6.2: The Second Industrial Revolution

Technology thus enabled imperialism. It also created a motive for imperialism, because of a phenomenon referred to by historians as the "Second Industrial Revolution." The Second Industrial Revolution consisted of the development and spread of a new generation of technological innovation: modern steel, invented in 1856, electrical generators in 1870 (leading to electrical appliances and home wiring by 1900 in wealthy homes), and both bicycles and automobiles by the 1890s. The American inventor Alexander Graham Bell invented the telephone in 1876, and thousands of phones, carrying millions of calls annually, were in operation already by the early 1880s. These advances created a huge demand for the raw materials – rubber, mineral ores, cotton – that were components of the new technologies.

In the initial phases of the Industrial Revolution, the raw materials necessary for production had been in Europe itself: coal deposits and iron ore. The other raw material, cotton, that played a key role in the Industrial Revolution was available via slave labor in the American south and from weaker states like Egypt (which seized virtual independence from the Ottoman Empire in 1833). The raw material of the Second Industrial Revolution, however, was mostly located outside of the older areas under European control, which meant that European business interests pressured their respective governments to seize as much territory overseas as possible. For example, when oil fields were discovered in Persia in 1908, European interest in Middle Eastern imperialism reached a fever pitch, with European powers cultivating contacts among Arab nationalist groups and undermining the waning unity of the Ottoman Empire.

Mines and plantations were crucial to this phase of the imperialism in Africa and Asia, as they had been to the early European exploitation of the Americas. Mining in particular offered the prospect of huge profits. There were Canadian nickel deposits for steel alloys, Chilean nitrates, Australian copper and gold, and Malaysian tin, just to name few mineral resources coveted by Europeans (of course, in the case of Canada, the people being colonized were Indigenous Canadians, and the colonists were themselves of European descent). Thus, while the motives behind imperialism were often strongly ideological, they were also tied to straightforward economic interests, and many of the strongest proponents of imperialism had ties to industry.
While the United States was not one of the major imperial powers per se (although it did seize control of the Philippines from Spain in 1898 and exercised considerable power in Central America), it played major role in imperialism nonetheless. The US eclipsed Europe as the major manufacturing power and the major source of exports in a shockingly short period - from about 1870 into the early 1900s - driving Europeans to sometimes-hysterical levels of fear of being rendered economically obsolete. The response of European politicians and businessmen alike was to focus on territorial acquisition overseas to counterbalance the vast natural resources of the US, which had achieved its dominance thanks to the enormity and richness of American territory (seized by force from Native Americans). Thus, even though the US did not join in the Scramble for Africa or assert direct control of East Asian territories, fear of American economic strength was a major factor driving European imperialism forward.

Figure 6.2.1: American resource production and industrial output vastly outpaced European production over time; already by the 1870s astute European observers correctly anticipated the rapid acceleration of American production.