Ricardo, Gold, and Rails: Discovering the Origins of *Progress and Poverty*

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ABSTRACT. Henry George's *Progress and Poverty* was one of the most widely read books of the 19th century. It is important to acknowledge the influence of classical writers such as Smith and Ricardo on George's thought. However, the content of George's most popular work cannot be fully appreciated unless one takes account of the historical period and social context within which its author came to maturity: Philadelphia and California before 1879 are part of the story of *Progress and Poverty* (1979).

Introduction

Henry George, a towering figure of the 19th century, was born in Philadelphia in 1839 and migrated to San Francisco several years after the peak of the California gold rush. His most popular publication was *Progress and Poverty (P&P)*, an extensive treatise on economic development and social inequality that first appeared in 1879. According to Blaug (2000: 270): "[T]he most widely read book on economics in the nineteenth century was . . . *Progress and Poverty* . . . [It elicited] refutations from all the leading economists of the day, including Alfred Marshall . . . [and] John Bates Clark."[1]

Efforts to explain the substance of George's political economy have often focused on *intellectual influences* of other economists.[2] No doubt George was influenced by Smith, Ricardo, J. S. Mill, and other classical political economists. As Sandilands (1986: 4) remarks, "George . . . ranged over the whole field of economics, politics and

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Table 1

Citations of Economists in *Progress and Poverty* (1956 Edition)

Author Cited	Number of Citations
Frederic Bastiat	1
John Elliott Cairnes	1
Henry C. Carey	1
Thomas Robert Malthus	2
John Ramsay McCulloch	6
John Stuart Mill	13
Marquis de Mirabeau	1
Francois Quesnay	1
David Ricardo	8
Adam Smith	13
William Thornton	1
A. R. J. Turgot	1
Francis Amasa Walker	2

philosophy . . . He corresponded with John Stuart Mill . . . and immersed himself in Mill's writings and those of . . . the French physiocrats, Smith, Ricardo and Malthus."

The debt of George to the works of Smith, Ricardo, and Mill is obvious if one counts the number of citations to their writings in *P&P*. As summarized in Table 1, George cites Smith and Mill 13 times each and Ricardo a total of eight times. The Physiocrats (Quesnay, Turgot, and Mirabeau) are also acknowledged by George but far less frequently.

But can one fully grasp the content of *P&P* by simply listing the authors whose books George read before drafting his first major work on political economy? I think not. Because George valued empirical evidence as well as theoretical principles, it is also important to consider the *historical events and trends* of which he was certainly aware and that probably helped to form his political economy. This is especially the case because, as Cesarano (2006: 452) has noted: "[H]istorical knowledge is most helpful in analyzing . . . [complex] subjects like economic growth."

Philadelphia Childhood

Even before his 1858 migration to California as a young adult, George must have been influenced by contemporary events in the United States. From 1840 to 1860, for example, the nation's population grew by 84.3 percent to 31.4 million (Gibson and Jung 2002: Table 1). During those same 20 years, industrial production increased nationally by nearly 260 percent (Davis 2004: 1189). Hence, George's childhood years were ones of rapid population growth and industrialization in the United States.

In his hometown, the pace of industrial and population growth was even faster. By 1850, Philadelphia had transformed itself from a colonial mercantile and financial center into a highly productive manufacturing city producing textiles, shoes, machinery, etc. By the 1850s, Philadelphia had also become an important hub in the country's expanding railroad network (Gyourko 2005: 10, 16). The city's population exploded between 1850 and 1860, increasing 366 percent to nearly 566,000 (Gibson 1998: Tables 8 and 9). This demographic growth was fueled in part by the arrival of free blacks, runaway slaves, and Irish peasants seeking employment.

During the first decade of George's life, the city experienced a series of racial and religious riots as well as violent labor strikes (Feldberg 1974: 326).[3] Furthermore, the Southwark neighborhood to which the George family moved in the mid-1840s "represented the outlook and values of the original community of artisans and mechanics that had rallied to the side of Tom Paine during the Revolution with their hatred of entrenched privilege" (Thomas 1983: 7). Even if his parents tried to shelter him from these social tensions, George may have learned to associate growth and development with conflict during his formative years in Philadelphia.

Gold Rush and Land Prices

During George's childhood and adolescence on the East Coast, dramatic events were taking place on the Pacific Coast. The U.S. army seized California from Mexico in 1846 and ruled this new territory until a state government was organized in 1849.[4] In 1848, the discovery of gold deposits in California's mountainous counties resulted in an influx of prospectors, merchants, and other migrants. During 1849 alone, 39,000 people arrived in San Francisco, many in transit to the mining camps, but the city's population nonetheless grew that year from roughly 3,000 to 25,000 residents (Decker 1978: 25). From the start, San Francisco was a commercial city with a high proportion of traders, brokers, and merchants—14 percent of the working male population in 1852 (Decker 1978: 33).

During the city's initial economic boom, a hilly topography and absence of transportation infrastructure confined much of its burgeoning population to the waterfront district.[5] As a result of high population densities and a deluge of gold from the mining camps, "one-story establishments with a twenty-foot front on the street rented for $40,000 a year . . ." (Decker 1978: 34). Rapid appreciation of rents and land prices in San Francisco, in turn, attracted a variety of investors:

> Merchants in the early 1850s also ventured into real estate speculation. In fact, it seemed that just about everyone—merchant-banker, carpenter, ship's captain, jeweler—speculated in real estate . . . The merchants owned the majority of the commercial buildings of the city . . . and most of the private residences, wharfs, and undeveloped but valuable beach lots. (Decker 1978: 53)

By 1860, $16^1/_2$ percent of native-born males in San Francisco reported ownership of some real estate (Walker 2000: 263).

This initial boom in economic activity and real estate prices in San Francisco came to a halt, however, in early 1854:

> The gold seekers in the Sierras discovered that the original gold . . . [exploitable] through a simple panning procedure had . . . disappeared . . . [A]s the demand for goods from the mines decreased, San Francisco merchants and bankers called in their credit. The building boom collapsed, volume at the port shrank by half, real estate values dropped 30 to 40 percent . . . In February 1855 the leading banking house in San Francisco . . . closed its doors . . . [The city] only recovered a measure of economic stability in late 1858. (Decker 1978: 36–37)

This California depression preceded by several years the financial panic and industrial contraction that gripped the East Coast just as George was about to leave his hometown for California (Davis 2004: 1203). Significantly, the Panic of 1857 brought a decline in Western land and railroad investments and also stress on Eastern banks and securities brokers (Calomiris and Schweikart 1991).

It is hardly surprising, then, that Henry George associated real estate booms and land speculation with financial crises and industrial depressions. He had witnessed this empirical correlation during his final months in Philadelphia and arrived in San Francisco near the end of a protracted and severe contraction in economic activity and real estate values.

The Spanish Colonial Influence

The California that George encountered in 1858 displayed an unusual pattern of land rights, ownership, and controversies. Unlike many states to the east, where federal land sales had encouraged the development of small family farms with secure titles, land ownership in California was both concentrated and also contested in the 1850s. During Spanish colonial times, the Franciscan order had created a network of 21 missions in Alta California, the sites being "well drained basins, valley floors, and piedmont areas" (Gentilcore 1961: 51). These missions existed to save the souls of Native Americans but were also highly productive agricultural and industrial enterprises, the largest exceeding 130,000 acres (Gates 1958: 215). During the 1820s, mission pastures for large herds of sheep and cattle covered perhaps 11.8 million acres (Gentilcore 1961: 60–69).

Following independence from Spain, the Mexican government secularized the missions and granted large ranchos to hundreds of settler families. By 1846, Spanish and Mexican officials had made some 750 grants of land totaling 13 to 14 million acres. The rancho, or colonization, grants ranged from 4,500 to 48,000 acres in size (Gates 1958: 215).[6] In his 1871 book on land policy, George points explicitly to Mexican land grants as one source of "land monopolization" in California.

Most of these land grants had ill-defined boundaries, were improperly recorded, and conveyed only use rights, not fee-simple ownership, to the occupants. Hence, a pattern of concentrated, but ambiguous, land rights had developed in California during the centuries prior to U.S. sovereignty. Although the Treaty of Guadalupe-Hidalgo (1848) guaranteed the property rights of Mexican citizens in the territories ceded to the United States, the U.S. Senate deleted that provision when it ratified the treaty. Hence, from the moment of its birth, the state of California witnessed a protracted struggle over land access and ownership.

In 1851, the U.S. Congress passed the California Land Act in an effort to resolve disputes over land ownership in the former Mexican territory. The land commission created by this act received 844 claims encompassing more than 12 million acres. The eventual result was that the commission endorsed 551 claims to 8.9 million acres (Clay 1999: 138). Because an average of 17 years was required to resolve a land claim, squatting was endemic on rural properties, especially those with higher land values (Clay and Troesken 2000: 229). In 1861, hundreds of deputies failed to evict a thousand armed squatters from a large grant near San Jose (Lause 1990). Squatters also occupied unimproved lots in San Francisco, and violence over land access flared sporadically in the city's streets until the 1860s (Scott 1985: 43; Clay 1999: 135).

Given the contested situation that greeted Henry George upon his arrival in California, it is entirely understandable that he came to view "land monopoly" as a serious social problem (*P&P*, chapter 2 of book VII). These conditions also help to explain George's claim that the fundamental tension within society is between those who own land and those who do not (*P&P*, chapter 1 of book VI).[7]

Miners and Land Rights

A strikingly different dimension of land rights in 1850s California is also relevant to Henry George's political economy. In contrast with the fertile valleys and coastal plains covered by large grants to private landowners, the mining counties of the Sierra Nevada entered the public domain in 1850. Until congressional passage of a mining act in 1866, gold miners were actually trespassers on federal lands. However, federal troops did not regulate private access to minerals on public lands (Umbeck 1977: 206). As a result of open access to gold deposits, thousands of hardworking miners earned at best the daily wage of unskilled labor (Clay and Wright 2005: 176).

Filling the legal void that they had entered, the miners created 141 self-governing districts by 1850 and perhaps 500 by 1866 (op. cit.: 163). These mining districts drew up explicit contracts governing individual conduct and helped to avert widespread violence among the "thousands of relatively young, armed, male miners from 31 countries [who] poured into California in search of gold" after 1848 (Zerbe and Anderson 2001: 114).[8] Mining codes frequently called for majority rule, trial by jury, and allocation of claims on a first-come, first-served basis. Furthermore,

> [A]ttempts to bring slaves into the mines were strongly and effectively resisted. The Jacksonian ideal of the small producer governed here. Both the wage laborer and his employee were held in contempt . . . Claim size then was generally geared to the individual producer and not to contract or slave labor . . . Agreements among miners in a district provided restrictions on the number of days a miner could leave a claim [and] on the number of claims a miner could own. (op. cit.: 128 and 132)

Zerbe and Anderson (2001: 123) conclude that the institutions of the mining districts echoed Tom Paine's call for assigning the land itself to the community and land improvements to those who undertake them. Several decades later, Henry George endorsed the miners' philosophy when he declared in a speech:

> The only way we can break up land monopoly; the only way we can secure to labor its just rights and fair earnings; the only way we can prevent pauperism . . . is to come back to first principles, and reassert the natural right of the people of California to the land of California; to reapply to the land and the water . . . the equitable doctrine that in the early days we applied to the mines: the doctrine that no man shall . . . hold more than he can reasonably use, and for no longer time than he does use it! (Wenzer 2003: 133)

Although George was a child in Philadelphia when the 1848 gold rush began, the political economy that he authored as an adult was influenced by the codes of self-governance that the California gold miners had devised and the philosophical precepts that had inspired those codes.

Textbooks, Newsprint, and Empirics

At this point in my argument, it is important to note that Henry George's empirical knowledge did not depend entirely upon eyewitness observations or casual conversations.[9] Rather, his understanding of contemporary events was certainly enriched by the spread of basic literacy, expansion of the telegraph network, and growth of the newspaper industry during the decades before he wrote *P&P*.

Invention of the telegraph in 1843 permitted instantaneous communication over long distances for the first time in human history. Less than a decade after its inception, 10 lines linked New York City to Philadelphia, Boston, and Buffalo (Nonnenmacher 2001: 21). The telegraph network extended to the Mississippi River by 1851 and to San Francisco by 1861 (DuBoff 1980: 461). The first successful transatlantic cable began operations between Newfoundland and Ireland in 1866. Hence, almost from the moment George arrived in California, there was a dependable and almost instantaneous flow of information from the East Coast and, a bit later, from Western Europe.

Much of the early use of the telegraph was for the transmission of political and commercial news and market data (Blondheim 1994: 172). Between 1868 and 1877, the nominal price per telegraph message fell by nearly 63 percent and the real price by an even greater percentage (DuBoff 1984: 573). Hence, timely and increasingly inexpensive information about market activity and economic development was potentially accessible to George as he sat down to draft his first major work on political economy.

George's employment as a California newspaper printer, reporter, and publisher enabled him to actually tap this increasingly rich flow of telegraphic information. His journalistic profession also helps to explain his hatred of monopoly: he had to contend with the Western Union and Associated Press monopolies on a daily basis.

By the end of the 1860s, more than $7^1/_2$ million Americans were enrolled in public schools—nearly two-thirds of the school-age population (NCES 1993: Table 8). The spread of basic literacy, in turn, stimulated newspaper circulation across much of the nation.[10] The number of newspapers in the United States doubled during the 1860s and increased by more than another third during the 1870s (Dicken-Garcia 1989: 49). The per capita circulation of daily newspapers increased by 30 percent during the 1870s (Gentzkow et al. 2004: 45). On the supply side of the newspaper market, the growing demand for consumption of daily news was accommodated by a rapid decline in the price of newsprint after 1867 (op. cit.: 19) and by the introduction of high-speed presses two decades earlier (Dicken-Garcia 1989: 24).

The net result of these technological and educational developments is that Henry George and other newspaper professionals devoted a lot of time to gathering, analyzing, and disseminating information about contemporary events by the 1870s.

Railroads and Land Prices

One development in the American West that shaped George's political economy profoundly was construction of the first transcontinental railroad line during the 1860s. Following passage of the Pacific Railway Act in 1862, "hundreds of Californians gathered in Sacramento [in early 1863] to witness ground-breaking ceremonies for the Central Pacific Railroad" (Deverell 1994: 11). During the early stages of construction, a German immigrant named Albertus Meyer published a pamphlet in which he questioned whether the relative prosperity of California rooted in geographic isolation, abundant natural resources, and labor shortages could survive completion of a coast-to-coast rail link (op. cit.: 16). San Francisco merchants purchased vacant lots with the expectation that the transcontinental railroad would flood the city with thousands of new residents (Decker 1978: 183). In September 1869, the first overland train arrived in Alameda. As Scott (1985: 50) describes the situation: "In the boom days before and after the arrival of the first overland train, real-estate activities rose to a high pitch and several new town were platted." Craig, Palmquist and Weiss (1998) have estimated that U.S. counties with rail access in 1860 had land prices that were 7 percent higher than those counties without. Because of San Francisco's near monopoly of Pacific Coast finance and merchandise trade in 1869 (Kahn 1979; Odell 1989), the impact of rail access on Bay Area land prices must have been far higher.

In a prescient newspaper article in 1868, George revealed that he was fully aware of what was about to happen with the arrival of rail service from the East:

> All over the State, land is appreciating—fortunes are being made in a day by buying and parceling out Spanish ranches; . . . speculators are grappling the public domain by the hundreds of thousands of acres; while for miles in every direction around San Francisco, ground is being laid off into homestead lots. (George 1868)

By 1871, 131 million acres of federal land and another 49 million acres of state land had been granted to 70 rail lines to help finance the construction of a national transportation network (Wenzer 2003: xxx). To Henry George, these immense grants of public land and the regional railroad monopolies that they helped to create fueled, in turn, the formation of immense personal fortunes and monopolization of land ownership rights (George 1871).

California During Crisis

As he sat down to begin the manuscript of *Progress and Poverty* in September 1877, Henry George could draw upon his childhood in Philadelphia, his adult experiences in California since 1858, and his readings in classical political economy. However, his text also bears the imprint of economic conditions in California and the United States at the very moment he set pen to paper.

The 1870s witnessed the most protracted and one of the most severe downturns in U.S. economic history. After a peak of macroeconomic activity in October 1873, the national economy contracted for 65 months until March 1879 (NBER 2008). Industrial production dropped 5 perecent from 1873 to 1875 and failed to regain its 1873 level until 1878 (Davis 2004: 1189). The civilian unemployment rate increased from 4 percent in 1873 to $8^1/_4$ percent in 1878, thereby increasing the "reserve army of the unemployed" by 760,000 workers (Vernon 1994: 710). Whereas the real wage rate for unskilled urban labor has risen by more than 43 percent between 1865 and 1873, it fell by more than 5 percent from that latter year to 1878 (Williamson 1995: 164). In California itself, the average nominal wage for nine urban craft occupations declined by 9.8 percent from 1873 through 1878 (Calculated from GPIH 2008).

Between 1873 and 1879, the consumer price index in the United States fell by 22 percent (Census Bureau 1975). A deflation of this magnitude must have posed serious problems for indebted farmers and railroads alike. Federal land sales reached a peak of roughly 7 million acres in 1873 and declined to an 1877 trough of approximately 3 million acres (Atack and Passell 1994: 257). In sum, Henry

George was drafting his major work in the midst of a macroeconomic crisis of historic proportion.

Given the severity of this national downturn, it might seem surprising that Henry George placed so much emphasis in *P&P* on the persistence of poverty despite economic development. His focus on *progress* and poverty perhaps reflects a personal capacity to ignore contemporary fluctuations and see longer-term trends. However, it probably also reflects the rapid expansion of California agriculture that was underway during the national downturn. From 1869 through 1879, the number of farms in the state expanded from 24,000 to 36,000. During that same period, total farm acreage expanded by 45 percent, to 16.6 million acres, and the real value of harvests exploded by 191 percent (Rhode 1995: 776).

California wheat farms of that era were export-oriented and highly productive: they relied more heavily on labor-saving machinery, wage laborers, and draft animals than those in the Midwest (Olmstead and Rhode 2003). Despite growth of exports and productivity levels, farm operators in California paid lower real farm wages in 1880 than they had paid in 1870 (Rhode 1995: 789). These divergent trends in California agriculture during the 1870s are certainly consistent with George's critical perspective on economic development.

Conclusion

Henry George's *Progress and Poverty* was one of the most widely read books of the 19th century. If one wants to understand the structure of its argument, then it is certainly important to acknowledge the influence of classical writers such as Smith, Ricardo, Mill, and the Physiocrats. However, the content of George's text cannot be fully appreciated unless one takes account of the historical period and social context within which its author came to maturity: Philadelphia and California before 1879 are part of the story of *Progress and Poverty*.

Notes

1. George's son claimed in 1905 that over 2 million copies of the book had been printed by that year (*P&P*: xxiv).

2. For a valuable discussion of George's advocacy of a land value tax and the views of his neoclassical critics, see Gaffney (1982). For treatments of George's ideas from a history of economic thought perspective, see Blaug (2000), Boulding (1982), and Sandilands (1986).

3. Interestingly, residents of the Kensington neighborhood rioted in June 1840 to protest construction of railroad tracks on their streets. Cries of "No monopoly! Free passage for all!" rang out (Feldberg 1974: 326). One wonders whether George heard about this and subsequent riots during his childhood.

4. The United States formally acquired California from Mexico in 1848 via the Treaty of Guadalupe-Hidalgo and officially admitted California to the union in 1850.

5. Between 1852 and 1860, the average commuting distance for blue-collar residents of San Francisco was 540 *yards* (Decker 1978: 225). This must have been the golden age of pedestrian traffic in the Golden State!

6. A large number of these grants were made by General Pico, the Mexican governor, on the day and night before his flight from American forces in August 1846 (Gates 1958: 229). For more discussion of the ranchos, see Scott (1985: 17–18).

7. One wonders whether George's political economy would have been different if he had migrated to Oregon or Washington instead of California. The U.S. Congress granted 640 acres of public land to married settlers entering those territories through 1850 and 320 acres thereafter until 1855. These grants were not available to settlers entering California at the same time (Gates 1958: 214).

8. It must be noted, however, that native-born miners of European descent did harass and even attack Chilean, Mexican, Chinese, Native American, and French gold hunters. In 1850, California even passed a tax on foreign-born miners, a measure aimed primarily at the Chinese (Kanazawa 2005).

9. According to his son, however, George was deeply moved by what he saw in New York City as a visitor during the winter of 1868/1869—dire poverty in the midst of a burgeoning city (George 1900: 191).

10. The boost to newspaper readership from expansion of basic literacy may have been especially strong in California. The 1850 Census shows an illiteracy rate in California that was roughly a third of that for the rest of the country (Zerbe and Anderson 2001: 119).

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