The introduction of new species and the remote planning of local agriculture was embedded in the new international role the empire and its scientists aspired to play.

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[72] Suzuki 2005, vol. 1, 2;10.; Nagumo 2011, 1530–2.
[73] *Kokushi daijiten,* keyword "Tanaka Yoshio," in: JK.
[74] *Hakubutsu kyoku yori okuraru Beikoku kaitō kusawata tane*, Envelope with seeds and instructions on cultivation, in: OVBE, Great Safe Compartment 3, 3-26; Suzuki 2005, vol. 2, preface, p. 3.
[75] *Ogasawara-tō yōran,* pp. 185–9, in: Ogasawara Village Board of Education, acc. no.: Anti-Humidity Safe A-12.

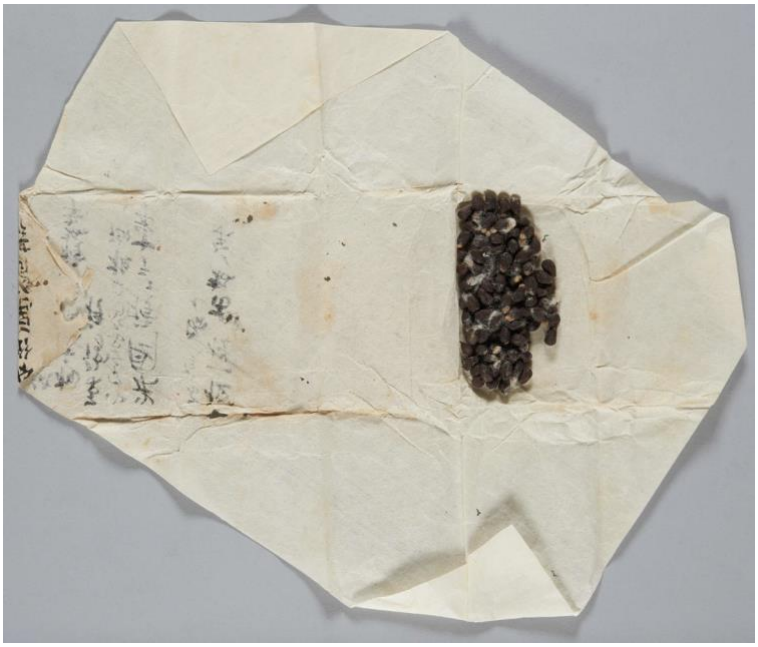

Fig. 7.6) Envelope containing "Sea Island Cotton" seeds sent to the Boinin Islands by Tanaka Yoshio in 1877. (*Hakubutsu kyoku yori okuraru Beikoku kaitō kusawata tane*, in: OVBE, Great Safe Compartment 3, 3-26.)

Almost immediately after the Japanese takeover, preparations began in early 1876 for the first *National Exhibition of Industry and Agriculture* (*naikoku kangyō hakurankai*) at Ueno Park in the center of Tokyo the following year. Governor Obana quickly put together shipments of exotic produce – 11 living plant types, two goats and a buck, as well as four specimens of local minerals – for the ministry of internal affairs. Later, a miniature canoe and oars were shipped as well, along with samples of cotton and eleven types of wood, recorded with their English or Austronesian

names.[76] In the manner of Western empires that exhibited types of colonial subjects, the Japanese also distributed handy photographs of Bonin Islanders and their material culture.[77] A laboratory of biological globalization, the frontier and its islands contributed to the new government's self-representation as an encompassing, cosmopolitan empire.

Public-Private Partnerships

From the onset of the new regime in the Meiji Reform, it was understood that Japanese presence in the frontier depended on private business initiatives, as a series of government-authorized business plans in the Bonin Islands illustrate. While the oligarchs, whose emergence marked the establishment of a new social order, were absorbed in defining the new system of rule at home, they already sought cost-effective ways to assert their fledgling empire's claims to the maritime frontier. The process of defining the relationship between business and state, however, was anything but straight-forward. The scarcity of governmental resources opened a space for private enterprise where the state found it either too costly, or diplomatically risky to deploy its own agencies. Initially, the promise of abundant whaling grounds primarily inspired plans for whaling businesses in the region. Once it had become clear that the global whaling industry had long been in decline, however, the focus of private entrepreneurs shifted towards the resources of more remote isles of the frontier.

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[76] *Ogasawara-tō yōroku*, vol. 2 entries 27, 40, 75, pp. 65–9, 94–6, 141–4, in: OVBE, Acc. No. Great Safe 3-3-11.
[77] Odo 2009, 205–8.

The Demise of Whaling

In early 1870, the third year of the Meiji era, the entrepreneur Iguchi Naosuke 井口直助 (*life dates n.k.*) and his assistants traveled to the Bonin islands on the U.S. post ship *New York* to explore the archipelago. Iguchi and his partner Tani Yōkei 谷暘卿 (1817–1885), retainers of a high-ranking *kazoku* nobleman, obtained a personal permission from the foreign minister to start a privately funded colony on the islands.[78] It was made clear to the entrepreneurs that "the costs will be significant and the profit marginal, making it an uncertain mission for private capital. Therefore, this shall be done not just for the profit, but for the honor of it, so that we may see the colonization succeed at last!"[79]

Despite the ready support of the islander Thomas Webb, who had served as the harbor pilot under the shogunate, Iguchi's assessment was sobering and he aborted the enterprise. Almost immediately, the license was reassigned to Fujikawa Sankei's 藤川三渓 (1817–1889) whaling corporation *Kaiyōsha,* which pledged to modernize the Japanese whaling industry with western methods. In his business plan, which he submitted to Imperial Councilor Ōkuma Shigenobu, the later founder of Waseda University, Fujikawa claimed that his enterprise would bring three essential benefits to the empire:

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[78] *Ogasawara-tō yōran*, p. 103, in: Ogasawara Village Board of Education, acc. no.: Anti-Humidity Safe A-12.

[79] "市民の自費にて事を開くハ費多く益少く永続甚だ覚束なし， 只利の為にせず, 名の為にせば, 竟に開拓の成功も見ん" *Ogasawara-tō yōran*, p. 103, in: Ogasawara Village Board of Education, acc. no.: Anti-Humidity Safe A-12.

> First, we aspire to increase the number of large ships and to provide the means to train sailors for national defense. Second, opening up the great resources of the sea will provide the basis for domestic strength and prosperity, and third, by colonizing peripheral islands we shall expand the map of our country.[80]

Whaling had long been linked to national defense in theory, as is illustrated by the Tokugawa shogunate's attempts to establish whaling businesses in the northern Frontier of Ezo, or in the shogunate's attempts to appropriate pelagic whaling technologies in the framework of naval modernization since the 1850s.[81] However, the rationale that whaling fleets can form a self-financing naval fleet proved faulty both technically, and due to the industry's global decline.

By the time private businesses could have modernized the whaling industry according to western standards, tapping offshore whaling grounds with effective, though wasteful technologies such as the "bomb lance" whale gun, the heyday of whaling was long gone by. (See Ch. 4).[82] By 1870, the whaling frontier had long moved to the northern rims of the Sea of Okhotsk, leaving the Kuroshio region with a sharply decimated whale population. Moreover, industrial whaling as it had emerged in the Atlantic was in fact a fundamental mismatch with Japanese markets. Exclusively producing whale oil, pelagic whaling failed to deliver the products that had been in demand on Japanese markets, such as baleen, whale guts, meat and whale-based

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[80] "第一利ハ大舩ヲ増シ水勇ヲ養フ, 此レ全国保護ノ本ナリ. 第二利ハ大ニ海利ヲ開キ, 以テ内国富強ノ基ヲ建ルナリ. 第三利ハ辺々海島ヲ拓キ物産ヲ納メ, 以テ我ガ版図ヲ広ムルナリ." *Kaiyōsha dai'i,* p.2, in: WUL, Acc. No.: イ 14 A3864.

[81] Rüegg 2021, 297–8.

[82] In 1862-63, twelve foreign whaling vessels visited the Bonin Islands, of which nine sailed under the American, two under the Hawaiian and one under the Russian flag. (*Ogasawara-tō fūdo ryakki,* p. 58, in: NAJ, Acc. No. 173-0185.) Competing over a dwindling number of cetaceans, Yankee whaling had been in decline for well a decade, and pressure on the industry increased with the commercial extraction of petroleum after 1857. Black 1998, 210.

fertilizers.[83] Until the invention of the heat pump, meat and other perishable products could not possibly be preserved on longer voyages, and the dissection of whale carcasses afloat did not allow to harvest much else than blubber and spermaceti.[84] These products, as well, had come under pressure since petroleum began quickly to substitute whale oil in many of its applications once systematic drilling first succeeded in 1857.[85]

"Modern" whaling, modelled after the Norwegian industry, was not brought to Japan until after the Russo-Japanese war, and represented a complete rupture from the networks and techniques of earlier, proto-industrial whaling enterprises. In 1864, the Norwegian entrepreneur Svend Foyn (1809–1894) had developed a new model of the explosive whale gun, fired from a cannon mounted on the mother ship, and started whaling with factory ships capable of also harvesting meat and bones.[86] In the early twentieth century, it was from Scandinavia that Japan imported state-of-the-art technology and know-how, mostly to locations with no previous whaling businesses, as Fynn Holm's recent article has illustrated.[87] Unlike earlier whaling businesses in coastal locations along the Kuroshio such as Taiji or Muroto, industrial whaling enterprises in the twentieth century emerged in major industrial harbors, essentially dissolving the place-bound character of the early modern business and its networks of know-how. In other words, the mechanical industrialization of the whaling

[83] Early modern whaling communities financed themselves through the sales of whale gut strings, leather, baleen and bones, all of which were resources applicable to build tools, houses, as fertilizers, or in medicine. Arch 2018, 84.
[84] Tønnessen 1982, 18–9.
[85] Black 1998, 210.
[86] Holm 2020b *Bringing Fish to the Shore*, 4.
[87] Ibid., 10–2.

business in Japan does not stand in a continuous line with early modern or proto-industrial whaling groups, but rather, it represents a radically new mode of large-scale and capital intensive enterprises that operated over vast geographical spaces.[88]

Fujikawa's *Kaiyōsha* was ultimately brought down over the feared competition over declining resources. Grievances uttered by fisherfolk in the Bōsō Peninsula halted the start of the company's whaling voyages for several months before clear regulations for the industry were laid out, since damage was expected to the sardine fisheries.[89] At least two more entrepreneurs attempted their luck with pelagic whaling out of the Bonin Islands between 1889 and 1891, but both businesses went bankrupt within a short period.[90] In a publication from 1896, the island governor complained that:

> even now, Japanese stand by idly and watch as guests from countries then thousand miles away raise myriad treasures, and leave it to them to deprive us from great profits. I must say, this is truly sad. However, if we made ambitious plans to [engage in the whaling] business, it shall be truly easy to open sources of wealth for the country![91]

In reality, the number of foreign whalers cruising in the Japan Ground had been shrinking for decades as it became less and less profitable to seek out the dwindling number of cetaceans in the vast sea. Even the number of foreign traders that

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[88] Edward Pratt's study of rural proto-industry of Japan shows that with mechanical industrialization, the *gōnō* farmer-entrepreneurs were displaced by more flexible urban investors. Pratt 1999.

[89] *Ogasawara-tō yōran*, p. 104, in: OVBE, acc. no.: Anti-Humidity Safe A-12.

[90] Yoshihara 1982, 61; *Ogasawara-tō yōran*, p. 103–4, in: OVBE, acc. no.: Anti-Humidity Safe A-12. In 1889 Kiino Kichibei, an entrepreneur from Izu hired an American whaling expert and caught one whale near Hahajima, one more in the next, and a last one in 1891. On its last trip, Kiino got caught in a storm and lost his freight, the crew making it barely back to Shimoda.

[91] 今法人は徒（いたず）らに拱手傍観（きょうしゅほうかん）し、沿海幾万の至宝を擧て殊域万里の客に委し広利を彼が壟断に任かす遺憾も亦甚しと云ふべし、然れども早晩或は有為家ありて、大に斯（この）業の計画をするあらば、邦家の富源を開くこと当（ま）さに遠きに非ざるべし(*Ogasawara-tō Yōran*, p. 258, in: OVBE, acc. no.: Anti-Humidity Safe A-12.)

approached the Bonins hit zero in 1898.[92] Instead of a whaling base, the Bonin Islands became a tropical plantation colony in the Pacific.[93] Until the 1890s, when the colony first made profits thanks to sugar exports, it was the experimental and ideological value that fueled the government's continued investments in its Pacific outpost.

South Sea Romanticism and the Emergence of Frontier Tycoons

The emergence of self-made men and frontier tycoons was followed closely by the reading public in Japan and contributed to a romanticized view of discovery, conquest, and entrepreneurial success. Frontier entrepreneurs often substantiated their claims to uninhabited islands through experiences of drifting or shipwreck, a narrative that resonated with both the circulating reports of early modern castaways such as Tosa no Chōhei or Nakahama Manjirō, and with the romantic idea of destiny and predetermination embraced by authors in the *nan'yō-ron* or "South Sea Expansionism" debates. At the same time, the state was yet to define its own attitudes towards both large corporations and emerging frontier business.

After the failure of private business to pave the way for colonization, the government pursued a developmental strategy that incorporated half-private businesses by granting exclusive monopolies. This came at a transformative time for economic ideology. As Pieter DeGanon has argued, it was not until the early 1880s that a German-influenced dirigisme in a "paternalistic turn" supplanted the Smithian

[92] Ishihara 2007b *Wasurerareta Shokuminchi,* 62.

[93] The most prominent representative being Oligarch Enomoto Takeaki, the later founder of the *Colonial Society* that forestalled the annexation of Taiwan in 1893, had shared the public craze for plantation colonialism in the Pacific. In 1887, he authorized an expedition of explorers and Journalists to Iōtō (also 'Iwo Jima') that spread enthusiasm over the *nan'yō ron* or *South Sea Expansionism* debate far beyond the intellectual elite. (Hiraoka 2015, 16–20).

liberalism that had dominated economic ideology in the previous decade.[94] Iwasaki Yatarō's 岩崎弥太郎 (1834–1885) *Mitsubishi Steamship Company* (*Yūbin Kisen Mitsubishi Gaisha*) successfully navigated the ambivalent and fast-changing environment of economic ideology by securing access to governmental flagship projects while securing its managerial independence. Privatized from the estate of the Tosa Domain in 1871, the company outcompeted the state-backed Japan Mail Steamship Company within a few years, so that by the time of the Taiwan Expedition of 1874, Mitsubishi was the only domestic shipping company able to support the naval venture.[95] The bond established through this public-private partnership in 1875 led to Ōkubo's proposition to grant the company governmental protection in exchange for the performance of assigned duties in shipping and naval defense.[96] This decision, again, reflects the fiscal concern about the cost of defense infrastructure and the government's interest in outsourcing as much as possible of it to commercially viable enterprises.

One of the "orders" (*meirei-jō*) issued to Mitsubishi was to provide a regular shipping connection to the Bonin Islands, with three annual connections at a rate of 3,000 yen per voyage.[97] To save 2,000 yen, it was decided in 1879 that the July connection should be carried out by wind, rather than steam power.[98] Given the considerable funds the government was allocating to Mitsubishi, it became

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[94] De Ganon 2011, 238–40. De Ganon makes this point by analyzing the reactions to a surprising bubble in the rabbit trade – the pets became the object of extreme speculation in the early 1870s, raising questions about market regulation and conflicts between indicidual and collective interest.
[95] Wray 1984, 43–9.
[96] Wray 1984, 78–81.
[97] *Ogasawara-tō Yōroku*, vol. 1, entry 81, p. 216, 12/08/1876, in: OVBE, Acc. No. Great Safe 2-3-1.
[98] Suzuki 2005, vol, 2, 6.

impossible for competitors to enter the Tokyo–Bonin route. When the entrepreneur and shipwright Tamaoki Han'emon applied first for permission to "engage in island colonization" (*gaitō kaitaku go-chakushu*) privately, and in 1878, to operate a shipping line, the window for such enterprises was already closing.[99] This deflected the attention of private entrepreneurs to the resources of more remote and less hospitable isles.

Off the government's radar, petty entrepreneurs sailed to islands as far into the Pacific as the Midway atoll to hunt albatrosses for down and fertilizer made of carcasses. As Paul Kreitman has shown, contested seasonal settlements in the maritime borderlands conflicted with the American thirst for guano, resulting in serious diplomatic crises.[100] Some applicants for island leases knew to play out the tempting resources of the commodity frontier against governmental concerns over diplomatic showdowns. According to Hiraoka Akitoshi, it was the commercial success of such breakneck pioneers in combination with an expansionist thrust among the populace that, by the late 1880s, inspired various fictional novels on drifting, discovery, and the sweet incantations of southern islands.[101]

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[99] *Ogasawara-tō yōroku*, vol. 3, entry 55, p. 75. In: OVBE, Acc. No. Great Safe 3-3-31.
[100] Kreitman 2015, 146–55.
[101] Some of the most influential exponents of South Sea Romanticism were Komiyama Tenkō and Suehiro Shigeyasu (Tecchō), both propagating expansionism to the Pacific and the Philippines. See also: Peattie 1988, 14–5.

Tamaoki Han'emon's Torishima

Tamaoki Han'emon, founder of the corporation Tamaoki Shōkai, is in fact one of the most prominent figures in the frontier business. Born a commoner on Hachijō island, the later tycoon ruled several island colonies in the 'nearer South Sea'.[102] Starting with the isle of Torishima north of the Bonins, Tamaoki chiefly staffed his enterprises with emigrants from his native Hachijō island. At the age of 22, Tamaoki had served as the chief carpenter in the shogunate's expedition to the Bonin islands, that, for geomantic considerations, consisted largely of Hachijō islanders. Later, he repeatedly petitioned for permission to trade with the colony, but the shipping monopoly had already been granted to the Mitsubishi corporation.[103] The resourceful networker eventually joined an expedition of politicians and journalists to "discover" Iōtō (also 'Iwo Jima') in 1887 that was attentively followed by the public. As planned, he was dropped off on Torishima to explore the island's commercial potential. Due to bad weather, however, the ship failed to pick him up again and returned straight to Tokyo.[104]

Prominent exponents of the public sphere, such as the journalist Shiga Shigetaka, were outraged as they witnessed this incident and sparked a sense of indignation among the reading public, making Tamaoki a star overnight. Within two months from his rescue, equally well-noted in the media, Tamaoki was granted a free

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[102] The term *kin-nan'yō* or 'near Pacific' was coined by expansionist Shiga Shigetaka's 1889 publication *Kin-nan'yō kikō* or 'Records of a Trip to the Near Pacific.' (Hiraoka 2015, 19.)

[103] Hiraoka 2012, 82; *Ogasawara-tō yōroku*, vol. 3, entry 55, pp. 75–77, in: OVBE, Acc. No. Great Safe 3-3-31.

[104] Hiraoka 2015, 17–20.

ten-year lease over Torishima that was later extended.[105] This path-breaking incident inspired various authors to write fictional novels on drifting, discovery and the sweet incantations of southern Islands. Many of the authors writing such educational novels (*kairyō shōsetsu*) had been politicized in the People's Rights Movement and redirected their subversive push into expansionist literature.[106] For many South Sea Romanticists, Tamaoki seemed to be the model of a protagonist.[107] His business, ostensibly focusing on cattle farming, experienced a break-through exporting bird feathers and downs, a resource bringing riches on domestic and international fashion markets. In an industrial manner, around 150 laborers from Tamaoki's home island killed 5 million albatrosses, leading to their near-extinction within a few years.[108]

Island Tycoons

The fortunes Tamaoki hoarded inspired what Hiraoka Akitoshi calls the *bird rush*: off the government's radar, petty entrepreneurs settled on islands as far into the Pacific as the Midway islands to hunt albatrosses for down and fertilizer made of bird carcasses. These remote settlements were mostly seasonal and did not result in lasting Japanese presence.[109] In the more stable settlements in the Senkaku and Daitō

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[105] Hiraoka 2015, 16–20.

[106] Some of the most influential early examples of South Sea Romanticism were Komiyama Tenkō's *Bōken kigyō, rentō daiō* 'An adventurous enterprise, or: the king of the lagoon' (1887) and Suehiro Shigeyasu (Tecchō)'s *Nan'yō no ō-haran* 'Furious waves of the Southern Seas' (1891), both propagating expansionism to the Pacific and the Philippines in a romanticized way. Also see: Peattie 1988, 14–5.

[107] Hiraoka 2012, 29–31.

[108] Kreitman 2015, 56.

[109] Hiraoka calculates that over fifteen years, the colony in Torishima counting 150 inhabitants must have generated a revenue of 1 million yen, the annual income of a laborer amounting to 80 yen. Hiraoka 2015, 22; 143.

islands near Okinawa – the latter one surviving down to the present – near-extinction and resource depletion forced frontier businesses to explore new resources: in Senkaku, the *bird rush* was followed by bonito fishery, and in Daitō, down production yielded to guano mining and sugar plantation. These state-approved corporate colonies developed their autonomy to the point of issuing their own currencies that could be converted at the companies' headquarters.[110]

In fact, the government hardly interfered with corporate colonies. When Tamaoki's lease was about to expire in 1897, for the first time a governmental inspector was sent to Torishima. Outraged, the inspector reported that far from the infrastructure Tamaoki had claimed built in his re-application (fig. 7.7), the village consisted of a few miserable shacks and was lacking even a proper harbor facility.[111] Even though his reports had been revealed as straightforward lies, authorities decided to extend the powerful entrepreneur's lease by another 10 years.[112] Before the end of this contract, however, a volcano eruption destroyed "Tamaoki Village" with all its 125 inhabitants. The disaster that rendered Torishima uninhabitable permanently shifted the focus of Tamaoki's business to his subsidiary colony on Daitō island near Okinawa.[113]

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[110] This was the case in the short-lived colony on Nishizawa (or Dongsha) island in the South China Sea, colonized by Nishizawa Kichiji, as well as in Tamaoki's Daitō island. (Hiraoka 2013, 228–9; Hiraoka 2015, 166–8.)
[111] Hiraoka 2015, 32–6.
[112] Hiraoka 2015, 32–6.
[113] Hiraoka 2018, 50. The explosion of Torishima was reported worldwide, also in the *New York Times* of Aug. 19, 1902.

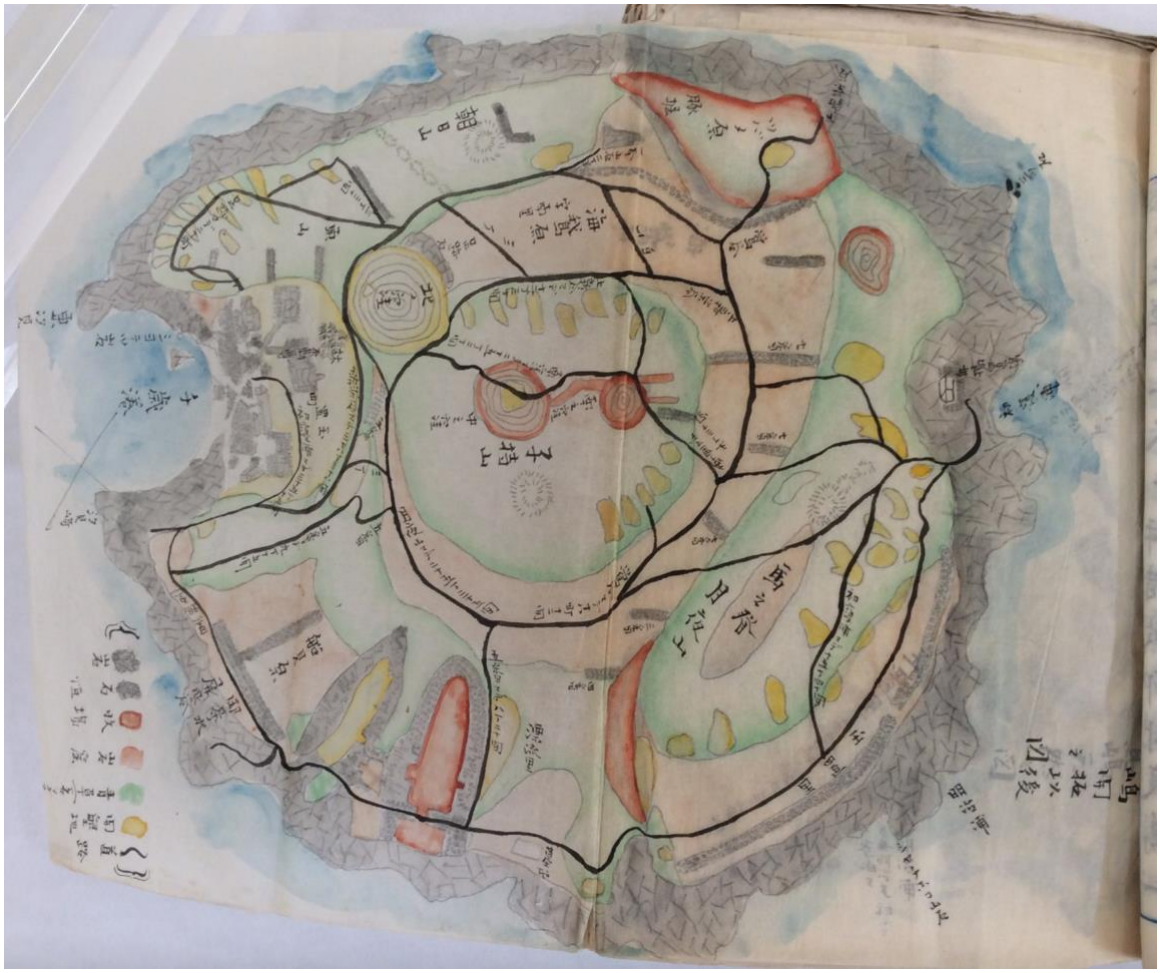

Fig. 7.7) A (largely fictive) representation of the development attached to the self-assessment Tamaoki submitted to the government in 1898. *Torishima ikkatsu shorui*, image. 31, in: TMET, Acc. No. 625.D4.19.

Rudimentary settlements mushroomed across the frontier towards the close of the century, set up by breakneck entrepreneurs that were lured there by the prospect of quick fortunes. In Torishima, Minami no Tori, and even near Hawai‘i, Japanese laborers began to hunt albatrosses in quasi-autonomous, but mostly short-lived corporate settlements that, like Tamaoki’s business, traded feathers, downs and bird-

carcass fertilizers.[114] As can be observed in the history of sealing and whaling stations or guano mines around that time elsewhere, unsustainable practices further necessitated continuous shifting from resource to resource, and from island to island.[115] In more stable settlements like the Senkaku islands, the 'bird rush' was followed by bonito fishery, and in the Daitō islands near Okinawa – a colony surviving down to the present – down production yielded to guano mining and sugar plantations.[116] To borrow Jason Moore's term, the shifting of businesses in the frontier due to unsustainable resource use gave birth to a "frontier mode" of capitalist expansion that built on continued spatial expansion and paved the way to expand state control to the empire's maritime fringes.[117]

For the Japanese government, frontier entrepreneurialism was both an essential driver for the expansion of the empire's territory, and a constant diplomatic risk. Paul Kreitman has shown how seasonal bird hunting settlements in Marcus, Midway and Lisianski islands near Hawai'i conflicted with the American thirst for guano or bird dung fertilizer, resulting in serious diplomatic crises.[118] Some applicants for island leases knew to play out the tempting resources of the commodity frontier against governmental concerns over diplomatic conflicts. Reminiscent of romantic novels, many frontier entrepreneurs claimed a castaway experience and discovery of – oftentimes previously known – islands that they now sought to develop.

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[114] Kreitman 2015, 56, 146–55; Hiraoka 2015, 22, 143. On these frontier businesses, also see Hiraoka 2012; Hiraoka 2018.
[115] Cawthorn 2000, 1–17.
[116] The permanent bird-hunting colony in Torishima met an abrupt end in 1902, when a volcano eruption devastated the island, killing all its inhabitants. See *New York Times*, 19 Aug. 1902, 1.
[117] Moore 2000, 411, 428–29.
[118] Kreitman 2015, 146–55.

Mizutani Shinroku, a trader who, like Tamaoki, emerged in the Bonin islands, claimed to have drifted to Minami no Torishima in 1892. His applications for acknowledgement of the settlement he established there, however, were ignored until 1898, when the United States annexed Hawai'i.[119] This romanticized culture of claiming developed within the Japanese discourse, where entrepreneurs primarily strove for official acknowledgement over competing claimants.

Science and Expansionist Geographies

To naturalize their territorial claims, the strategists of Japan's young empire began propagating malleable geographies that offered a transitional framework for gradual expansion. While the shogunate had applied a strategy of gradual incorporation with compatible bodies when they relocated settlers from the nearest Island within Japan to the Bonin Islands, under the Meiji government, topographical features helped substantiate expansionist claims.

In Japan as much as in the west, the opening of oceanic frontiers became a prompt to rationalize and structure the Pacific "wilderness" – to use an analogy common in the American discourse at the time – and what lay beneath it. In the United States, this process had evolved around oceanic data provided by the whaling industry. The sheer quantity of data that became available through hundreds of whaling logbooks that were collected at the United States Naval Observatory and Hydrographical Office in Washington DC, it became possible to render the ocean "wilderness" legible independently of locally specific experience. Matthew Fontaine

[119] Kreitman 2015, 56–9.

Maury's *Whale Charts of the World* were pathbreaking tools as they combined place and seasonality of into a tidy picture of the frontier's winds, currents, and migrating resources that, Maury believed, circulated according to an immutable, divine rhythm.[120] Around the Atlantic as much as in Japan, the fascination for the offshore expanded vertically with the deep-sea soundings for underwater telegraph cables.[121] Subaqueous geographies were drawn up of the places in-between, offering an opportunity to redefine megageographical categories beyond the shoreline.

The routine presence of large international vessels in Japanese treaty ports by the 1860s turned the compilation of precise bathymetric maps into a technological flagship project.[122] The first underwater cables reached Japan in 1871, reducing the time a telegram employed from Nagasaki to Western Europe to around twelve hours. The fact that telecommunications between the United States and Japan had to be repeated by way of London underlined the geopolitical importance of deep sea technology and infrastructure.[123] Though Japanese cartographers had collected considerable experience with the charting of hidden shoals and reefs in the vicinity of harbours under the Tokugawa already, the big picture of deep sea geography evolved mostly in the context of foreign sounding projects around Japan.

When the British sounding expedition *Challenger* landed in Yokohama in 1875, the scientists attracted major attention from the new Ministry for Waterways (*suiro*

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[120] Matthew 1855, 50. Penelope Hardy has pointed out that Maury's work, saturated with biblical teleology and relying on non-academic collaborators, was contested in its own time. See Hardy 2016, 407–9.
[121] Rozwadowski 2005, 13–7, 25–9, 76–9.
[122] Nicholls 2009, 1–22.
[123] The systematic sounding of Port Lloyd in the Bonin Islands in 1863, was one of the first such projects undertaken by an exclusively Japanese team. See Rüegg 2017, 440–90.

kyoku), and were even invited to an audience with the Emperor himself.[124] As I have previously discussed elsewhere, their findings provided a new dimension for Japan's orientation to its oceanic environs. One textbook from 1891 stated:[125]

> We have gained general insight from the British *Challenger,* the German *Gazelle,* and the American *Tuscarora* expeditions that have thoroughly analysed the sea floor…. The contours (*chisei*) of our country arise on the peninsula of Kamchatka, where a mountain range enters the sea, rising and falling, thereby creating the Kuriles and reaching Hokkaido; they decline and next form Honshu, whence they meander westward in two waves. One becomes Shikoku, the other becomes the San'in and San'yō regions before they collide to form Kyushu. The remaining *momentum* disappears into the sea, becoming the Ryukyu Islands and ultimately continuing into the East-Indian Archipelago that runs parallel to the Asian Continent's eastern shore.[126]

The discovery of the the deep sea as a part of the geographical imaginary had set in motion a process of geological reorientation that allowed the emerging empire to position itself at the center of an archipelagic Pacific. As a result, the empire's *metageographical determinism* developed a third dimension.[127]

In 1880, Obana Sakunosuke had a new stela erected in the Bonin Islands to celebrate the islands' incorporation. The stela, texted by home minister Okubo Toshimichi 大久保利通 (1830–1898), celebrated the "the opening of the vast frontier."[128] Before its inauguration, Obana took a chisel and edited the epitaph shipped from Tokyo (Fig. 7.8) to read:

> In principle, the territory of our country is surrounded by maritime waters in all directions. To the southeast of Izu, from the twenty-fifth or twenty-sixth degree of northern latitude to the thirty-fifth or thirty-sixth degree, islands are spread out like stars, and also this island is part thereof. The mountain range of Kai and Izu [provinces] winds down in wavelike movements ~~and ends here~~ [*strikethrough in the original*]. This is thus our southern gate. If we did not station officials to protect it, then the population could not [peacefully attend to]

[124] Nishimura 1992, 137–49; Ōshima 2000, 474–82.
[125] Rüegg 2021, 17–21.
[126] *Yochigaku kyōtei,* vol. 1, 38; vol. 2, 13–4, in: WUL, Acc. No. ハ 02_01012.
[127] Lewis and Wigen 1997, 43–6.
[128] "大拓彊域" *Kaitaku Ogasawara no Hi,* EPIT.

> their occupations. Alas, may people peacefully [pursue] their professions and improve their skills. May they not reject the new government's great kindness of opening up the periphery![129]

Giving way to his desire for further expansion of the frontier, island governor Obana Sakunosuke, in whose honour the stela was erected, erased the words limiting Japan's claims. Obana's reckless edits were explained in an entry of June 1880 in the official chronicle *Ogasawara Yōroku*:

> The aforementioned [stela] was brought to the island in June 1880, and we succeeded in erecting it in October. The characters "and ends here" went against Sakunosuke's taste. He deleted the parts that greatly distort the geographic reality on the map of the southern sea [the Pacific] and other parts, and set up the stela on a hill some twenty *ken* (36m) from the office at Ōgiura.[130]

The description of the maritime space propagated by Sakunosuke effectively codified a shift in geographical concepts that occurred with Japan's move to the Bonin Islands. The mountain range of Izu was no longer bounded by the landmass of Honshu, with the sea as its limit, but continued as an underwater ridge 1,000 kilometers to the Bonin Islands and ever farther southward. As mountains of the Izu range, the islands in the Pacific became geographically connected to the motherland, and with them, to the surrounding maritime space. No longer a southern boundary, the islands were to become the empire's gateway to the vast Pacific.[131]

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[129] "蓋我國之為地, 海水四環. 伊豆東南北緯二十五六度至三十五六度属島星羅而本島居其一. 甲斐, 伊豆之山脈蜿蜒起伏至於此~~而盡~~ [*sic*]. 乃我南門也. 不置官司以鎮焉則居民不能[安]其業. 嗚呼, 民安其業使修其識. 庶幾不違新政拓疆之盛旨也歟." (Epitaph version in square brackets.) (Kaitaku Ogasawara no hi, EPIT.)

[130] "右十三年六月該島江持渡同年十月建設成功ス, 文中爾尽ノ二字作助之意ニアラス, 又南海ノ図其外実地ニ拠ルニ大ニ悖ル所アルヲ磨刪ス, 父島扇浦官庁ノ南二拾間程ノ岡上ニ建." I am grateful to Tanaka Hiroyuki for pointing out this reference. (*Ogasawara-tō yōroku*, vol. 4, entry 201, pp. 203–5, in: OVBE, Acc. No. Great Safe 4-3-37.)

[131] I have previously discussed this stela in Rüegg 2017, 142–4. See also Chapman 2016a *The Bonin Islanders*, 94–5.

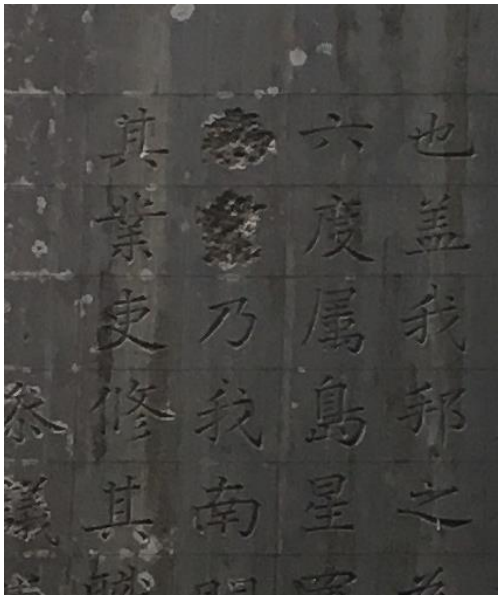

Fig. 7.8) The memorial stela in Ogiura, Chichijima, with the edits ordered by Obana Sakunosuke. (*Kaitaku Ogasawara no hi*, EPIT)

Conclusion

With the permanent colonization of the Korean Peninsula in 1910 and the instalment of Manchukuo two decades later, Japan secured itself a unique position in world history as a Pacific archipelago-turned-continental empire. In the history of the Japanese empire, the colonization of the Kuroshio Frontier islands was a formative process for private and public institutions. Reminiscent of the "Chartered Company States" that appeared in the Scramble for Africa around the same time, these petty empires blurred the boundaries between business, state and––piracy. Had he not fallen victim to his own lynch law, the blackbirder Benjamin Pease could have become an island governor at the order of the Japanese. Tamaoki and other self-made frontier tycoons took advantage of an expansionist momentum making their interests an integral part of the imperial project, real and imagined. The process of inventorying

people, incorporating resources, and defining the boundaries between business and state coined ideologies and created networks that were scaled up in the Japanese empire's later mode of expansion.

By the close of the century, corporate islands that enjoyed a significant degree of autonomy beyond the reach of state control mushroomed throughout the frontier. Centered on single resources, the private island colonies of the Kuroshio Frontier––most notoriously Torishima, Marcus Island, the Senkaku and Daitō Islands––acted in an essentially unsustainable manner, shifting produce and venue as local resources were exhausted one by one. On Tamaoki's Torishima, as well as Koga's Kuba island in the Senkakus, colonies primarily exploited for albatross feathers and carcasses in the beginning, bird populations collapsed within a few years, causing the colonies to shift to cattle farming and bonito fisheries respectively. Accordingly, these corporations kept vying for new sites to exploit. In Daitō, the only corporate island that is still inhabited today, guano mining and sugarcane plantation became the corporation's focal branches.[132] The government hardly interfered with frontier businesses, and some developed their autonomy to the point of issuing their own currencies. By that time, the frontier had given raise to quasi-autonomous corporate islands that prided themselves as laboratories for the empire.

Tamaoki drafted plans for branch colonies elsewhere, such as in the southeastern Marcus Island. The island, however, was granted to Tamaoki's competitor Mizutani Shinroku who had claimed the discovery of the island on

[132] Mochizuki 1992, 50.

December 3, 1896. The claim of first discovery became a major point of argument raised by other applicants for an island lease once Mizutani's discovery had been publicized.[133] Ultimately, Tamaoki obtained a lease over the Daitō islands. Moving workers from Okinawa and his native Hachijō to the new colony, Tamaoki's corporation created an extensive migrant network that spanned across the frontier. Just like the emigrant and re-migrant networks of Okinawa facilitated the transfer of agrarian know-how from the plantations of Hawai'i to the colonies of the Japanese Empire, the networks of the Kuroshio frontier eventually merged into the empire's greater colonial projects.[134] Tamaoki's branch colony on Daitō near Okinawa outlived its founder as a part of *Dai Nippon Seitō* sugar corporation. Company executives emphasized the value of their autonomously managed corporate island as a laboratory for the empire's colonial management.[135] The sea of islands embraced by the Kuroshio's fluctuating path had become the spatial and temporal nexus between the metropole and its oceanic empire.

Over the 1890s, the craze for South Sea expansionism was only growing, and on the eve of World War I, Japanese leaders, entrepreneurs, and public intellectuals were obsessed with Pacific expansionism. Romantic ideas about the "South Seas" conquest – enthusiastically propagated Enomoto and other elite strategists funnelled the domestic thrust of the People's Rights Movement into overseas expansionism. Novels and polemic debates that functioned with romantic conceptions of destiny,

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[133] Hiraoka 2018, 17–20.

[134] Gotō Ken'ichi's recent book explored this observation in more detail, following individual biographies from the frontier islands to Taiwan and Indonesia. Gotō 2019.

[135] Dai Nippon Seitō ed. 1934, 167–8.

discovery, wilderness and conquest, picked up on exoticizing fantasies about southern island paradises and commercial success, luring adventurer-entrepreneurs as far south as Chuuk in Micronesia to establish hardly profitable trading posts.[136] Explorers and entrepreneurs, and even government institutions believed firmly in the discovery of still-unknown southern island paradises, and sponsored sometimes hopeless explorations. In 1887, the gunboat *Amagi* was dispatched in vain to find the mythical island of ancestors *Pai-Patirōma* appearing in folktales of the Yaeyama islands, and as late as 1913, a steamer headed out to explore an island Japan had claimed in 1907, only to find out it had never existed.[137] With Japan's takeover of the German South Sea colonies in 1914, the archipelagic empire expanded as far as the Caroline and Marshall islands, spanning thousands of kilometers of maritime space.

Meanwhile, the systematic expansion of pelagic fisheries as a strategic industry by the 1930s turned virtually the entire Pacific into what William Tsutsui calls a '*pelagic empire,*' detached from insular infrastructures.[138] The steady expansion into the Pacific continued independently of insular land bases. The pursuit of ever-farther tuna stocks, a rare treat in Japan before 1900, became 'symbolic capital', writes Nadin Heé, when the 'victory fish', *katsu-uo* was celebrated as the empire's most essential resource in the 1930s. Subsequently, the race for tuna in the 'South Sea' was portrayed in imperial propaganda as a race to drive out foreign fisheries. The search for ever-new fishing grounds had made the deep-diving fish both

[136] Peattie 1988, 26–33.
[137] Taketomi-cho shi henshū iinkai, ed. 2018, 295; Hiraoka 2015, 98–115.
[138] Tsutsui 2013, 31.

an important source of protein, and a cash commodity to quench the empire's thirst for imported fuel.[139] The archipelago's resource base kept expanding horizontally and vertically, in ways invisible to terrestrial maps. Decades before colonialism on the continent, the Pacific had been the cradle in which the empire took its first steps, yet it became the abyss over which its hubristic project ultimately collapsed.

[139] Heé 2019, 215–18.

CONCLUSION

The Unending Kuroshio Frontier

My sweet girl in Palau,
Each time I give you a friendly look,
You embarrass me with your smile,
Whenever you come out,
My natural beauty,
A mere glance of your hips
Robs my sleep at night

Nostalgic folk song of the Bonin Islands.[1]

On June 26 1968, when the stars and stripes were lowered over the town office in the Bonin Islands, a formerly Japanese territory was returned to Japan's sovereignty for the first time since the collapse of its empire. American military personnel, local administrators, and the teacher of the local school – also an employee of the navy – left the islands for good.[2] The community of some two hundred stateless civilians classified as *Bonin Islanders* under the American administration became once again Japanese subjects, an ethnic minority in a country that claimed to be racially homogeneous.[3] Formerly the nexus between the metropole and its 'South Sea'

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[1] "パラオの五丁目にいる可愛い娘さん, とても優しい笑顔で僕は睨む時は, ちょいと笑うかずきでなんだか恥ずかしい, 時々あなたさまが外へ出る時, お化粧ばかりじゃないが、その後ろの腰は, みただけでも本当に寝るに寝られない." *Video Recording of a Performance Folk Songs by Ōhira Kyōko* (b. 1921) held at OVBE, no acc. no.
[2] Eldridge 2014b *The Origins of U.S. Policy*, v.
[3] Chapman 2016a *The Bonin Islanders*, 137.

colonies, with the war's end, the Bonin islands had become a periphery where exclusive borders wove back and forth over ocean and islands.

The reversion of the Bonin Islands was a milestone in Japan's path to regaining full sovereignty.[4] Implemented amidst the high economic growth period of the 1960s, Japan's reclamation of its holdings in the Pacific funneled pride and confidence into a moment of national reinvigoration: with the Bonin Islands came the three islands of Iōtō (in English also known as 'Iwo Jima') some two hundred kilometers further south, the outlier of Minami no Torishima 1,230 kilometers to the east, and the reef of Oki no Torishima, some 950 kilometers to the southwest. Encompassing these remote isles, the administrative community of Ogasawara Village, centered on the two inhabited islands of Chichijima and Hahajima, today encompasses an Exclusive Economic Zone (EEZ) that makes up approximately one third of Japan's entire sovereign space. With the reversion of Okinawa five years thereafter, Japan can now claim an exclusive economic zone twelve times as large as the country's land surface.[5]

The Pacific continues to constitute a large part of Japan's economic space, and a central element of its cultural identity. As Epeli Hau'ofa noted, static and mostly arbitrary borders dominate island lives in the oceanic borderland, "transforming a

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[4] Robert Eldridge has shown how the reversion served as a legal rehearsal for the reversion of Okinawa four years later. Eldridge 2008, 5–24.

[5] This figure, provided by the Japanese coast guards, includes the waters around the Senkaku/Diaoyu islands contested by Taiwan and China, as well as Takeshima/Dokdo and the southern Kuril Islands, which are currently under Korean and Russian control, respectively. (Kaijō hoanchō 2022b *Nihon no ryōkai*.) The EEZ Japan claims is based on the United Nations Convention on the Law of the Sea (UNCLOS) of 1982, which Japan signed in 1996. (Tokyo University Ocean Alliance ed. 2011, 19.)

once boundless world into the Pacific Island states and territories that we know today. People were confined to their tiny spaces, isolated from each other."[6] What is true in the perception of human travelers stands in contrast to the fluid oceans that surround these now-incorporated frontier settlements, with sheer subaqueous trenches, benthic resources and still-unknown ecosystems, that still evade bureaucratic attempts to pin down, inventory, and divide animals and resources.[7]

The memory of Japan's foregone colonial empire, at the heart of the country's complicated relationship with recent history, is kept alive among those island communities that constituted the points of departure, places of transfer, and sites of refuge for repatriated 'South Sea' colonists. Hachijō, once a Pacific outpost of the Japanese realm, by the close of the nineteenth century had become a hub connecting labor, experience, and capital for island colonies between the South China Sea and Hawai'i, and later, the Japanese 'South Sea.'[8] The presentation of the *nan'yō odori* or 'South Sea Dance,' performed in bast skirts and floral garlands accompanied by march music in foreign tongues, forms the climax of the annual get-together of Hachijō and Bonin islanders, tied by kinship bonds but separated by the absence of an inter-insular shipping line. (See Fig. 8.1) The dance, cultivated by islanders and recent

[6] Hau'ofa 1994, 155. On borderlands as post-frontier stages, see: Adelman and Aron 1999, 816.

[7] Noticeably, frontier closure has come to mean both depletion of frontier resources, and the solidification of national borders in the context of accentuating competition over those resources, as demonstrated in John G. Butcher's *The Closing of the Frontier*. (Butcher 2004). Also see: Finley 2013, 62–75.

[8] Peattie 1988, 23–33.

immigrants, was supposedly brought to the islands in the prewar period by commuters between the Bonins and Japan's colonies in the South Pacific. Since the year 2000, the dance and songs that tell of these past connections with distant worlds have been under the official protection of Tokyo Prefecture.[9] Just like the outrigger canoes that populate the beaches of Bonin Islands, or their motorized versions in the harbor of Hachijō, the colonial remembrance in the islands of the Kuroshio Frontier tells of subaltern encounters, movements, and intimacies across the ocean and its currents.[10] Revisiting modern Japan as seen from these Pacific outliers raises questions about ethnicity, periodization, and the very boundaries of 'Japan' itself.

Fig. 8.1: Performance of the 'South Sea Dance' at the 2018 Hachijō–Ogasawara friendship festival in Chichijima, Bonin Islands. (Author's Photo.)

The Pacific's Place in Modern Japanese History

[9] "Ogasawara no nan'yō odori," in: *Tokyo bunkazai jōhō database*, keyword "Nan'yō odori;" Ibid., keyword "Ogasawara no min'yō."
[10] Goto 2013, 164; Kramer and Kurihara Kramer 2015, 179–96.

This book has argued that the history of modern Japan cannot be told in separation from its Pacific environment. Over the course of just over a century – from the emergence of Russian naval challenges to the northern frontier in the late eighteenth century, to the industrial whaling boom that ensnared Japan in the decades before its so-called "opening," and on to Tokyo's annexation of a vast sea of islands beyond the Kuroshio in the wake of its imperial reinvention – the ocean has assumed vastly different meanings for those who traveled, worked, and lived on it, and for those who observed and analyzed it from afar.

Dominated by monsoon winds and the powerful Kuroshio current, the southern seas of the Japanese archipelago were a demanding territory to sail and ply. At the same time, the maritime paths along and into the current represented "the aorta of Edo,"[11] in the words of a contemporary observer, the archipelago's most essential routes of commerce. For the islanders of Hachijō, the only part of the shogunal lands to the south of the fast and dangerous Kuroshio current, the seasonal rhythm of shipping was dominated by the summer and winter monsoons. Though only contacted by regular vessels on an annual cycle, the islanders knew themselves as a part of an international oceanic geography. A constant influx of drifters and flotsam in the current that grew in volume as Japan's economic center shifted east, gave rise to an institutionalized system of repatriation I call "castaway economy," and a cultural

[11] "江戸ノ扼喉" *Izu no kuni go-biba no gi ni tsuki zonjiyose mōshiagesōrō kakitsuki*, in: EGAN, Acc. no. Q3-14.

identity rooted in legendary and historical arrivals from the continent. Regardless of maritime prohibitions and an apparent introspection under the Tokugawa shogunate, the ocean proper never ceased to be an integral part of Japan's economic space.

In the beginning of this dissertation, I have suggested thinking of the archipelago as part of an amphibious metabolism that fueled early modern growth and enabled the concentration of over a million people in Edo, the largest metropole of the early modern world. Nutrients allocated by the abundant Kuroshio and Oyashio currents were fed into the land-borne economy in the form of foodstuff and marine fertilizers, closely linking the marine and agrarian spheres. The gradual expansion of marine fertilizer extraction by whaling and fisheries in this sense represents an expansion of Toshihiro Higuchi's "organic empire"[12] offshore, a process that was later continued with the importation of Manchurian soy bean cake and the expansion of fisheries far beyond the inter-island space, a process William Tsutsui calls the creation of a 'Pelagic Empire.'[13] Long before the adaptation of an imperial rhetoric in the Meiji period (1868–1912), the commercial metropoles and their surroundings were absorbing resources from the maritime rims of the economic polity.

The 'rims' here – just like the term 'frontier' – describe sites of extraction that were indispensable parts of a economic mechanism that supported commercial growth in the metropole. By no means should the terms I chose to refer to these places

[12] Higuchi 2015, 139–157.
[13] Tsutsui 2013, 23.

imply a marginality or a state of being 'left behind' on a normative trajectory of development and incorporation. Rather, frontiers continue to play a central role in economies of extraction and accumulation . In an ecological sense, frontiers, and the continuous shift to ever-new frontiers, are an integral part of unsustainable economic models. Based on a similar observation, though steering clear of the intellectually tense "frontier" concept, David Howell challenges the assumption that the geographical center of Japan was the source of all important social and economic developments, and instead to locate critical changes in social and economic relations in ostensibly 'backward' areas.[14] Howell rejects the frontier idea based on the well-known problem of perspective – that this "essential word 'frontier' requires a point of view, a center, by which that 'other place,' out there, separate from the center, becomes the 'frontier.'"[15] As a tool of global historical comparison and as an ecological concept, however, the frontier helps analyze the material connections between sites of extraction and centers of consumption in their spatial dimension, sprawling beyond the borders of formal rule and extending into a liminal space of fading state power. The very opportunity to analyze local events in their interregionally connected context, along networks of migration and following the invisible power lines of commercial agents, makes the frontier concept a tool in the

[14] Howell 1995, xii.
[15] Worster 1989, 317.

service of a postcolonial purpose: to center people, places and environmental cost of modern life that are otherwise dismissed as peripheral.

True, what lay beyond the current for early modern Japan was the object of largely speculative geographies. Yet, the redrawing of Japan's maritime geographies in the nineteenth century was the product of a cacophonous debate that existed in conversation with international developments across the Pacific. At the close of the eighteenth century, it was Russian incursions into the sea of Okhotsk that prompted Hayashi Shihei to dispense with the idea that Japan was surrounded by an "impregnable sea,"[16] and instead to call for naval preparedness. The provocation apparent in his theses carries through: Shihei remapped Japan as embedded in a wider archipelagic world connected by shipping lanes and land borders. His 'uninhabited' *munin* or "Bonin" Islands beyond the Kuroshio were soon firmly anchored in the broader geographical vernacular. The promise of frontier islands awaiting subjection inspired Satō Nobuhiro's *Secret Plan for Unification* (1823), an aggressive action plan for Pacific expansionism, but it also informed more conventional dreams of agrarian island reclamation. Time and again, such enterprises were aborted before take-off: in 1837, for example, botanist Abe Rekisai joined a circle of curious individuals around the renowned painter Watanabe Kazan making plans to turn the Bonin Islands into an agrarian laboratory. Since the entry of Atlantic

[16] Endō 2007, 29–30.

whalers into the "Japan Ground" in the 1820s, offshore had become a space of international mingling. The sudden appearance of foreign vessels first off northeastern Japan, and by the 1840s, all around the archipelago, triggered a reflexive pivot by the shogunate into the most severe seclusion policies of the Tokugawa period. In short, debates over Japan's relationship with its rapidly changing maritime environment evolved amidst diverging local and urban, official and vernacular cells of the public sphere.

Towards the end of the century, when frontier settlements appeared throughout the Kuroshio region, a similar negotiation between commercial and state agents tested the limits of Japan's new role in the international environment of the Pacific world. Takahiro Yamamoto has argued that establishing control over frontier spaces in the Meiji period, from Sakhalin to Tsushima and Okinawa, was made possible by an international "balance of favor:" in order to prevent imperial competitors from seizing land exclusively, the principal treaty powers created a favorable environment for semi-sovereign Japan to police frontier islands as a proxy.[17] This dynamic provided the political backdrop for the deployment of private enterprise to remote frontier islands coined a new relationship between business and state interests and gave rise to a new form of corporate capitalism. This started with a period Hiraoka Akitoshi calls the "bird rush" to frontier islands, in pursuit of

[17] Yamamoto 2015, 23–4.

albatrosses that were processed into fertilizer and fashion products.[18] The state developed its colony in the Bonin Islands with experimental plantations, growing exotic fruits and useful species such as cinchona bark, experiments that in turn granted access to the scientific community at international agrarian conferences. Resource colonies on remote isles at the fringes of state control, by contrast, developed their autonomy to the point of issuing their own currencies.[19] In this sense, Japan's early colonial expansion, driven by thirst for nutrients and fueled by ideals of adventure, discovery and colonial riches, was the product of competing state and commercial interests.

The Frontier in the Anthropocene

Japan's oceanic expansion bridges the conventional divides of early modern and modern, shogunal and imperial, insular and global. The object of historically changing commercial interests, the archipelago's watery frontiers remain a site of international resource competition and technology-driven expansion. In the age of climate change, the oceanic frontier once again proffers diverse possibilities. For some, a sinkhole for excess CO_2 to mitigate the effects of climate change; for others a seemingly inexhaustible wellspring of cheap energy, nutrients, and the very minerals that are

[18] Hiraoka 2012, 108–14; Kreitman 2015, 66–8.

[19] This was the case in the short-lived colony on Nishizawa (or Dongsha) island in the South China Sea, colonized by Nishizawa Kichiji, as well as in Tamaoki's Daitō island. (Hiraoka 2013, 228–9; Hiraoka 2015, 166–8.) These corporate islands were comparable, at a smaller scale, to the "chartered company governments" Steven Press describes in *Rogue Empires.* (Press 2017, 7.)

required in the shift to renewable energies.[20] Ironically, these hopes rest on a continuous and technology-driven expansion towards the bottom of the deep sea which will perpetuate and accentuate the international competition for marine resources, as the conflict surrounding fossil fuel deposits beneath the Senkaku/Diaoyu islands underlines.[21] With many living resources dwindling or exhausted beyond commercial viability, the frontier is now observing a shift towards inanimate resources.

The rare earth minerals found in the deep sea around Japan are of growing geopolitical significance: the country's electronic industry relies heavily on precious metals and rare earth minerals, over which China holds a virtual monopoly.[22] China's sudden export block in reaction to the 2010 confrontation over the Senkaku islands indicated that Japan's reliance on importsposes a considerable risk.[23] Under the United Nations Convention on the Law of the Sea (UNCLOS) of 1982, exploitation of underwater resources is only permitted within the Exclusive Economic Zone (EEZ) of the permit-issuing nation state. Despite Japan's extensive EEZ, the principle has drawn criticism from right-leaning Japanese authors, who perceive Japanese interest

[20] METI 2019, 17–8. Noticeably, the quest for rare minerals, driven by conventional resource corporations such as Japan Oil, Gas and Metals National Corporation (JOGMEC), is inextricably tied to the exploration of subaqueous fossil fuels. (JOGMEC 2020).
[21] Drifte 2014, 7–8.
[22] China controls the vast majority of worldwide rare metal production, and it has a monopoly on separation and purification of rare mineral ores. As of 2018, 58% of Japan's rare earth imports originated directly from China. DeWit 2021, 7.
[23] Drifte 2014, 19.

in fewer rather than more regulations on the world's oceans.[24] To secure control over deep-sea deposits of strategic resources, Japan, as well, is currently claiming "extended continental shelf" privileges that extend its EEZ beyond the customary 200 nautical miles to encompass rare earth fields between Okinawa and the Bonin Islands, west of Minami no Tori Island, as well as south of Oki no Tori reef.[25] (See fig. 8.2) Bold estimates expect as much as 126 billion m^3 of methane ice, and a value of around 100 billion USD in rare minerals within Japan's EEZ.[26] The sheer quantity of sought-after resources in its territorial waters underscore that Japan is anything but the allegedly resource-poor island nation it often presents itself to be.

Climate change poses new challenges to the region, which has already started to exhibit signs of irreversible anthropogenic transformation. According to palaeoclimatologist Stephen Gallagher et al., the Kuroshio current is expected to accelerate its flow by 30 *cm/s* under the impact of global warming. Changes in speed and flow paths – the Kuroshio Extension is believed to have shifted north already by half a degree in latitude over just the last century – can have sweeping effects on temperature and precipitation, as well as local manifestations of sea level rise.[27] In the fluid environment of the ocean, physical geography is never static. Rising sea

[24] Yamada Yoshihiko, for example, portrays the UNCLOS as a ticket for irresponsible states to exploit globally shared maritime resources in an unsustainable manner, and at Japan's expense. Yamada 2016, 112–6.
[25] As outlined in the "Submissions to the Commission: Submission by Japan," in: The Government of Japan 2008; Tokyo University Ocean Alliance ed. 2011, 28.
[26] Yamada 2016, 86; 98..
[27] Gallagher et al. 2015, 18.

levels not only threaten coastal communities, but also challenge Japan's claims to some 410,000 km^2 of EEZ around Oki no Tori reef, 1,700 *km* south of Tokyo. The reef, which Japan claims as an inhabitable island, in fact reaches just a few centimetres above the surface in two locations, and is certain to be drowned in the foreseeable future.

In an age in which oceans revise coastal geographies with increasingly violent whims, anticipated environmental changes have inspired governments to explore new strategies in claiming oceanic space. To prevent territorial loss, Tokyo University's Kayane Hajime calls on his government to support the growth of corals "*naturally* rather than by constructing an island of concrete."[28] According to various proposals, cement tetrapods will help accumulate shoals of drifting corals to the point that palms can be grown and ultimately produce an inhabitable island.[29] This green-washed island construction is an attempt to keep with classical, coast-centric definitions of maritime claims as stipulated in the UNCLOS of 1982.[30] Other approaches include creatively redefining the continental shelf in one's favour, a strategy China is trying to implement in the East China Sea to expand its EEZ towards Japan.[31] In building artificial islands as much as in redefining the basis for exclusive

[28] Tokyo University Ocean Alliance, ed. 2011, 24.
[29] Ibid.
[30] UNCLOS III, Part V, Article 57. (*UNCLOS* 1982.)
[31] Drifte 2014, 29.

claims, engineering and legislation in maritime territories are now reactive *vis-à-vis* the vagaries of oceanic change.

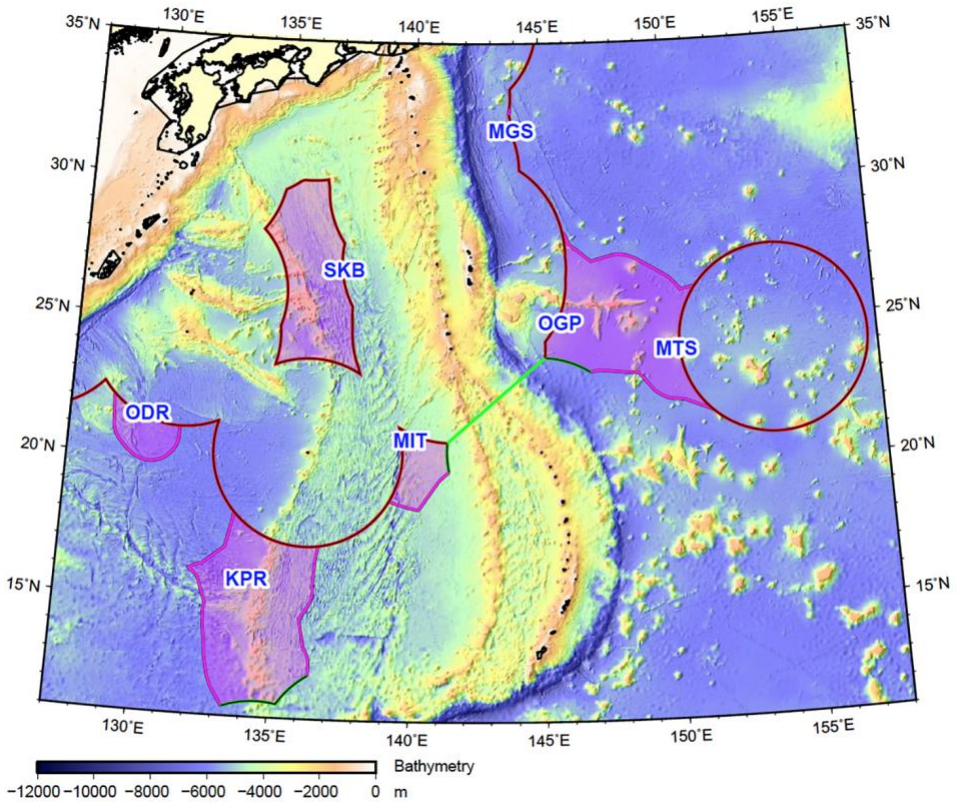

Fig. 8.2) Map of Japan's pending application to the United Nations for an 'extended continental shelf' (in purple) beyond the customary 200 nautical mile zone stipulated by the United Nations Convention on the Law of the Seas, or UNCLOS. In: The Government of Japan 2008, 6.

To understand the historical processes that direct state and industry interests to specific places within the dynamic landscapes of currents, habitats, and mineral deposits, historians need to explore oceanic transformations in their *volumetric* dimension. Tridimensional fluid landscapes of currents, catchment areas, and migrating fish, oceans complicate territorial notions of sovereignty, empire, and the

roots of historical change. As the arrival and disappearance of Atlantic whalers in the Kuroshio Extension in the 1830s or the later emergence of short-lived bird hunting colonies in the late nineteenth century show, resource extraction proceeds in a spatially and temporally layered manner. These layers are being worked through one by one as a result of unsustainable practices offshore that rely on continued expansion and technological innovation. Like the "bomb-lance" whale gun, frontier technologies have rarely enhanced sustainability, but rather delayed the extractive industries' collapse while accelerating the decimation of resources. Similarly, the pursuit of vertical frontiers today reproduces a precept at the heart of the capitalist logic of continued growth and accumulation: indifference to the idea of planetary boundaries.

To historicize the ocean proper as a site of resource competition and as a catalyst of anthropogenic change will necessitate a comprehensive, interdisciplinary methodology based on analytical categories that transcend the limitations of static geographies. It is my hope that this attempt at unpacking the frontier as both a material condition and as a historically grown mode of reasoning among non-western agents will help shed light on the systemic problems in the human-environment relationship that define the Anthropocene.

APPENDIX I

Archives

ACLA	Akune City Local Archive (阿久根市立郷土資料館). Takamatsu-cho 2, Akune-shi, Kagoshima 899-1622, Japan.
APC	Author's Private Collection. Digitized materials will be shared upon request.
CTMH	Choei Takano Memorial Hall (高野長英記念館). Zawanaka Kamino-cho 1-9, Ōshu-shi, Iwate 023-0857, Japan.
EGAN	Egawa Archives, Nirayama (韮山江川家文書). Egawa Residence, Nirayama 1, Izunokuni City, Shizuoka 410-2143, Japan.
EPIT	Epitaph, Outdoor Location Specified for Each Item.
GET	The Getty Research Institute. 1200 Getty Center Drive, Suite 1100, Los Angeles, CA 90049–1688, U.S.A.
HEN	Shiryō Hensanjo, Tokyo University (東京大学史料編纂所). Hongo 7-3-1, Bunkyo-ku, Tokyo 113-0033, Japan.
HMH	Hawaiian Mission Houses Digital Archive Online Archive, https://hmha.missionhouses.org/.
HOU	Houghton Library, Harvard University. Harvard Yard, Cambridge, MA 02138, U.S.A.
KUL	Kyushu University Library (九州大学附属図書館). Motooka 744, Nishi-ku, Fukuoka 819-0395, Japan.
KUN	Kunaichō, the Imperial Household Agency (宮内庁) 1-1 Chiyoda, Chiyoda-ku, Tokyo 100-8111, Japan.
LOC	Library of Congress. 101 Independence Ave SE, Washington, DC 20540, U.S.A.
NAJ	National Archives of Japan (国立公文書館). Kitanomaru Koen 3-2, Chiyoda-ku, Tokyo 102-0091, Japan.

NDL	National Diet Library of Japan (国立国会図書館). Nagatacho 1-10-1, Chiyoda-ku, Tokyo 100-8924, Japan.
NMHC	Nagasaki Museum of History and Culture (長崎市歴史文化博物館). Tateyama 1-1-1, Nagasaki-shi 850-0007, Japan.
OVBE	Ogasawara Village Board of Education Archive (小笠原村教育委員会). Azanishi-chō, Ogasawara-mura, Tokyo 100-2101, Japan.
RUM	David Rumsey Map Collection, Stanford University. 557 Escondido Mall, Stanford, CA 94305-6004, U.S.A.
RYU	University of the Ryukyus Library (琉球附属図書館). Sembaru 1, Nakagami-gun, Nishihara-cho, Okinawa, 903-0213, Japan.
SJUL	Sugiyama Jogakuen University Library (杉山女学園大学図書館). Hoshigaoka-motomachi 17-3, Chikusa-ku, Nagoya-shi, Aichi 464-8662, Japan.
STAT	U.S. State Department, Office of the Historian. Online Archive, https://history.state.gov/search.
TMET	Tokyo Metropolitan Archives (東京都公文書館). Izumi-chō 2-2-21, Kokubunji-shi, Tokyo 185-0024, Japan.
TROV	National Library of Australia, Trove Newspaper Archive. Online Archive: < https://trove.nla.gov.au/newspaper/ >
TUGL	Tokyo University General Library (東京大学総合図書館). Hongo 7-3-1, Bunkyo-ku, Tokyo 113-0033, Japan.
UML	University of Minnesota Libraries, Elmer L. Andersen Library. 222 - 21st Avenue South, Minneapolis, MN 55455, U.S.A.
UTL	University of Tsukuba Library (筑波大学附属図書館). Tennodai 1-1-1, Tsukuba-shi, Ibaraki 305-8577, Japan.
UWML	University of Wisconsin, Milwaukee Library. 2311 E Hartford Ave, Milwaukee, WI 53211, U.S.A.
WUL	Waseda University Library (早稲田大学図書館). Nishiwaseda 1-6-1, Shinjuku-ku, Tokyo 169-8050, Japan.

APPENDIX I

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APPENDIX I

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APPENDIX II

Name Register

Abe Masahiro 阿部正弘 (1819-1857). Politician of the *bakumatsu* era. Enters the office of Senior Councilor at age 25 in 9/1843 and acts as the Chief Senior Councilor in 1844–55.

Abe Rekisai 阿部櫟斎 (1805–1870). Honzō botanist active in the Bonin Islands during the colonization of 1861–63. Involved in illicit plans to sail to the Bonin Islands in the *tenpō* era.

Abel–Rémusat, Jean-Pierre (1788–1832). French sinologist and translator of Hayashi Shihei's *Glance at Three Countires.*

Adams, William, English navigator active in Japan, also known as Miura Anjin 三浦按針 or "pilot of Miura" (1564–1620).

Aizawa Seishisai 会沢正志斎 (1782–1863). Shogunal advisor and nativist, known for xenophobic theses and regarded as the father of the "Shell-Repel" edict of 1825.

Akioka Takejirō 秋岡武次郎 (1895–1975). Geographer and map collector.

Arai Hakuseki 新井白石 (1657–1725). Economist and political advisor to the shogunate.

Beechey, Frederick (1796–1856). Captain of the British sloop *Blossom.*

Bent, Silas (1820–1882). Naval officer and hydrographer on Perry's mission to Japan 1853. Known for his writings about the "Kuro Siwo."

Bradley, Charles William (1807–1865). U.S. consul in Amoy (1849–54), during the *Robert Bowne* incident, in Shanghai (1854–57), and Ningpo (1857–60).

Broughton, William Robert (1762–1821). British naval officer active in East Asia and the Pacific.

Chapin, Alden B. (*life data n.k.*). Settler in the Bonin Islands, 1830, born in Massachusetts.

Charlie "Kanak" (*b.* 1822). Pacific Islander resident in the Bonin Islands in the 1860s and 70s.

Charlton, Richard (1792–1852). British consul in Hawai'i.

Chinsei Hachirō Tametomo see Minamoto no Tametomo.

Chōhei (of Niijima) 長兵衛 (*life data n.k.*). Member of the 1675 Shimaya expedition to the Bonin Islands.

Chōhei from Tosa 土佐長平 (1762–1821). Castaway who survived for over 12 years on the uninhabited Torishima island.

Cook, James, also "Captain Cook" (1728–1779). British navigator and cartographer active in the Pacific.

Davis, Ira (1805–81). Captain of the New Bedford whale ship *Franklin.*

De Long, Charles Egbert (1832–1876). U.S. Envoy and representative of the Kingdom of Hawai'i in Japan 1869–73.

Egawa Tarōzaemon "Hidetatsu" (or "Tan'an") 江川太郎左衛門英龍（坦安） (1801–55). Nirayama magistrate. Administrator of most of Izu province, including the Seven Islands of Izu and the harbor of Shimoda. Responsible for maritime security in Sagami bay under Chief Senior Councilor Mizuno Tadakuni and City Magistrate Torii Yōzō of Edo. Under Abe Masahiro, Egawa initiates technological projects including the building of a reverberating furnace at Nirayama and the construction of a schooner at Heda bay.

Elliot, Sir Charles (1801–1875). British naval officer and diplomat in China during the first Opium War.

Emperor Jiajing 嘉靖帝 (1507–1566). Emperor of the Ming dynasty.

Enomoto Takeaki 榎本武揚 (1836–1908). Meiji era politician, diplomat, and expansionist.

Fillmore, Millard (1800–1874). 13th President of the United States. In office 1850–53.

Foyn, Svend (1809–1894). Norwegian inventor and entrepreneur.

Fujikawa Sankei 藤川三渓 (1817–1889). Meiji era entrepreneur, founder of the whaling company *Kaiyōsha.*

Furukawa Koshōken 古川古松軒 (1726–1807). Physician, traveler and geographer.

Gao Shanhui 高山耀 (life dates n.k.). Chinese captain, drifted to Hachijō in 1753.

Hagura Geki 羽倉外記 (1790–1862). Tenpō era official.

Hanai Toraichi 花井虎一 (*life dates n.k.*).

Hattori Genroku 服部源六 (active late 18th c.). Local official in Hachijō.

Hayashi Jussai 林述斎 (1768–1841).

Hayashi Shihei 林子平 (1738–1793).

Hayes, Bully (*d.* 1876). Blackbirder and pirate active in the Pacific. Partner of Benjamin Pease in the 1860s.

Herman Melville (1819–1891). American novelist and author of *Moby Dick* (1851).

Hirano Renzō 平野廉蔵 (*life dates n.k.*). Entrepreneur from Echigo province, finances Manjirō's whaling experiments near the Bonin Islands.

Hirata Atsutane 平田篤胤 (1776–1843). *Kokugaku* nativist scholar.

Honda Toshiaki 本多利明 (1743–1821). Late Edo period economist.

Horton, George (1778?–1864?). Resident in the Bonin Islands after 1854. Arrested in the so-called *Horton Incident* of 1861.

Hübner, Johann (1668–1731). German historian and geographer cited extensively by Ōtsuki Heisen.

Iguchi Eishun 井口栄春 (*life dates n.k.*).

Iguchi Naosuke 井口直助 (*life dates n.k.*).

Inō Jakusui 稲生若水 (1655–1715). Honzō botanist. Initial author of the botanical encyclopedia *Shobutsu ruisan.*

Inō Tadataka 伊能忠敬 (1745–1818). Geographer and author of the Inō Maps of Japan.

Iwakura Tomomi 岩倉具視 (1825–1883). *Bakumatsu* and Meiji era politician.

Iwasaki Yatarō 岩崎弥太郎 (1834–1885). Meiji era entrepreneur and founder of the Mitsubishi Steamship Company.

John Bravo (*b.* 1812). Resident of the Bonin Islands after 1848, born on the island of Brava in Cape Verde.

John Marquese (*life dates n.k.*). Member of the 1830 group of settlers in the Bonin Islands.

Johnson, Charles (*d.* pre-1853). Member of the first group of settlers in the Bonin Islands, 1830. Born in Denmark.

Johnston, Alexander Keith (1804-1871). British geographer.

Junsen 順宣 (*life dates n.k.*). Misspelled in some sources as 順宜. Priest at Muryōsu temple (無量寿寺) in Mutsu province, arrested in 1839 for illicit plans to sail to the Bonin Islands.

Kaempfer, Engelbert (1651–1716). German physician in the service of the Dutch VOC in Nagasaki 1790–93. Author of the *History of Japan* (1727).

Kageyama Kudayū 陰山九太夫 (*d.* 1675). Assistant to Suetsugu Heizō.

Kan'emon 勘右衛門 (*d.* 1670). Captain of the vessel from Awa province drifted to the Bonin Islands in 1670.

Kikuchi Sakujirō 菊池作次郎 (1834–1889). Accidental member of the 1861 expedition to the Bonin Islands.

Kikuchi Sanai 菊池左内 (active around 1800). Local magistrate in Hachijō.

King David Kalākaua (1836–1891). 7th King of the Kingdom of Hawai'i, in office 1874–90.

King, James (1750–1784). British naval officer who led James Cook's mission after the captain's death in Hawai'i in 1779.

Klaproth, Julius (1783–1835). German Japanologist and translator of Hayashi Shihei's *Glance at Three Countries.*

Koga Tatsushirō 古賀辰四郎 (1856–1918). Entrepreneur and colonizer of the Senkaku (Diaoyu) Islands.

Kondō Tomizō 近藤富蔵 (1805–1887). Exiled samurai in Hachijō, author of the local history *Hachijō Jikki.*

Koseki San'ei 小関三英 (1787–1839).

Krusenstern, Johann Adam von, also „Ivan F." (1770–1846). Russian Captain-Lieutenant.

Kurita Manjirō 栗田万次郎 (*life dates n.k.*). Physician and *honzō* botanist active in the Bonin Islands in 1861.

Kyokutei Bakin 曲亭馬琴 also "Takizawa" Bakin 滝沢馬琴 (1767–1848). Popular novelist and author of the *Wondrous Tales of the Crescent Moon.*

La Pérouse, François Compte de (1741–1788). French naval officer and explorer of Sakhalin.

Latour, Bruno (*b.* 1947). French sociologist and philosopher of science.

LeGendre, Charles (1830–1899). American diplomat, advisor to the Japanese foreign ministry 1872–57.

London, Jack (1876–1916). American popular novelist.

Lütke, Friedrich von, also „Fédor Petrovich" (1797–1882). German-born Russian Lieutenant-Commander.

Magellan, Ferdinand (ca. 1480–1521). Navigator in the service of Portugal and Spain.

Mahan, Alfred Thayer (1840–1914). American naval strategist.

Mamiya Rinzō 間宮林蔵 (1775–1844). Geographer and explorer of the Amur Delta, Sakhalin, and the Mamiya Strait.

Matsudaira Sadanobu 松平定信 (1758–1829). Chief Senior Councilor during the Kansei Reform.

Matsuzaki Shinji 松崎晋二 (*b.* 1850). Photographer on the 1874 Taiwan Expedition, and in the Bonin Islands in 1875.

Matteo Ricci (1552–1610). Jesuit scholar active at the Ming Court of China.

Matthew C. Perry (1794–1858). U.S. Navy Commodore.

Maury, Matthew Fontaine (1806–1873). Geographer and Lieutenant of the U.S. Navy.

Mazarro, Matthew (*d.* 1848). First leader of the 1830 group of settlers in the Bonin Islands. Native of Ragusa or Genoa, Italy.

Meiji Emperor 明治天皇 also "Mutsuhito" 睦仁 (1852–1912, r. 1867–1912).

Mikawa Terumasa 三河口輝昌 (*life dates n.k.*). Shogunal official who travels to Hachijō in 1796, providing the information for Furukawa Koshōken's *Hachijō Hikki* of 1797.

Millichamp, Richard (*life dates n.k.*). Member of the first 1830 group of settlers in the Bonin Islands. Born in Britain.

Minamoto no Tametomo 源為朝 (1139–1177). Heian period warrior exiled to the islands of Izu, protagonist of Bakin's *Wondrous Tales of the Crescent Moon.*

Mineta Fūkō 嶺田楓江 (1817–1883). Author of the political fiction *Kaigai shinwa* (1849).

Mitsukuri Genpo 箕作阮甫 (1799-1863). Scholar of Western studies.

Miura Anjin *see Adams, William.*

Miyamoto Gendō 宮本元道 (*b.* 1824). Landscape painter in the Bonin Islands, 1862–63.

Mizuno Tadakuni 水野忠邦 (1794–1851). Senior Councilor and architect of the Tenpō Reforms.

Mizuno Tadanori 水野忠徳 (1815–1858). Uraga magistrate, Nagasaki magistrate and chief negotiator of the shogunate in the 1850s. Gaikoku bugyō ("foreign minister") in 1858–62. Leader of the expedition to the Bonin Islands in 1861.

Mizutani Shinroku 水谷新六 (*life dates n.k.*). Meiji period entrepreneur and colonizer of Minami no Torishima.

Mogami Tokunai 最上徳内 (1755–1836). Geographer and explorer.

Mori Kōan 森幸安 also "Kinsai" 謹斎 (active mid-18th c.). Geographer.

Mori Koben 森小弁 (1896–1945). Japanese businessman active in Micronesia.

Morris, Robert (*b.* 1851). Resident of the Bonin Islands in 1875, born in the Bermudas. Husband of O-Yoshi. Naturalized as Japanese in 1877, probably the first black person to become officially Japanese.

Motley, James (1810–1866), also spelled "Mottley." Resident of the Bonin Islands after 1844, born in London.

Motoori Norinaga 本居宣長 (1730–1801). Influential *kokugaku* scholar, author of *Kojiki-den.*

Murayama Tōan 村山等安, baptized "Antão" (1566?–1619). Nagasaki magistrate.

Myers, Robert Samuel (*life dates n.k.*). Resident of the Bonin Islands in the 1870s and 80s, among the first group of islanders to be naturalized in 1877.

Nabeshima Naomasa 鍋島直正 (1814–1871). Daimyo of Saga domain.

Nagakubo Sekisui 長久保赤水 (1717–1801). Geographer.

Nakahama Manjirō 中浜万次郎 (1827–1898) also "John Manjiro" or "John Mung"

Nishikawa Joken 西川如見 (1648–1724). Geographer.

Nye, E.F. (active mid-19th century). Captain on the New Bedford whaleship *Willam Rotch.*

Nye, Gideon (1812–1888), American businessman and later diplomat and advocate of the U.S. annexation of Formosa.

O-Yoshi (*b.* 1856). Japanese resident of the Bonin Islands in 1875, born near Yokohama. Wife of Robert Morris from the Bermudas.

Obana Sakunosuke 小花作之助 also "Sakusuke" 作助 (1829–1901). Administrator, governor and judge of the Bonin Islands under the Tokugawa (1861–63) and Meiji colonization (1875–1880). An employee of the home ministry, Obana left the office when the islands were integrated into Tokyo Prefecture in 1880.

Ogasawara Chōkei 小笠原長啓 (life dates n.k.). Descendant of Ogasawara Sadayori. Apparently first concocted the myth of Sadayori's discovery and residence in the Bonin Islands in 1702.

Ogasawara Sadatō 小笠原貞任 (*d.* 1730). Rōnin, applied for permission to reclaim the Bonin Islands in 1728. Disappeared in the illicit attempt to reach the Bonin Islands in 1730.

Ogasawara Sadayori 小笠原貞頼 (active in the late 16th–early 17th century). Venerated in local shrines as the alleged discoverer and first colonizer of the Bonin Islands, an episode that is, however, ahistorical.

Ōkubo Toshimichi 大久保利通 (1830–1898). Leading politician during the Meiji Reform and member of the 1871–73 Iwakura Mission to Europe and the United States.

Ōkuma Shigenobu 大隈重信 (1838–1922). Leading politician during the Meiji and Taishō periods, and founder of Waseda University.

Ōkusa Takayoshi 大草高好 (active early-mid 19th c.). Late Edo period *hatamoto* official.

Ono Tomogorō 小野友五郎 also "Kōhan" 広胖 (1817–1898). Naval officer, navigator, cartographer, and captain of the steamboat *Kanrin maru* during the 1861 expedition to the Bonin Islands.

Otaheite, Harry (*life dates n.k.*). Member of the first group of settlers in the Bonin Islands, 1830. Born in Hawaii or Tahiti.

Ōtsuki Gentaku 大槻玄沢 (1757–1827). Physician and botanist.

Ōtsuki Heisen 大槻平泉 (1773–1850). Physician, botanist, and author of the „Historia of Whales" *Geishikō*.

Parker, Peter (1804–1888). American missionary and diplomat in China, representing the American legation in various capacities 1844–57.

Parkes, Sir Harry Smith (1828–1885). British minister plenipotentiary in Japan 1865–83.

Pease, Benjamin (*d.* 1874). Blackbirder and convicted pirate active in the Bonin Islands 1869–74.

Pruyn, Robert Hewson (1815–1883). U.S. Consul in Edo 1862–65.

Robertson, Russell (active late 19th c.). Reports to the British government from the Bonin Islands about the circumstances of Benjamin Pease's disappearance.

Saigō Tsugumichi 西郷従道 (1843–1902). Lieutenant-General, commander on the 1874 Taiwan Expedition.

Sakuma Shōzan 佐久間象山 (1811–1864). Scholar of Western studies.

Satō Nobuhiro 佐藤信淵 (1769–1850). Agronomist, student of *kokugaku* nativism, and political advisor to Mizuno Tadakuni.

Savory, Maria (*b.* 1828). Abducted from the Philippines to the Bonin Islands at the age of 15 by Richard Millichamp. Wife of Matthew Mazarro and later, Nathaniel Savory. Later identifies as "Bonin Islander."

Savory, Nathaniel (1794–1874). Member of the first group of settlers in the Bonin Islands, 1830. Becomes a leading figure in the community after Mazarro's death in 1848. Installed as "Chief Magistrate" of the "Colony of Peel Island" by M.C. Perry in 1853.

Shibukawa Rokuzō 渋川六蔵, also "Hironao" 敬直 (1815–1851). Shogunal astronomer and advisor to Mizuno Tadakuni.

Shiga Shigetaka 滋賀重昂 (1863–1927). Geographer, journalist and ardent expansionist. Author of *Current Affairs in the South Sea* and later Diet member.

Shimaya Ichizaemon "Mitate" 嶋谷市左衛門見立 (1606–1690). Navigator and explorer. Captain

of the 1675 exploration of the Bonin Islands. Author of the map *Muninjima no ezu* and *Muninjima no kakitsuki.*

Shimaya Ichizaemon "Sadashige" 嶋谷市左衛門貞定重 (life dates n.k.). Son of Ichizaemon "Mitate" and author of *Funanori pirōto* (1685) and other texts on navigation.

Shimazu Nariakira 島津斉彬 (1809–1858). Daimyo of Satsuma domain.

Shinpei of the Daigo Group 醍醐組新兵衛 (active around 1800). Leader of a Japanese whaling group on the Kurile island of Iturup.

Shinpei 新兵衛 (active early 19th c.). Fisherman in northeastern Japan.

Shizuki Tadao 志筑忠雄 (1760–1806). Astronomer and translator active in Nagasaki.

Shūkan 宗感 (Active mid-18th century). Monk at Chōrakuji temple in Hachijō.

Siebold, Philipp Franz von (1796–1866), German physician in the service of the Dutch VOC in Nagasaki 1823–29. Expelled from Japan over the so-called *Siebold Incident*. Author of *Nippon, Archiv zur Beschreibung von Japan.*

Spenser (*d.* 1875). Resident of the Bonin Islands in the early 1870s. Suspected murderer of Benjamin Pease.

Suetsugu Heizō "Masanao" 末次平蔵政直 (*d.* 1630). Nagasaki merchant and from 1619 on, Nagasaki Magistrate.

Suetsugu Heizō "Shigetomo" 末次平蔵茂朝 (1633–1676?). Nagasaki Magistrate in the fourth generation. Sponsor of the 1675 expedition to the Bonin Islands. Exiled to the island of Oki in 1676 over a smuggling scandal.

Sugiura Shigetake 杉浦重剛 (1855–1924). Meiji period educator, school founder, and court teacher to the later emperor Hirohito. Nan'yō expansionist.

Takahashi Kageyasu 高橋景保 (1785–1829). Geographer and Western scholar. Supervisor of the cartographic projects of Inō Tadataka and Mamiya Rinzō. Died in prison in the aftermath of the *Siebold Incident.*

Takano Chōei 高野長英 (1804–1850). Western scholar in the entourage of Egawa Tarōzaemon. Author of *Yume monogatari.*

Takizawa Bakin *see Kyokutei Bakin*

Tamaoki Han'emon 玉置半右衛門 (1838–1910). Meiji period entrepreneur. Born in Hachijō, he was a member of the 1861–63 expedition to the Bonin Islands. Later, his company *Tamaoki shōkai* colonized Torishima as well as the Daitō Islands.

Tamura Genchō 田村元長（1739–93). Honzō botanist, author of the Illustrated Explanation of the Produce of the Izu Islands 豆州諸島物産図説 (1791).

Tanaka Hisashige 田中久重 (1799–1881). Inventor active in Saga domain known especially for his clockworks and the reverse engineering of a steam engine.

Tanaka Yoshio 田中芳男 (1838–1916). Botanist and founder of Ueno Zoo.

Tani Yōkei 谷暘卿 (1817–1885). Kanpō physician and later entrepreneur.

Tanuma Okitsugu 田沼意次 (1719–1788). Influential politician and Senior Councilor 1772–1786.

Terashima Munenori 寺島宗則 (1832–1893). Meiji Period politician and Foreign Minister 1873–79.

Terashima Ryōan 寺島良安 (*b.* 1654). Physician and author of the seminal encyclopedia *Wakan sansai zue* (1712).

Tewcrab, also "Twocrab" (life dates n.k.). Born in Hawai'i or another Pacific island. Resident of the Bonin Islands in the 1860s and 70s.

Tōjō Kindai 東条琴台 also "Shinkō" 信耕 (1795–1878). Scholar and author of the polemic *Map of the Seven Islands of Izu with the Eighty Islands of Munin Jima* (1842).

Tokugawa Ietsuna 徳川家綱 (1641–1680). Fourth Tokugawa shogun, in office 1651–80.

Tokugawa Ieyasu 徳川家康 (1543–1616). Founder and first shogun of the Tokugawa shogunate (1603–1867).

Tokugawa Yoshimune 徳川吉宗 (1684–1751). Eighth shogun of the Tokugawa shogunate.

Torii Yōzō 鳥居耀蔵 (1796–1874). City commissioner (*machi bugyō*) of Edo and architect of the 1839 Purge of Western Scholars (*bansha no goku*).

Tosa no Chōhei *see Chōhei from Tosa.*

Toyotomi Hideyoshi 豊臣秀吉 (1537–1598). Warlord and unifier of Japan in the late sixteenth century.

Tsukamoto Akitake 塚本明毅 also "Kanpo" 桓甫 (1833–1885). Co-author of Ono Tomogorō's map of the Bonin Islands.

Turner, Frederick Jackson (1861–1932). American historian.

Unamuno, Pedro de. Spanish explorer.

Vizcaino, Sebastian (1548–1628). Spanish merchant and explorer.

Wada Fujiemon 和田藤右衛門 (life data unknown). Exiled *rōnin* in Hachijō in 1753.

Watanabe Kazan 渡辺崋山 (1793–1841). Artist and scholar, member of the intellectual circle

shōshi kai. Advisor to Nirayama magistrate Egawa Tarōzaemon. Prosecuted in 1839 for advising private preparations for an unauthorized expedition to the Bonin Islands.

Watsuji Tetsurō 和辻哲郎 (1889–1960). Philosopher and cultural historian.

Webb, Thomas H. (*d.* 1881). Settler present in the Bonin Islands after 1847. Born in Britain.

Yamaguchi Gorōsaemon 山口五郎左衛門 (active early/mid-19th c.). Exiled samurai in Hachijō, author of *Waking up in Hachijō* (1848).

Yamaguchiya Hikobei "Kanejirō" 山口屋彦兵衛金次郎 (*life dates n.k.*). Member of the *Shōshikai* society around Watanabe Kazan.

Yamashita Yosō 山下與惣 (active late 18th c.). Hachijō local official.

Yanagita Kunio 柳田国男 (1875–1962). Ethnographer and founder of Japanese folklore studies or *minzokugaku.* Author of *The Maritime Path* (1961).

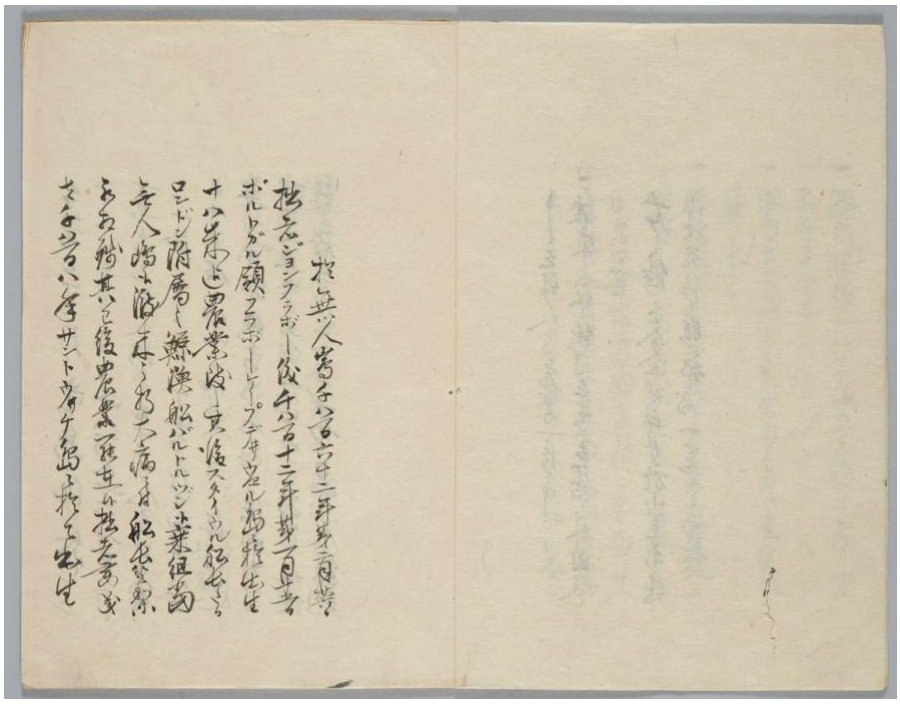
Yoshida Shōin 吉田松陰 (1830–1859). Teacher and ideologue of the *Sonnō jōi* movement.

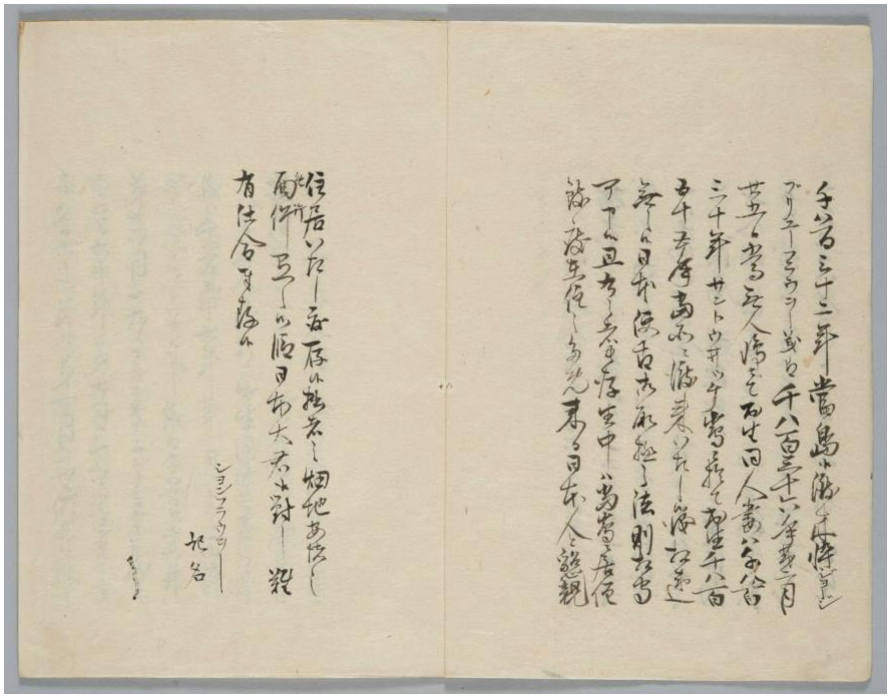
Zheng He 鄭和 (1371?–1434?). Ming dynasty Chinese admiral who led seven large-scale expeditions to the Indian Ocean and as far as Eastern Africa.

APPENDIX II

The Life of John Bravo

Sadame 定 [Regulations]. In: OVBE, Acc. No.: Great Safe, 2, 2-5, pp. 5–6.





於無人嶌千八百六十二年第二月廿六日

拙者ジョンブラボー儀千八百十二年第一月十五日ポルトガル領ブラボーケープデキウエル島ニ於出生，十八歳迄農業致之，其後スタイウル船長たるロンドン附属之鯨漁舩バルトルヅン江乗組, 当無人嶋江渡来之折， 大病ニ付舩長［に］我等被相残, 其己後農業罷在候. 拙者妻儀者千八百八年サントウキチ島ニ於て出生, 千八百三十二年当島江渡来．倅ジョージ・ブリユー・フラヲー儀は千八百三十六年第二月廿五日当無人嶋にて出生．同人妻ハ千八百三十年サントウキッチ嶌ニ於て出生．千八百五十五年当所ニ渡来いたし候儀相違無之候．日本使節御取極之法則相守可申候．且有之者（ば），申存生中当島ニ居住致度在住之ため来る日本人と懇親住居いたし度存候．拙者之畑地安堵之面許　免許　有之候段, 日本大君江対し難有仕合奉存候.

ジョンブラウヲー

記名

Munin Jima, 26th day of the 2nd month in the year 1862

I, John Bravo, was born on the Portuguese island of Brava, Cape de Ver[de], on the 15th day of the 1st month in the year 1812. Until the age of eighteen, I was a farmer, then I embarked on the London-based whale ship *Bartleson* (?) under Captain *Styre* (?). I came to this island since I was suffering from a heavy disease, and was left here by our Captain. Thereafter, I started farming. My wife was born in the Sandwich Islands in 1808, she came to this island in 1832. My son, George W. Bravo was born on this, Munin Island in the year 1836. His wife was born in the Sandwich Islands in the year 1830. She must have come here in 1855.

I pledge to cooperate with the Japanese envoys and to respect the law they proclaim. Moreover, as I wish to live out my days on this island, I intend to live in harmony with the Japanese who will come. I express my gratitude to the *Tycoon* of Japan for the permission to retain the fields I have reclaimed.

Signed: [John Bravo]

At the Ogasawara Village Town Office,
Summer 2016.