Studies in Pacific History

Economics, politics and migration

Edited by Dennis O. Flynn Arturo Giráldez, and James Sobredo

Studies in Pacific History

Economics, Politics, and Migration

Edited by

DENNIS O. FLYNN, ARTURO GIRÁLDEZ

University of the Pacific

and

JAMES SOBREDO

California State University, Sacramento

ASHGATE

© Dennis O. Flynn, Arturo Giráldez, James Sobredo 2002

All rights reserved. No part of this publication may be reproduced, stored in a retrieval system, or transmitted in any form or by any means, electronic, mechanical, photocopying, recording, or otherwise without the prior permission of the publisher.

Published by

Ashgate Publishing Limited Gower House Croft Road, Aldershot Hants GU11 3HR England

Ashgate Publishing Company 131 Main Street Burlington Vermont 05401–5600 USA

Ashgate website: http://www.ashgate.com

The editors and authors have asserted their moral right under the Copyright, Designs and Patents Act, 1988, to be identified as the editors/authors of this work.

British Library Cataloguing in Publication Data

Studies in Pacific history: economics, politics, and migration.

- 1. Pacific Area-Economic conditions-18th century.
- 2. Pacific Area-Economic conditions-19th century.
- 3. Pacific Area-Economic conditions-20th century.
- 4. Pacific Area-Emigration and immigration-History.
- I. Flynn, Dennis Owen, 1945– II. Giráldez, Arturo.

III. Sobredo, James.

330. 9'1923'08

Library of Congress Control Number: 2001099633

ISBN 0754609464

This book is printed on acid free paper.

Printed and bound in Great Britain by MPG Books Ltd, Bodmin, Cornwall

STUDIES IN PACIFIC HISTORY

In recent years scholars have begun to conceptualize the history of the Pacific Ocean as a subset of world history. This question is taken up in the introductory chapter of this volume, which sets out four periods of modern Pacific history: a silver period, 1570s-1750; a period of early integration, 1750–1850; a gold period, 1850-c.1900; and a period of imperial strategies after the gold rushes. The next chapter looks at the fur trade of the Pacific coast of America, and its dependence on markets in China and Russia, followed by a set which focuses on the era of the gold rushes in California, Australia, and New Zealand, when the pace of Pacific integration grew rapidly and new markets opened across the ocean. The last chapters examine aspects of the subsequent evolution of the Pacific Ocean into an 'American lake', looking in particular at the interlocking of politics and migration.

This volume carries forward study of the 'Pacific Centuries', promoting the conceptualization of the Pacific Ocean as a coherent unit of analysis, and providing further important steps toward provision of the multi-century framework that is required for proper understanding of today's 'Pacific Century'.

Acknowledgments

Materials contained in this volume were presented in preliminary form at the third Pacific Centuries conference held at the University of the Pacific in Stockton, California in April 1998. This conference was co-organized with the California History Institute and the John Muir Center for Regional Studies, both of which are headquartered at the University of the Pacific. Special thanks to Professor Ron Limbaugh, Director of the John Muir Center at that time, and Pearl Piper, who handled a multitude of conference tasks with energy and grace. UOP's Eberhardt School of Business contributed a comfortable venue for conference sessions, thanks to ESB Dean Mark Plovnick. Robert Coburn, Professor of UOP's Conservatory of Music, organized a splendid "Concert Celebration of Music and Dance from Across the Pacific Region." Sharlene Messer and Heath Wheeler, able undergraduate research assistants, worked on this volume's production. Finally, the 1998 conference occurred because of a generous grant from the office of Dr Philip Gilbertson, Provost of the University of the Pacific, in collaboration with Robert Benedetti, Dean of the College of the Pacific.

We wish to thank Dr John Smedley, publisher, and Celia Hoare, Editor, of Ashgate Publishing, for provision of a forum for sharing thoughts about historical interconnections within and across one-third of the earth's surface.

Contents

List of Figures, Maps, and Tables Acknowledgments		
1	In Search of Periodization for Pacific History: An Introduction Dennis O. Flynn, Arturo Giráldez, and James Sobredo	1
2	Soft Gold: Animal Skins and the Early Economy of California Jim Hardee	23
3	San Francisco's Pacific Exports, 1850–1898 David J. St Clair	40
4	Powerhouse Economies of the Pacific: A Comparative Study of Gold and Wheat in Nineteenth-Century Victoria and California Warwick Frost	61
5	New Zealand and the Gold Rushes of the Mid-nineteenth Century Kenneth E. Jackson	75
6	Gold Rush California Bound: New Evidence from French Passenger Lists Annick Foucrier	95
7	The Rim of Fire: Pacific Rim Cities and the Problem of Fires Lionel Frost	108
8	World War I, the American Interior, and Pacific Markets: A Look at Distant Impacts Nancy J. Taniguchi	123
9	Race and the Right Kind of Island: Immigration Policy in Hawaii and Cuba under US Auspices, 1899–1912 Katharine Bjork	140
10	The 1934 Tydings–McDuffie Act and Filipino Exclusion: Social, Political and Economic Context Revisited James Sobredo	155

11	Communists, Christians, and Japanese Imperial Subjects: Okinawan Immigrants within the Japanese Diaspora, 1899 to 1941 Edith M. Kaneshiro	170
12	Hong Kong: Constitutional Development and Corporate Culture Frank H.H.King	188
13	The Philippine Annexation: An Experiment of Profound Interest <i>Arthur Power Dudden</i>	212
14	Cold War Casualties: The Impact of American Nuclear Testing Policies in the Pacific, 1954 Martha Smith-Norris	223
Inde	x	250

List of Figures, Maps, and Tables

Table 3.1	Destination of San Francisco treasure exports, 1854–63	43
Table 3.2	Treasure exports from San Francisco, 1882–98	44
Table 3.3	Destination of treasure exports by sea from San Francisco,	
	1882–98 (thousands of dollars)	45
Table 3.4	Composition of San Francisco silver exports, 1882–98	46
Table 3.5	San Francisco exports by type, 1861–63 (\$)	46
Table 3.6	San Francisco merchandise exports, 1861–63	46
Table 3.7	Destination of San Francisco merchandise exports, 1861-63	49
Table 3.8	Leading San Francisco merchandise exports, 1861-63 (\$)	48
Table 3.9	Largest merchandise exports from San Francisco, 1870–81 (\$)	49
Table 3.10	San Francisco merchandise exports, 1828–1898	50
Table 3.12	Distribution of San Francisco merchandise exports, 1882-98	52
Table 3.11	Destination of San Francisco exports, 1882–98	
	(thousands of dollars)	53
Table 3.14	Destination of San Francisco wheat and flour exports,	
	various years (as per cent of California wheat and flour exports)	
Table 3.13	San Francisco wheat and flour exports, 1882–1898	
	(thousands of dollars)	55
Table 3.15	San Francisco lumber exports, 1876–1898	57
Table 4.1	Population of California and Victoria (thousands)	63
Table 4.2	Population of San Francisco and Melbourne (thousands)	64
Table 4.3	Population of gold towns in California and Victoria (thousands)	65
Table 4.4	Population of non-gold towns in California and Victoria	
	(thousands)	66
Table 4.5	Central Victoria, indices of average wheat acreage and average	
	wheat prices, 1867/70–1896/1900 (1867/70 = 100)	69
Table 4.6	California, indices of average wheat acreage and average wheat	
	prices, 1867/70–1906/10 (1881–85 = 100).	71
Table 4.7	Agricultural price indices, Victoria, 1867/70–1881/85	
	(1867/70=100)	73
Figure 5.1	Percentage share of exports by category	79
Table 5.1	GNP Estimates	80
Table 5.2	Population migration	84
Map 1	Places of birth of passengers (N = 1406)	107
Map 2	Residences of passengers (N = 1477)	107

In Search of Periodization for Pacific History: An Introduction

Dennis O. Flynn, Arturo Giráldez, and James Sobredo

Overview

In an opening plenary address at the initial 1994 'Pacific Centuries' conference at the University of the Pacific, K.N. Chaudhuri expressed skepticism that anyone had devoted serious attention to defining 'the Pacific' as a coherent unit of analysis. Aware of the legitimacy of this criticism, we nonetheless proceeded through two subsequent Pacific Centuries conferences in 1996 (Melbourne) and 1998 (Stockton) with faith that a clearer conceptual framework would emerge in due time. Contributions by researchers since the first Pacific Centuries conference seven years ago, including the new essays of this volume, permit us to offer: (1) a clearer conceptualization of the Pacific as a unit of analysis, and (2) an attempt at periodization of Pacific history from the sixteenth through the nineteenth centuries.

The Pacific Ocean occupies one-third of the surface area of the planet, is larger than all earthly landmasses together, and is equal in area to the remaining oceans/ seas combined. The Pacific is twice as large as the Atlantic Ocean and contains more than double the water (because of greater depth). Much economic and social coherence around the Pacific region stems ultimately from geological history. Colliding plates created the volcanic 'Ring of Fire' that encircles the world's greatest ocean. Subduction zones along the American (i.e. eastern) edge of the Pacific produced rugged, volcanic mountains that span the length of the Americas. Earthquakes and volcanic activity are characteristic of these mountain ranges, as well as of the islands and archipelagoes of the Pacific. It may be more accurate to describe the Pacific as an 'Ocean of Fire' rather than a 'Ring of Fire'. Since the oceanic islands are all volcanic, today's emphasis on the 'Rim' - and de-emphasis of Pacific islands - indeed makes little sense in terms of geology or history. The mid-twentieth-century 'War in the Pacific', for example, mainly involved battles over control of crucial islands. Control of island ports and island resources are fundamental to understanding the history of the Pacific from the beginning.

Plate tectonics and the Ocean of Fire may initially seem tangential topics for the study of history, but we believe that consideration of geologic/geographic conditions is essential to a more complete understanding of the history of the Pacific. Conceptualization of long-term history necessitates discussion of human opportunities and constraints, both of which are largely determined, in turn, by the

natural environment. Specifically, we have in mind tectonic forces that endowed smoldering mountains around the Pacific's edge with vast holdings of metals. Indeed, nothing influenced trade relations around the Pacific Ocean more – from the mid-sixteenth century to the mid-nineteenth century – than the production and shipment of metals.

The silver period

From the mid-sixteenth century to the mid-eighteenth century, the exchange of Peruvian and Mexican silver for Chinese exports (especially silks and porcelains) dominated the trans-Pacific commercial world. ² Tectonic forces – on the Americas side of the Pacific – made possible discovery of unprecedented silver deposits in the Andes and in Mexico beginning in the 1540s. Japanese silver production - on the Asian side of the Pacific - was also immense in the sixteenth and seventeenth centuries (perhaps half as large as total Spanish American output). Virtually all Japanese silver was exported to China. China was simultaneously the end market for the bulk of the silver emanating from American mines. China became the dominant 'suction pump' for world silver production because the price of silver in China was double its price in the rest of the sixteenth century world. Unsurprisingly, merchants worldwide recognized that it was profitable to buy silver cheaply in Japan, Spanish America, and Europe and sell it at lofty prices in markets connected to China. This protracted phenomenon signaled one of world history's most spectacular cases of arbitrage trade, buying a product cheaply in one sub-market and selling it dearly in another.

We know why the value of silver had escalated so dramatically in China. Collapse of China's paper-money system in the fifteenth century, combined with subsequent conversion of China's tax system to a silver basis, resulted in a protracted 'silverization' of Chinese society. Given that China contained a quarter of world population at the time (not to mention Chinese tributary states that were also wedded to silver), demand-side dynamics emanating from within China caused Chinese silver prices to rise dramatically. Europeans played the role of middlemen on the global silver stage; they were important intermediaries between American and Japanese mines (on the production side) and the Chinese marketplace (the endmarket). It is worth emphasizing that an overwhelming preponderance of world silver production occurred around the Ocean of Fire. On the supply side, geological conditions predetermined the locations of silver-rich American and Japanese mines. On the demand side, dynamics emerging from China's silverization guaranteed that the earth's most populous country would become the world's main silver client all the way into the early twentieth century.

Two general themes arise from analysis of the 'silver period' just discussed. First, Pacific Basin geography is unique. An important aspect of this uniqueness

has been mentioned: tectonic activity led to unusual concentrations of metals around the perimeter of the Pacific, the rim of an Ocean of Fire. Other aspects of Pacific geography assured that certain nodal points would become crucial for both Pacific and world history. The American side of the Pacific contains few natural harbors. The excellent bay at Acapulco, however, was strategically located and therefore served as a crucial trade link along the eastern shores of the Pacific. Favorable ocean currents and trade winds permitted Acapulco's rise as the main American entrepôt linking Mexican/Peruvian silver to crucial markets on the Asian side of the Pacific. 4 Manila Bay furnished an equally crucial harbor/entrepôt on the Asian side of the Pacific. As is true of airports today, it was useless in times past to possess the right to embark from one port in the absence of secure landing rights at the destination port. Yet, no European state possessed sufficient military power to control a mainland Asian state up through the middle of the eighteenth century. European interlopers were either: (a) convenient collaborators who were tolerated on Asian home soil (e.g. the Portuguese and Dutch in Nagasaki and the Portuguese in Macao); or (b) they were compelled to seek defensible ports among thousands of islands in archipelagoes off the Asian mainland (e.g. the Portuguese in Goa, the Portuguese and Dutch in Malacca, and so on). Spain had the good fortune to gain control of one of Asia's best natural harbors, Manila Bay. The Spanish Crown did its best to monopolize trade between Acapulco and Manila (although smuggling was rampant), while profiting mightily in the process, but Chinese merchants dominated the trade leg between Manila and the Asian mainland. Indeed, Chinese merchants outnumbered Spaniards in the city of Manila by a wide margin. Geography on the Asian side of the Pacific was once again crucial, in other words, including the location and configuration of archipelagoes. Mutually beneficial collaboration between Spanish and Chinese trading interests (eruptions of confrontation and bloodshed in Manila notwithstanding) evolved in the context of unique geographic formations, as well as convenient access to the world's biggest markets.

While Spain was remarkably successful in controlling most of the Atlantic silver trade, crucial ocean trade routes that connected Europe and Asia had previously fallen under the control of the Portuguese and the Dutch. Spain dominated the Atlantic leg of silver's journey to China, in other words, but was shut out of the Europe-to-Asia leg of the global silver trade. Thus, the Acapulco-Manila trade route via the Pacific represented perhaps Spain's only hope of interfacing directly with Chinese merchants. Manila became the linchpin of Pacific trade; and her galleons yielded immense profits for the Spanish Crown in the process.⁵

During the mid-sixteenth to mid-eighteenth century 'silver period', it is in a sense true that the Acapulco-Manila galleons linkage of the Americas with Asia was narrow and limited. Immense profits from silver and silk commerce indeed riveted the attention of Spanish, Chinese and other merchant interests. But the vast

Pacific beyond this crucial thread of trade was considered mostly irrelevant by superpowers focused on trade profits. It is important to recognize, on the other hand, that trans-Pacific trade also introduced biological/ecological exchanges of immense importance to Pacific and world history. John McNeill calls this environmental connection a 'Magellan Exchange' counterpart to Alfred Crosby's much-discussed 'Columbian Exchange' across the Atlantic Ocean. 6 Not only did AfroEurAsian diseases eventually devastate Pacific Island populations in percentages reminiscent of the well-known demographic collapse of Native Americans, but many American plants also reached Asia (and Pacific Islands) aboard the very Acapulco-Manila galleons that carried silver through the Philippines. These galleons represented an important vector through which the American sweet potato, peanut, corn, tobacco and other flora were introduced into China. American food crops, in turn, contributed to a substantial increase in Chinese population during the eighteenth century. Reverberations throughout world markets in response to China's eighteenth-century population growth must certainly have been huge, yet we have been able to find little discussion of this complex and important topic.8

Before leaving discussion of the Pacific's 'silver period', a significant non-precious metal deserves brief mention. Tectonic dynamics also generated tremendous copper mines around the Pacific. At a time when Japanese silver mines were playing out in the latter half of the seventeenth century, Japan became the world's largest source of copper (producing twice as much as did Sweden in the late-seventeenth century). Most Japanese copper was exported to Asian markets, especially China, but significant quantities of copper were also exported to Europe. We have found no evidence to suggest that significant Japanese copper exports across the Pacific to the Americas during Japanese copper's heyday, but this mining boom is an important subject of Pacific history nonetheless. Chile became a major copper producer along the eastern edge of the Pacific Ocean of Fire much later on, but integration of the Chilean copper story into a multi-century fabric of Pacific history will have to await the efforts of scholars with specialized knowledge of this topic.

Exploration and early integration of the South and North Pacific with 'the Rim' c.1750-c.1850

Between the end of the 'silver period' in the mid-eighteenth century and initiation of a 'gold period' in the mid-nineteenth century, intensified exploration combined with new commercial opportunities to yield further integration of the Pacific region. As early as 1669, an age of exploration began with Dampier's voyage contributing Australia to the global map. Voyages by Bouganville and Cook a century later added Tahiti, Samoa, eastern Australia, New Zealand, and Hawaii to the list of 'new worlds' to be explored by Europeans. These Pacific lands became more fully

integrated with continental societies as new technologies and business opportunities evolved. Sometimes the consequences were devastating in environmental terms. For example, attractive sandalwood prices in China induced the King of Hawaii to set island forests ablaze in order to detect the distinctive odor of sandalwood; this was evidently the least expensive way to determine the whereabouts of this valuable product. ¹⁰

Sheep were introduced in Australia when this made sense for the textile industry. And plantations likewise emerged on islands around the Pacific when conditions were favorable for continental markets for sugar, tobacco, and other tropical products. Plantations around the Pacific mainly employed native or Asian wage laborers. Pacific plantation history therefore followed paths distinct in many ways from Atlantic plantations based on African slave labor. Having said this, it nonetheless seems peculiar to us that precious little scholarly attention has been paid to the African Diaspora in the Pacific. ¹¹ Africans were dispersed widely throughout the Pacific since the sixteenth century – in Mexico City, Manila, Nagasaki, Batavia, Beijing, and so on – yet blacks of the Pacific are routinely excluded from discourse on the African Diaspora. But this is the sort of neglect that renders Pacific Centuries a vibrant research area with numerous opportunities.

Once the main thrust of the 'silver period' ended around 1750, the Chinese marketplace continued to dominate Pacific trade and imperial policies after that date.12 Jim Hardee's article on the trade in California animal skins will be discussed more completely in a moment, but his label 'soft gold' for animal skins is both interesting and an appropriate subject for this volume. Like gold and silver, animal skins can be considered natural resources that could be (and were) depleted when heavily exploited. And like silver (but unlike gold), Hardee informs us that China was a principle market for animal skins harvested along America's Pacific coast. Indeed, the northward spread of Spanish missions up California's coast was a response to southward expansions by non-Spanish fur traders, especially Russians. A general conclusion arising from the work of Hardee and others is that the histories of peoples around and within the Pacific involved long-distance links for centuries. Much of what passes for local history cannot, in fact, be properly understood without consideration of global connections. Indeed, the main unifying theme to have emerged from the first three Pacific Centuries conferences is that China dominated the demand-side of numerous Pacific market products over several centuries (e.g. silver, sandalwood, sea cucumbers, mercury, and so on).13

The gold period

Following the main 'silver period' and an interim period of exploration and 'soft gold' animal skins, another precious metal – gold – ushered in the next major phase in Pacific history. The 'gold period' began with California discoveries in

1848, followed shortly thereafter by discoveries in Australia and New Zealand. Half of the articles in this volume involve – either directly or indirectly – these nineteenth century gold rushes.

Individual articles in this volume

Silver Period 1571-c.1750

None of the articles in the present volume deal with the silver period as described above, although contributions to previous Pacific Centuries volumes do discuss the birth and evolution of trans-Pacific relations up to 1750.¹⁴

The exploration and early integration period c.1750–c.1850

"Soft Gold: Animal Skins and the Early Economy of California," by Jim Hardee, contradicts the myth that pre-gold-rush hunters and trappers along the American coast were autarkic characters operating locally in isolated environments. Pre-gold-rush trade in animal skins along the California coast was in fact firmly linked to intercontinental markets connected via the Pacific Ocean.

Abundant sea otter pelts enticed Russian ships to travel farther and farther along the Aleutian chain and down toward California. But this Russian maritime expansion was also a response to vigorous demand for sea otter furs within Russia; Siberian merchants had long monopolized this trade by sending regular caravans across the Gobi desert to the Russian border. Merchants were well aware of Chinese demand as well, since sea otter prices in Canton had risen to \$80 and \$100 per pelt during the last quarter of the eighteenth century, bringing "vast changes to the economy of the Pacific Rim" (p. 1). Indeed, spectacular skin prices simultaneously attracted the intense interest of English, French, Spanish, and American merchants and authorities. Soon after British Captain James Hanna shipped sea otter skins directly to Canton in the 1780s - via the Hawaiian Islands - the old caravan trade routes were abandoned. Russian and American collaborators established hunting bases along the coast, consciously avoiding Spanish population centers that spread up the coast to block them. Collections of otter skins peaked at perhaps 8,000 to 17,000 annually between 1804 and 1812, leading to depleted sea otter populations in California around 1815. American beaver trappers invaded coastal waters during the 1820s in any case, and by 1835 the sea otter trade had virtually ceased.

Prior to the close of the eighteenth century, however, cattle raising had become the chief source of food, occupation, trade, and wealth in California. Between 1822 and 1834, Catholic missions were the source of most California hides (from their combined herd of perhaps 500,000 cattle). New Englanders derived

considerable advantage from the hide and tallow trade, according to Hardee, and "California furnished enough leather to give Connecticut and Massachusetts a monopoly on the early boot and shoe industry in the USA" (p. 12).

Beaver trappers next invaded California's interior waters. California was a relatively minor source of beaver pelts, but these trappers opened important overland routes to the Pacific coast. For example, regular commerce was opened between Los Angeles and St. Louis via Santa Fe, New Mexico. Mexican goods were brought from Santa Fe to the coast, including Mexican silver destined for China. On the return journey Asian silks, spices, and other products flowed eastward overland from the Pacific. Hardee's work is important because central aspects of California history are framed in terms of global markets, as opposed to the conventional practice of depicting these issues as local phenomena. California was connected to Pacific markets long before its famous Gold Rush.

The gold period c. second-half of the nineteenth century

"San Francisco's Pacific Exports, 1850–1898" by David J. St. Clair provides export data for the port of San Francisco during the second half of the nineteenth century. California mines produced over \$300 million worth of gold from 1854 through 1859, about 80 per cent of which was exported to eastern US destinations (England received the remaining 20 per cent). Practically all California gold was exported eastward, while silver flowed westward to the Pacific. Its famous gold rush notwithstanding, California was itself on a de facto silver money standard. Since Nevada's Comstock mines did not begin silver production until 1859, Mexican pesos were imported into California while gold was simultaneously exported during the 1850s. Mexican pesos fed California's monetary appetite for silver, but they were also re-exported to China in volume (via San Francisco). True, silver comprised only 5.4 per cent of combined California gold and silver exports during the 1854-63 gold boom, but it is important to note that the white metal flowed westward to China (in the opposite direction of gold flows). Even when Comstock silver production heated up later on (1882-98), re-exported Mexican silver dollars comprised over half of the silver exported into the Pacific via San Francisco.

After 1870, non-metal exports from California were dominated by wheat, followed by flour, wool, and quicksilver. Exports of wheat to Great Britain surged, while flour was exported mainly to China. Over 80 per cent of California's mercury production (sometimes comprising two-thirds of world production) was exported to China and Mexico. Notwithstanding these trends, California's trade with Hawaii, Latin America, and British Columbia was often even greater than its trade with China in the late nineteenth century. Except for gold and wheat exports, according to St. Clair, the California economy was linked closely to Pacific forces: "Indeed, aside from the huge wheat trade with England, San Francisco [non-gold] exports

are best characterized as the exports of a diverse set of products all around the Pacific" (p. 38).

"Powerhouse Economies of the Pacific: A Comparative Study of Gold and Wheat in nineteenth Century Victoria and California," by Warwick Frost, compares the great gold rushes of California (1848 onwards) and Victoria (1851 onwards) as well as their attendant booms in wheat production. Both areas were pastoral prior to the discoveries of gold, but Victoria was far more developed initially. Melbourne, the capital city of Victoria, for example, boasted a population of 23,000 at the time of Australian gold discoveries; San Francisco contained perhaps 500 inhabitants. Vigorous wool exports explain early dynamism in Victoria. Indeed, Victoria's population was 40 per cent larger than that of all of California by 1860, and even in 1870 Victoria's population exceeded that of California by 150,000 inhabitants. California became slightly more populous by 1880 and 1890, then surged to a 25 per cent advantage by 1900. Even with the tremendous population boom of San Francisco during the second half of the nineteenth century, Melbourne's population (494,000) was still larger than that of San Francisco (439,000) by the turn of the century in 1900.

There was tremendous urban growth in Victoria's gold towns, while California's urban growth was concentrated in non-gold towns. At its peak, California's Grass Valley was only 15 per cent the size of Victoria's Ballarat, while Nevada City never surpassed 8 per cent of Ballarat's size. Even the capital of California, Sacramento, contained only half the population of Ballarat by 1880. One explanation for this phenomenon is simply that Australian gold deposits lasted longer than did their California counterparts. Ballarat and Bendigo were also surrounded by extensive agricultural hinterlands, while the foothills of the Sierra Nevada mountains were limited in terms of agricultural potential.

Both California and Victoria were major areas of wheat production during the second half of the nineteenth century (indeed, California wheat was exported to Australia during the early stages of the latter's gold rush). Wheat production collapsed in both areas at the turn of the century, however, as California's wheat production fell 85% between 1896 and 1909, while Central Victoria's wheat production shrank by 88% between 1876 and 1894. Frost argues that falling wheat prices (a popular explanation for declining production) cannot in fact explain the acreage decrease in either location. Indeed, during the first decade of the twentieth century wheat acreage dropped in California despite a rise in wheat prices there. Another explanation for decline is soil exhaustion, but Frost finds little evidence to support this contention either. Rather, he finds convincing evidence that suggests that rising prices for non-wheat crops offer the best explanation for the switch away from wheat production in both Victoria and Central California. Studies of comparable areas around the Pacific can shed light on many developments that remain obscure when they are viewed (incorrectly) as isolated phenomena.

"New Zealand and the Gold Rushes of the Mid-Nineteenth Century," by Kenneth E. Jackson, reminds us that New Zealand experienced a gold rush (in 1861) that began in earnest one decade after its Australian counterpart (1851). New Zealand had been both positively and negatively impacted by the Australian boom of the 1850s. On the positive side, New Zealanders exported products into the trans-Tasman economy, but there was also a negative resource movement effect in the sense that population was lost to Australia. Australia's gold boom attracted grain imports both from New Zealand and California (California's own gold rush boom notwithstanding).

The Australian discoveries of 1851 no doubt prompted a search for gold in New Zealand. Indeed, government inducements were offered to anyone who could locate a substantial gold deposit in New Zealand and the big payoff began in 1861. Jackson utilizes a three-sector model to analyze the impact of gold discoveries on New Zealand: gold represents the booming tradable sector, while wool is the lagging tradable sector, and services the non-tradable sector. As expected, a resource movement into the booming gold sector within New Zealand did indeed put a cost squeeze on the other sectors, especially the other tradable - wool - during the early 1860s. Wool exports accounted for over 50 per cent of total exports in 1855, but mineral exports shot past 70 per cent of total exports in the early 1860s. In the longer term, however, rapid immigration into New Zealand from Australia seems to have offset domestic labor shortages, and increased spending by the expanding population tended to dominate the resource movement effects, especially for the service sector. Wool producers did suffer, but they were also able to switch to meat production. The Australian gold rush led to immigration rather than rising standards of living, and the same mechanism seems to have held for New Zealand. The domestic manufacturing sector expanded after the decline of gold, but large employment opportunities awaited the advent of refrigeration in the 1890s, when primary processing rather than manufacturing led the way. Jackson concludes that there "are similar mechanisms at work in the New Zealand, Californian and Australian cases, but the speed, strength of the impact and the eventual outcomes are all different in terms of the detail. By considering the interaction between them it can be seen that there was a Pacific rim economy effect as well as their own internal impacts, and that this effect was not confined to the population shifts between them" (p. 70).

In "Gold Rush California Bound: New Evidence from French Passenger Lists," Annick Foucrier provides quantitative evidence concerning the 'forgotten migrants' of the Gold Rush – the French. French passenger lists and passports in French county archives furnish a rich sample of 1,722 passengers sailing for California aboard 32 different ships between September 14, 1849 and April 9, 1852. The average age of male passengers was 31.70 years, while the average age of women migrants was 29.15 years; half of the women over 20 were married, while women