CHAPTER FOURTEEN

Continuity and Change:
Since 1648

The Second Era, 1648–1815

The second era began with the victory of the northern bloc, dominated by the Netherlands, England, and France, over the southern Hapsburg bloc, dominated by Austria and Spain. The Netherlands had won independence from Spain after an eighty-year struggle.¹

Dutch Hegemony

Wallerstein (1980) dates Dutch economic hegemony from about 1625 to 1675.² At the peak of Dutch hegemony, in the second half of the seventeenth century, "the volume of Dutch-owned shipping considerably exceeded Spanish, Portuguese, French, English, Scottish and German combined" (Glamann 1974:452). The Dutch fleet—as large as all the other European fleets put together—consisted of six thousand ships and about fifty thousand crewmen, "fantastic figures for the time" (Braudel 1984:190). Amsterdam was the undisputed commercial center of the world.

Seaborne trade, including both the Baltic and Asian trade, was firmly in Dutch hands at the outset of this era. The Baltic trade continued to be the "mother trade" and was Amsterdam's lifeline to such needed supplies as grain, wood, metals, and fish—both for the Dutch's own use and for reexport to other areas. Of particular importance was imported grain for home consumption; grain was also shipped on to the Mediterranean. Already in the sixteenth century, 60 percent of the Baltic trade had been in Dutch hands, and this dominance continued through most of the seventeenth century despite British attempts to break in (Wallerstein 1980:52). In exchange for grain, the Dutch shipped textiles and pepper, among other items, to the Baltic. The Baltic trade linked Amsterdam and Danzig, the latter well-suited as a grain-exporting terminus (Glamann 1974:458). In the seventeenth and eighteenth centuries, according to Glamann (p. 457), the Amsterdam exchange determined the grain prices for Europe.³

¹ The southern Netherlands (roughly what is now Belgium) remained Spanish.
² As discussed earlier, Wallerstein considers hegemony a "momentary summit" in which "a given core power can manifest simultaneously productive, commercial, and financial superiority over all other core powers" (Wallerstein 1980:39). Dutch productive advantage preceded 1625, and financial advantage extended beyond 1675, according to Wallerstein.
³ However, in this era Baltic grain trade did not keep expanding as it had in the era before 1650. "Southern and western Europe seem [after 1650] to have become more self-sufficient in grain" (Glamann...
In the Asian trade, the Dutch faced competition from the British. The English East India Company had been founded in 1600, and the Dutch East India Company in 1602 (Glamann 1974:516). Trade with Asia in this era concentrated on imports (Glamann 1974:447). Bullion was sent to Asia in exchange for silk, pepper, and spices. Then Indian textiles began to replace spices and pepper on Europe’s import list, accounting for over 40 percent of the Dutch East India Company’s imports by 1700. In the 1720s to 1740s, imports of coffee and tea became important, reaching about 25 percent of the company’s imports (Glamann 1974:447).

Dutch control of shipping concentrated world trade at Amsterdam, turning the city into a “warehouse” for the world. Braudel (1984:236) writes that “the warehouses of Amsterdam could absorb and then disgorge any amount of goods.” The Bank of Amsterdam, created in 1609, was the central institution of a large financial sector connected with the “warehouse” trade.

The Dutch also pioneered the global “triangular trade,” a trade innovation that reduced warehousing and increased efficiency. Silver could be shipped directly from America to Asia to be traded for spices and tea, which could be shipped back to Amsterdam. An earlier version of this seems to have occurred in the Baltic trade, with ships sailing from Amsterdam to Brouage to buy salt, then to the Baltic to sell salt and buy grain and timber, which went back to Amsterdam (Glamann 1974:458). The triangular trade was widely used by France, Britain, and the American colonies later in the era.4

Dutch hegemony, according to Wallerstein, rested on productive superiority, particularly in shipbuilding. The shipyards at Saardam could turn out a warship every week at peak production (Braudel 1984:191). Wallerstein (1980:40, 55) stresses the importance of controlling the Baltic trade, which provided Amsterdam with shipbuilding materials. The advantage in shipbuilding in turn helped the Dutch control the Baltic trade, creating a “circular reinforcement of advantage.”5

As mentioned in the last chapter, during the previous era the Dutch had built up a lead in the design of ships that were cheaper to operate (requiring smaller crews). This advantage seems to have persisted in the second era. A French report from 1696 stated that Dutch ships of 250–400 tons needed only twelve to eighteen crewmen, compared to eighteen to twenty-five men on a French ship of similar size (Braudel 1984:191). Between the lower production costs and the lower operating costs, Dutch shipping outcompeted that of all other countries. Warships as well as commercial ships could be built cheaply (and the revenues from commerce could support a navy

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4. Wallerstein (1980:51). In the British version, British manufactures were sent to the North American colonies, which sent lumber and provisions to the West Indies, which sent sugar and tobacco to England (Wallerstein 1980:237). In the American colonies’ version, slaves were shipped from Africa to the Caribbean, which sent molasses to the northern colonies, which sent rum to Africa.

5. Braudel (1984:191) stresses access to easy credit, in addition to access to naval stores from the Baltic and technological superiority in shipbuilding, as a Dutch advantage.
disproportionate to the small size of the Dutch population), so the Dutch were able to take over the Asian trade routes from Portugal by military force. This gave the Netherlands control of both the intra-European and long-distance trades.

Dutch agricultural technology was quite advanced, concentrating on industrial crops rather than food crops (Wallerstein 1980:41). Among these were dyes, which were produced more cheaply there than anywhere else and which allowed the Netherlands to build up a substantial industry of importing British cloth, dying it, and reexporting it at twice the value.

The Dutch also excelled in their own textile production. Dutch industrial production, primarily textiles, expanded fivefold between 1584 and 1664 (Wallerstein 1980:42). The import of grain from the Baltic allowed the Netherlands to concentrate on industrial crops, and in turn the production of such export goods as textiles gave the Dutch something to trade for the grain. In sum, Wallerstein (1980:44) says that "no other country showed such a coherent, cohesive, and integrated agro-industrial complex."

The role of the Dutch state in Dutch hegemony is controversial. Tilly (1975:45) argues that Holland was economically central but "did not mount a particularly strong state" and that this makes the Netherlands an exception to Wallerstein's assertion that state-making is more likely to succeed in the core (where the flow of resources from the periphery supports it) than in the periphery. Wallerstein, however, argues that the Netherlands did indeed have a strong state, and Braudel (1984:203) agrees that "the United Provinces had... a strong state" as demonstrated by their very often playing the "leading role" in the Thirty Years' War.

**Hegemonic Decline**

Militarily as well as economically, the second era after 1648 began with Dutch predominance. But as Europe recovered from the Thirty Years' War, the Dutch immediately faced military and economic competition from two of its winning coalition partners in that war, England (Davis 1975) and France. Wallerstein (1980:80) attributes Dutch military decline to the rising costs of warfare, which had made a quantum jump in the Thirty Years' War (chapter 13). The Netherlands was too small, in total population and total economic strength, to support the costs of great power war, even with the wealth derived from trade.

Directly after the end of the Thirty Years' War, the English began moving against Dutch trade, restricting imports from the Netherlands in the Navigation Act of 1651⁶—a move designed to cripple the Amsterdam "warehouse" trade, according to Wallerstein (1980:78).

War broke out between the Dutch and English in the following year, 1652, and twice more in the next two decades. An English general, when asked the reason for

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6. This was the period of strong mercantilist sentiment, as captured by an English Writer around 1651: "What nation soever can attaine to and continue the greatest trade and number of shipping will get and keepe the Sovereignty of the Seas, and consequently the greatest Dominion of the World" (Howard 1976:46).
declaring war on the Dutch, said: "What matters this or that reason? What we want is more of the trade the Dutch now have" (Howard 1976:47). Thus, as the late seventeenth century wore on, there emerged what Howard (p. 38) calls the Wars of the Merchants—naval battles in the North Sea between England and the Netherlands in which both sides began to learn "organized naval tactics and strategy" (p. 47). The British navy generally got the better of these encounters.†

Meanwhile, in 1667 the French invaded the Spanish (southern) Netherlands and by 1672 nearly conquered the Dutch republic as well. Thus the Dutch were not militarily strong enough to stand up to the British on the sea and could barely hold off the French on land, despite their trade-derived wealth. And the failure to secure superiority at sea undercut the basis of that wealth.

The Dutch military decline occurred rapidly in the decades following the Thirty Years' War. I find this no mystery. In 1648, Dutch hegemony rested in part on Dutch superiority but also largely on the weakness of other powers. The Netherlands had sat out the last years of the Thirty Years' War, which had drained much of Europe, and had taken advantage of the war to take over other countries' trade. Meanwhile the Hapsburgs were defeated. England had been engaged in civil war for six years. France had borne heavy costs toward the end of the Thirty Years' War and was still at war with Spain. But none of this would last, and as other great powers rebuilt their strength, the Dutch lead evaporated. Wallerstein (1980:80) argues that until 1672, England and France both saw the Dutch as their primary threat, while after that date "the Dutch suddenly became a secondary factor" and the English and French turned on each other.

Economic decline seems to have set in more gradually than military decline for the Netherlands. But by the late seventeenth century, Dutch textile industry was "running into trouble" (Wallerstein 1980:91). The industry was located in the towns, where taxes and labor costs were high, while the textile industries in other countries had moved to the countryside to avoid these costs. "The town, with its restrictive guild system, its higher taxation, and its greater hazards of plague, fire, and enemy action, was not a place where the enterprising organiser of industry could thrive" (Pennington 1970:55). Dutch shipbuilding also declined in the last decades of the seventeenth century, just as English shipbuilding was rapidly expanding.

Dutch decline in trade proceeded more slowly. As late as 1786, almost all of the fifteen hundred ships arriving in Amsterdam (from Prussia, Russia, France, America, and elsewhere) were Dutch-registered (Braudel 1984:238). The market value

7. The reasons for British advantage are not obvious.
8. Other than this shift to the countryside, European industry did not register striking changes in the 17th c., except in mining and metalworking, where the demands of war stimulated rapid growth in copper and then iron mining (Pennington 1970:59).
9. North American shipbuilding also became quite competitive in the late 17th to mid-18th c. since low lumber costs more than compensated for high wages. By 1775, nearly a third of all ships registered in Britain as British-owned had been built in the northern colonies (Wallerstein 1980:240).
10. Glamann (1974:443) writes that Dutch trade "was finished" after 1730; this seems overstated since Amsterdam seems to have remained a strong trade center for at least several decades more.
of goods shipped from the East Indies to Amsterdam nearly quadrupled from the mid-
seventeenth to the mid-eighteenth century (Van Dillen 1974:203). As Pennington 
(1970:60) puts it, after Amsterdam’s preeminence had been established in the early 
sixteenth century, “not even the incessant rivalry of England and then of France 
could do more than slowly erode it.”

In the Asian trade, the Dutch “had to fight a constant and in the end losing battle” 
(Pennington 1970:60). But most of the trade of the European world economy was 
still concentrated within Europe itself, and it was in this intra-European seaborne 
trade, rather than the long-distance trade, that the Dutch proved strongest and most 
enduring.

Dutch economic strength, ironically, may have been prolonged by military de-
cline, which diverted the attentions of Britain and France to each other and spared 
the Netherlands the costs of war. In the Seven Years’ War (1755–63), Dutch neutrality 
paid off in “unparalleled commercial prosperity” (Braudel 1984:269), as the Dutch 
moved in to capture French trade routes in America.11

But as the era progressed, through the eighteenth century, Britain gained greater 
and greater trade predominance, while the Netherlands declined. By the late eigh-
teenth century, European trade networks encompassed the coastal areas throughout 
the world, and the British network predominated (Braudel 1984:28).12

Finally, financial decline followed, perhaps a century behind military decline. 
Dutch finance was shaken by three major credit crises between 1763 and 1783 
(Braudel 1984:267)13 Dutch capital had gradually shifted from industry to commerce 
to finance, and much of it ended up invested in England—280 million florins by 
1782, compared to 425 million invested in the Netherlands themselves (Braudel 

British-French Rivalry

As Dutch hegemony declined, Britain and France competed to fill the gap.14 Compe-
tition to achieve greater economic strength (through production and trade) was an 
important component of British-French rivalry. The country that became strongest 
economically would likely come out on top in the next hegemonic war. The English 
seem to have won the economic contest for three main reasons, despite the consider-
able strengths of France—in particular France’s larger population and resource base 
and its self-sufficiency in both wood and iron.

First, England’s forests began to run out before those of France—a blessing in 
disguise, because while France was still comfortable using wood for fuel, England 
switched to coal. As mentioned in chapter 13, this favored the development of large-

11. The English had done the same to the Dutch during the long continental wars of the early 17th c. 
(Wallerstein 1980:77).
14. See Kindleberger (1964). The military aspects of this competition will be discussed later in this 
chapter.
scale manufacturing. The shortage of wood also encouraged England to take over aggressively the Baltic trade from the Dutch in order to secure high-quality masts for shipbuilding (as well as Swedish iron).

Second, England, a compact, island nation, was pushed toward seaborne trade at a time when sea transport was becoming cheaper than land transport (Wallerstein 1980:104). The "tyranny of distance" in France (Braudel 1984:316) is conveyed by the fact that in 1765 it took three weeks to cross France by land. Braudel (1984:315) calls France "a victim of her size."

A third factor, stressed by Wallerstein, is the structure of the state. Wallerstein (1980:101) argues that both England and France expanded their industrial production in the eighteenth century at roughly comparable rates. Thus, it was the steady increase in the relative strength of the English state—rather than significant differences [which were minor (p. 90)] in how French and English production was organized in the period from 1600 to 1750 or in their value systems—that accounted for the ability of England to outdistance France decisively in the period from 1750 to 1815 (p. 288).

By the late eighteenth century, France's national product (GNP) was still more than double that of England (due to France's larger size), but England's budget was almost equal to France's. The English, by using indirect taxation of consumer goods and by benefiting from a high per capita GNP, were able to concentrate in their national government (whence it could be used for military purposes) a greater proportion of the national wealth than did the French.

Much of the British-French competition in this era centered on access to wealth from the extra-European periphery. By 1700 European colonies extended around the globe, but the largest and most extensively colonized areas were the Americas (see fig. 14.1). There was intense competition between the Netherlands, England, France, Spain and Portugal in this era for trade in America, particularly in the Caribbean, which had become a production center for tropical agriculture using slave labor. The Caribbean became in the late seventeenth century "the haven of pirates and buccaneers" (Wallerstein 1980:157). Ships from one country were not safe from seizure by other countries (a strategy dating back to Sir Francis Drake's seizures of Spanish ships in the Caribbean a century earlier). Contraband smuggled to the English through Jamaica broke the Spanish monopoly on trade with the Caribbean region (Wallerstein 1980:159). These British successes in America strengthened its position relative to France.

Despite the high visibility of the American trade, three-fourths of England's shipping around 1700 was with the nearby areas of Europe—and the highest profit ratios (though only a small portion of total volume) were for Asian trade (Wallerstein 1980:97; Davis 1973a). Pennington (1970:63) estimates that in 1700 England and the Netherlands "were sending perhaps a tenth of their tonnage across the Atlantic, and a little more to the east." Of the total shipping tonnage used for English imports around 1700, half was for timber; on the export side, coal accounted for 60 percent of the shipping tonnage (Glamann 1974:454).
The era under consideration was one of great trade competition generally because of the decline of Dutch predominance. It is known as the “age of mercantilism.” Mercantilism was used by economically weaker countries at all levels of the international hierarchy against stronger ones. Braudel (1984:53) writes that “mercantilism was above all a means of self-defence.” A hegemonic power generally promotes “free trade,” since its products, being superior and less expensive, can penetrate all markets under such conditions. When, in the eighteenth century, Britain moved away from its earlier mercantilist stance (epitomized by the Navigation Acts), Braudel (1984:53) takes it as a sign that “Britain’s power and greatness on a world scale had dawned,” and by 1846 Britain “could embrace free trade without running any risk at all.”

Rising Powers of the Future

While the center of great power rivalry in this era was in Britain and France—the Netherlands being in decline and the southern countries having been defeated in a hegemonic war—new powers were rising at the edges of the European world that would become important only in the next era. The United States became an important economic center in its own right, winning independence in the 1770s and consolidating it in 1812. Japan had asserted its independence from the European “world economy” in 1638 and was following its own path to development—a path that would eventually bring it into the world system as a great power.

Meanwhile, the Russian empire at the outset of this era was completing a major expansion into huge new territories stretching to the Pacific, as illustrated in figure 14.2. In this era, Russia still “tended to manage her affairs on the margins of the rest of Europe, as an autonomous world-economy” (Braudel 1984:442). But Russia’s territorial growth would lay the basis for its eventual rise to great power and then superpower status. Russia adopted an unusually strong and dominant state structure in the sixteenth century under Ivan the Terrible (1547–84). Braudel (1984:446) attributes this to the effects of three centuries of war against the Tatars. After defeating the Tatars decisively in 1552, Ivan expanded his empire eastward, and Siberia was opened to conquest beginning with the expedition of 1583 (Braudel 1984:455).

Long Waves in Prices and Wages

The second era, like the first, is divided into several long waves, each with its war peaks (discussed below) and its movements of prices and real wages. Prices showed little secular trend throughout the second era (in contrast to the secular inflation of the first era), until the last upswing of hegemonic war.15

Strangely, although the inverse correlation of prices and real wages in the long wave continued in this era, the longer-term trends of both variables declined in this

15. This may be due in part to decreasing Spanish imports of silver from America, which peaked in the 1590s and declined throughout the 17th c. (Wilson and Parker 1977:46, 48).
era as compared with the previous era. Prices changed from inflation to stationarity, and real wages went from stationarity to decline.16 This suggests that the inverse correlation of prices and wages in the long wave time frame does not hold up over a longer term.

The secular decline in real wages in this era probably resulted from two influences: the working people were paying the costs of the new style of larger great power wars fought by professional armies, and economic surplus was being invested in the early stages of industrialization to the detriment of immediate consumption. Economic surplus used for investment in industrial expansion, and for making war, was not available for improving the lot of the working class. Thus over the course of the eighteenth century real wages declined. Only in the next era, as great power war diminished under British hegemony and industrialization reached full swing, did working-class conditions improve.17

16. The estimates of Phelps-Brown and Hopkins ([1956] 1962) for English real wages show that they declined from a peak of 104 (1736 = 100) in 1744—at the start of the long wave upswing—to a low of 64 in 1772 (ten years past the end of the same long wave upswing), then climbed during the long wave downswing back to 78 by 1786. On the next upswing, wages again lost ground, to 58 in 1813.
17. I advance these explanations as tentative and partial answers.
Military Evolution

As discussed in the last chapter, the Thirty Year’s War, which started this era, ended a long period of stalemate in European war. That stalemate period, which had lasted from the Italian wars at the outset of the first era, was characterized by much siege warfare but few major battles.

In the Thirty Years’ War, it will be recalled, mercenary war reached its “nadir of brutality,” and war seemed to “escape from rational control” (Howard 1976:37). But, adds Howard, there was “one great exception” from this condition, “the armies of the United Provinces; and they were exceptional for the very simple reason that they were regularly supplied and paid.” This allowed the Netherlands to maintain a regular force of trained professionals: “The wealth which the Dutch derived from their overseas trade enabled them, almost alone among the states of the early seventeenth century, to keep their force under arms throughout the year” (p. 55). The first thing such an army could be trained to do, which mercenary armies could not, was to dig and maintain high-quality fortifications (Howard 1976).

Braudel (1984:203) writes: “Like any self-respecting economic centre, the United Provinces kept war at arm’s length: a string of forts along the frontiers reinforced the obstacles created by the many waterways.” Well-paid and well-trained troops “had the task of seeing that the Provinces remained an island sheltered from conflict” (Braudel 1984:204).

The second thing the professional army could do was drill soldiers, which enabled them to make use of firepower in new and devastating ways (as well as to maintain order in the face of firepower). Maurice of Orange, at the end of the sixteenth century, developed formations of musketeers ten deep “countermarching in their files, reloading as they did so, so that their front rank was always giving continuous fire” (Howard 1976:56). The effect of this war machine on the ragtag mercenary armies of the seventeenth century can be imagined.

Sweden picked up these techniques during the Thirty Year’s War and refined them, developing faster reloading so that infantry formations could be only six deep and combining this with a new, lighter, and more mobile artillery developed by the Swedish iron industry. The superiority of the new military system developed by the Netherlands and refined by Sweden was proven in 1631 at Breitenfeld when “the Habsburg forces suffered a cataclysmic defeat which transformed the pattern of power in Europe” (Howard 1976:58). This new military style required discipline and control in order to work, and that required a professional army, which cost money. A quantum leap in the social burden of war had again taken place, as had happened around 1495. An Englishman wrote at the end of the seventeenth century: “Nowadays the whole art of war is reduced to money” (Howard 1976:48).

Where could a state in the seventeenth century find the “ample and continuous supplies of money” needed for warfare in the new style? “Money in the necessary

18. Military service in Sweden lasted 20 years, for one in ten citizens, supporting the existence of a professional army as in the Netherlands.
quantities could come only from trade” (Howard 1976:37). Howard argues that “the capacity to sustain war and so maintain political power in Europe became, during the seventeenth century, increasingly dependent on access to wealth either extracted from the extra-European world or created by the commerce ultimately derived from that wealth” (p. 38). World trade supported Dutch hegemony, and world trade would support British hegemony next. Between the British and their future, however, lay the French.

**Long Waves and British-French Wars**

This era saw recurring war peaks, on each long wave, in which Britain opposed France. Dutch military decline was already evident by the end of the long wave downswing of 1650 to 1689. Beginning with the next war peak, the rivalry of France and England shaped each major round of great power war. In each long wave, England pulled further ahead of France in controlling world trade and dominating the seas militarily. France repeatedly fought to gain dominance on the Continent but was repeatedly put down—as were the Hapsburgs in the last era—by a succession of coalitions led by England.

The first long wave upswing phase in the era began around 1689. Ralph Davis (1975:5) writes that 1689 opened a new phase in British maritime expansion, “with French wars that were marked by fierce privateering operations against English merchant shipping.” These wars first catalyzed Anglo-Dutch cooperation against the French threat. The war peak of the upswing was the War of the Spanish Succession (1701–13), in which France under Louis XIV united with Spain but was defeated by a coalition led by England and including the Netherlands. Wallerstein (1980:188) sees that war as an unsuccessful attempt by Spain to resist English domination. The war also continued British and French efforts to “destroy each other’s trade networks, especially by privateering” (Wallerstein 1980:188). After the War of the Spanish Succession, the European economy entered another long wave downswing (1720–47), and France and Britain’s “mutual destruction of each other’s property” in the Caribbean “died down” (Wallerstein 1980:164).

Figure 14.3 shows the political map of Europe during this period. Spain and Portugal were past their prime and under English domination; Austria-Hungary was a shrunken remnant of past Hapsburg grandeur, although the Ottoman Empire had receded somewhat; Germany and Italy were fragmented; and the Dutch republic was in decline. France had failed in the War of the Spanish Succession but was not knocked out, and only France had the potential to challenge Britain’s ascent.

The following upswing from 1747 to 1762 saw the same issues build to a new war.

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19. A particularly long phase, no doubt because of the high toll of the Thirty Years’ War on the European economy.

20. Throughout the 18th c., Dutch investments in England helped the English fight wars against the French with minimal economic disruption, a “symbiotic arrangement between a formerly hegemonic power and the new rising star” (Wallerstein 1980:281).

21. As had the Anglo-French wars in the Caribbean in 1666–67, 1689–97, and since 1702.
peak in the Seven Years’ War (1756–63). In the Seven Years’ War, fought at various locations throughout the world, the British essentially defeated France in the periphery and deprived France of its right to compete outside Europe (Wallerstein 1980: 191; see also Furneaux 1973; Gradish 1980; Kaplan 1968).

The long downswing that followed the Seven Years’ War, from 1762 to 1790, was punctuated by one relatively small British-French war, which the French got the better of by 1783. Britain also lost her North American colonies during this downswing, so it was a time of slowdown in the British move toward hegemony. But by the end of the downswing, in 1787, the French were forced to open their ports to English shipping (under the Eden Treaty of 1786), letting in an “avalanche of British goods” (Braudel 1984:380). This coincided, Braudel suggests, with a crisis in French industry, which was “still suffering from antiquated structures.” These pressures may have contributed to France’s path during the next upswing, 1790 to 1814—a period of hegemonic war that finally resolved the English-French rivalry.

22. In 1772 a French writer said: “We open our campaigns with armies that are neither adequately recruited nor properly paid. Whether they win or lose, both sides are equally exhausted. The National Debt increases, credit sinks, money runs out” (Howard 1976:74). This statement well reflects conditions on a long wave downswing.
Hegemonic War

The French revolutionary and Napoleonic wars represent the last effort of France to avoid British hegemony and, if possible, to dominate Europe itself. At first, the French Revolution seemed to offer an opportunity for France’s rivals to do her in. "As the French state sank to its knees the vultures gathered. In 1792 an Austro-Prussian army marched on Paris" (McEvedy 1972:70). The French, however, not only repulsed this attack but struck back and "surged forward all along their eastern frontier," overrunning several neighbors. "This onslaught by forces that had been thought incapable of defence amazed and alarmed Europe. . . . 1793 saw the formation of an anti-French coalition that included just about everyone" (McEvedy 1972:70).

The French fleet proved unable to withstand the British on the seas in 1798 (Aboukir) and 1805 (Trafalgar), but on land France was stronger due to a new military innovation. The professional armies of the other great powers (professional armies that had replaced the mercenary armies of the first era) were countered with French superiority in numbers, gained through a reordering of the state under a revolutionary ideology. The upkeep of regular military forces drained the budgets of other European states, but for revolutionary France a new relationship between the national economy and the war machine was possible. In 1793 all Frenchmen were put "on permanent requisition for military service," and within eighteen months Carnot had put over a million men under arms and obtained "a crushing numerical superiority on every battlefield" (Howard 1976:80). "If men could be conscripted, so also could the resources of the nation to arm, equip, clothe, and feed them; and in order to do so Carnot and his associates attempted to create a planned war economy, based on the fear of the guillotine" (Howard 1976:81).

Furthermore, it became impossible either to demobilize this huge army or to support it on French soil.

The Directory did not much care where the French armies went so long as they and their generals stayed abroad. The young Bonaparte led his starving and ragged forces into Italy in 1796 with a simple promise of plunder. . . . The spirit of romantic heroism . . . thus coexisted happily in the Grande Armée with a more straightforward zest for loot (Howard 1976:82–83).

This style of fighting meant that the army had to stay constantly on the move and had to win all its battles in order to resupply itself from the defeated country. The French army ate its way across Europe like a swarm of locusts:

Carnot, 'the organizer of war', supplied [the French army] with conscripts and munitions at a truly revolutionary rate. As he sent nothing else but men and guns the French had to attack to keep alive. . . . [T]he new state could function only on a war footing and its armies only in an offensive role" (McEvedy 1972:70).

This new kind of war produced battle casualties and civilian suffering on a greater scale than any previous war. Average annual battle fatalities exceeded 150,000—compared with about 88,000 in the Thirty Years' War (see chapter 11).
Ultimately, even France with its large population, area, and resources could not sustain its offensive against a coalition, again led by England, that had grown to include Russia. Within ten years, the "quality of conscripts deteriorated" and "supply became a nagging and insoluble problem," particularly as Napoleon began penetrating less fertile areas of Europe after 1807. Russia had remained outside the European world economy until the eighteenth century, Braudel (1984:27) writes, because "distance was forever taking its revenge." Now that distance took its revenge on Napoleon.

France was decisively and finally beaten on land, and its fleet was decimated by Britain. The Congress of Vienna in 1815 marked another restructuring of the great power system, with Britain assuming a predominant position. France was whittled back, and a "pentarchy" of great powers emerged with Britain in the most powerful role. The congress brought about the restoration of conservative rule after revolutionary challenge: "[t]he Congress asserted one theory of government—the rulers' right to rule—and denied another—the peoples' right to rule themselves" (Albrecht-Carrié 1965:85).23

The Third Era, 1815–1945

The third era extends from the end of the Napoleonic wars in 1815 to the end of World War II in 1945. British hegemony seems to have been stronger at the outset and to have lasted longer than Dutch hegemony in the previous era.

British Hegemony

The following sections on British hegemony will rely heavily on Thomson (1950) as a convenient historical summary. I chose Thomson because his periodization of phases of British social development fits my long wave phases (see below).24

After 1815, Britain was the strongest country in Western Europe and the Mediterranean and "supreme in the colonial world of North America, the West Indies, and India. The markets of the world lay wide open to her manufactured goods, and the undeveloped areas of the globe to her capital investment" (Thomson 1950:26).

Britain had benefited greatly by having the war fought elsewhere.25 At the height of the British land expedition to the Continent, the Peninsular War against Napoleon, only forty thousand British lives were lost, of a British population of about thirteen million. High prices hurt the British working class, but "the war had scarcely upset the delightful routine" of the landed gentry (pp. 1, 15).26

During this era industrialization proceeded in earnest, and Britain led the way. At the outset of the era, "agriculture was still Britain's largest national industry" 23. See also Kissinger (1973).
24. Unlike Wallerstein's and Braudel's accounts, which I relied on heavily in describing Dutch hegemony, Thomson's is not a Marxist account.
25. Thanks to what Dehio would call Britain's "insular" position.
26. On the effects of the war on the British economy, see Mauro (1971:7–10).
**Table 14.1. Estimated Real Per Capita National Product**

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Estimates apply to the boundaries as at the dates shown.
* England and Wales prior to 1800.

Note that national income levels in 1970 were derived from Kravis et al., 1978, pp. 236-237, column (5).

Note: Values shown are in 1970 U.S. dollars.

(p. 137), but textiles were a close second, and industry was just beginning to take off. Coal was the main fuel, and the era saw the rapid growth of railroads and steamships.27 Railroad expansion created demand for coal and iron and stimulated heavy industry, metallurgy, and mining (p. 42). Britain’s per capita GNP remained higher than all others during the nineteenth century (see table 14.1).28

Throughout the nineteenth century, Britain dominated world trade by any standard. By 1851, more than half the world’s tonnage of seaborne shipping was British (Thomson 1950:142). The long wave upswing around 1848 to 1872 saw a particularly rapid increase in this trade, which tripled in volume in just two decades (p. 138). During this upswing period “Britain enjoyed to the full the economic benefits of having become the ‘workshop of the world’” —an advantage over other countries that Thomson (p. 101) attributes to successful industrialization, inventiveness, and political stability. By the end of that upswing, British foreign trade was greater than that of France, Germany, and Italy combined (p. 101).

At the beginning of this era, trade with America was crucial to Britain. As noted earlier, exports to America amounted to only about 10 percent of Britain’s total around 1700, but this had risen to 37 percent by 1772 (Crouzet 1980:69). But the importance of the American trade seems to have peaked by 1815 (Crouzet 1980:77).

27. Thomson (1950:41) calls the period 1830—50 the “era of railways and steamships in Britain.” Railroads became “one of the chief sources of national wealth” (p. 13). Boom years of railway construction occurred in 1836–37 and 1844–47—perhaps a sign of the upturn in capital investment that would be expected about ten years before the long wave price upturn in 1848 (see chap. 12).

28. Unfortunately, data for the Netherlands are of lower quality, and Crafts (1983:394) lists them separately, only from 1870 on. These data show per capita GNP (in 1970 $U.S.) in the Netherlands at 591 in 1870, 707 in 1880, 768 in 1890, 840 in 1900, and 952 in 1910—lagging well behind Britain in this late part of the era.
The slave trade was officially abolished in 1815, though smuggling continued (Braudel 1984:440). In the downswing years after 1815 (the beginning part of this era), British exports to the United States “fluctuate[d] wildly” (Crouzet 1980:73), and the “state of the American market was—at least in the 1830s—the most important single factor in bringing prosperity or depression to British export industries” (Crouzet 1980:75). During the upswing of 1848–72, exports to North America grew more slowly than those to northern Europe. The final years of the price upswing ending in 1872 saw “a big boom in trade.”29 The Suez Canal was opened in 1869. But after 1872, trade stagnated.30

Along with its productive advantage and commercial predominance, Britain in this era was also the financial center of the world economy. “Sterling . . . became the money of international finance” (Thomson 1950:140). E. H. Carr writes that the “corollary of an international commodity market was an international discount market, an international market for shipping freights, an international insurance market, and, finally, an international capital market.”31 Thomson (1950:141) argues that “the world economic order, which was regarded by laissez-faire economists as part of the natural order, was in fact controlled by a highly centralized authority situated in London.” British financial hegemony seems to lag somewhat behind commercial hegemony, as Wallerstein’s theory of hegemony suggests. Paris was considered a rival financial center until about 1870.

**Long Waves and Phases of British Hegemony**

Thomson (1950) divides British history in the extended Victorian age into three phases, each marked by a distinct character.32 The dividing lines between these phases correspond with turning points of the long wave.33 First is the postwar generation of 1815–50 (corresponding with the long wave downswing), marked by international peace and the consolidation of government in Britain. Second is the golden age of Victorian Britain, 1851–74 (a long wave upswing), in which a spate of minor great-power wars occurred, free trade reached its peak, and a liberal hegemony prevailed in the British government.34 The third phase, 1875–1914, combines a long wave downswing and the following upswing and could be broken into subphases on that basis. It was marked by the scramble for colonies as British

29. 1868–74, according to Thomson (1950:139).
30. British exports came to £256 million at their peak in 1872 and did not reach that level again until around 1900. By 1913 the export value had grown again (on the upswing) to £525 million (Thomson 1950:194).
32. In this extended period, within Britain three political groupings competed for power—the Tories, Whigs, and Radicals—although the distinctions between them were not “over-sharp” (Thomson 1950:25). These groupings correspond with the triangle of world views discussed in Part One.
33. Thomson does not note this.
34. This period was marked by “growing material prosperity” and a rising standard of living. The Crystal Palace of 1851 in London, a “Great Exhibition of the Works of Industry of all Nations,” symbolized British optimism, internationalism, and prosperity (Thomson 1950:97–100).
h egemony declined (on the long wave downswing) and then the escalation of great power tensions in the prewar generation before 1914 (on the long wave upswing).

The rival philosophies of mercantilism and free trade also seem to follow the long wave in this era. Free trade gained sway on the upswing, and mercantilism on the downswing. The first downswing of this era began with the passage of the Corn Law in Britain (1815), which restricted imports of corn. The first upswing was initiated by the repeal of the mercantilist Navigation Acts (dating from mid-seventeenth century) in 1849. And the next downswing “revived the old policy of protectionism within the Conservative ranks, under the slogan of ‘fair trade’” (Thomson 1950:182).

These same long wave periods also seem to reflect an alternation in “social values” (to use Namenwirth’s term; see chapter 5). Thomson (1950:119) calls the period from 1846 to 1874 (the long wave upswing) a period of “Liberal hegemony” in British government. The period from 1874 to 1891 (the downswing) Thomson (p. 182) refers to as “Conservative hegemony.”

**Hegemonic Decline**

British hegemony did not decline as quickly as had Dutch hegemony. It was not until the second half of the nineteenth century that Britain began to lose its lead; even then it remained the strongest military and economic power until around the turn of the twentieth century.

British economic decline seems to have accompanied a shift toward production for export. Crouzet (1980:79) cites data showing that British exports grew from about 14 percent of the national product in 1811 to 25 percent by 1871. The greatest acceleration of exports was after 1848, on the long wave upswing—“it was only after 1850 that Britain really became ‘an export economy’” (Crouzet 1980:81). By the end of the upswing, around 1872, Britain was exporting something like 40 percent of its wool production, 70 percent of its cotton, and 40 percent of its iron (Crouzet 1980:86). Britain paid the “penalty of industrial leadership” as it became increasingly dependent on food imports—by 1875 nearly half the wheat consumed was imported, and this rose to nearly 70 percent with bad harvests in the late 1870s (on the downswing). The acreage under cultivation in Britain fell by 30 percent from 1871 to 1901 (Thomson 1950:195).

Meanwhile, in the 1850s and 1860s Britain had a great technological lead but, unlike France and the United States, “did not originate any of the great naval

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35. Over the longer term, free trade was favored by the hegemonic country at times of greatest productive and commercial hegemony. “The open door . . . was the creed natural to any people which has great natural advantages and a long lead in methods of production. Free competition is of most value to those who need not fear any competition” (Thomson 1950:27).

36. But I wonder if this relationship is specific to the 19th c. with its low great power war severity. Mercantilist measures were used as a source of revenue (and a way to control shipping for security reasons), more than to protect domestic industries. In Britain in the late 1820s, customs and excise contributed £36 million annually, and all other sources of taxation only £13 million (Thomson 1950:78).

37. The five years of Liberal government in this period, in 1880–85, coincided with the temporary upsurge of prosperity between the depressions of the 1870s and 1890s.
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developments” (Thomson 1950:98). In fact, “naval shipbuilding passed through a baroque phase” (p. 98).38 British industrial growth slowed down, from perhaps 3 percent annually to 2 percent in the downswing of the 1870s to mid-1890s (p. 163). Not only Britain but the world experienced a Great Depression from about 1873 to the early 1890s (see Gordon 1978:23).

During the long wave upswing starting around 1893, British exports shot up to record levels, but this increase came primarily in coal exports and “masked the stagnation in the textile industries and the positive decline in the iron and steel industries” and did not reverse the agricultural decline (Thomson 1950:194; see also McCloskey 1973).

British overseas financial expansion, based on the export of capital as foreign investments, peaked in the 1848–72 (upswing) period. Britain exported surplus capital amounting to roughly 15 million pounds sterling annually, in addition to reinvesting abroad the earnings from existing foreign investments (about 50 million pounds sterling annually by the 1870s). The situation was reversed after 1872, however. Income from foreign investments was diverted to home consumption in Britain, and surplus capital was directed toward bridging an adverse trade balance rather than toward new foreign investments (Thomson 1950:165). “No change marks more decisively than this the end of [Britain’s] great era of economic expansion” (p. 166).

By the late 1870s Britain’s position was one of diminished prestige, loss of initiative in foreign diplomacy, and increasing economic dependence . . . , though all these changes were at first masked by the continuing aura of prestige . . . [and] the continued pre-eminence of Britain financially and commercially in the world (p. 163).

Long Waves in Prices and Wages

This era, like the previous one, saw level and even slowly declining prices up until World War I, then very sharp inflation. Prices returned to their pre--World-War-I level only momentarily, if at all, at the height of the depression in the 1930s and then inflated rapidly again in World War II.

Thomson (1950:139, 192) writes that real wages experienced a sudden increase in 1870–73 (around the time of the price downturn) and notes a “sharp check in the rise of real wages” between 1900 and 1913 (the price upswing). These fluctuations are consistent with the inverse connection of prices and wages discussed in chapter 12. Around 1910 (late in the long wave upswing), “class struggle” seems to have reached a peak throughout the core. This period, Screpanti (1984:512) argues, was “announced” by the Russian revolution of 1905, which was followed by a wave of strikes and occasional street fighting in the West—especially France, Italy, and the United States. The peak of industrial unrest and violence came in 1911–15, accord-

38. This might reflect a dampening of innovation on the production upswing, as suggested by long wave theory.
ing to Screpanti (see also Phelps Brown 1975:5). This fits with the theory adduced in chapter 12, in which the late upswing period brings decreasing real wages, rising prices, and stagnating production.

Encouraged by this corroboration, I categorized the points of most visible class struggle, as described in Thomson's (1950) account, according to long wave phases. The results were not convincing, however:

→ Downswing of 1815—48:
  1825—35: Remarkable growth in trade union movement (p. 52).
  1830: Starving field laborers riot for wage demands (p. 16).
  1832: Reform Bill, major Whig Parliamentary reform (p. 73).
  1833: Owen's Factory Act passed, regulating child labor, under pressure for more radical reforms (p. 47).
  1838—48: Chartist movement; put down in 1848 (p. 83).
  1847: Ten-Hour Bill limits working hours of adults (p. 47).
→ Upswing of 1848—72:
  1850—70: 10 percent increase in prosperity of working class (p. 144).
  1867: Second (Conservative) Parliamentary Reform Bill (p. 126).
  1871: Start of new wave of strikes (p. 148).
→ Downswing of 1872—93:
  1879: Depression; high unemployment weakens labor (p. 148).
  1890s: Big strikes (p. 198).
→ Upswing of 1893—1917:
  1910—14: Great strike movement (p. 188).

Thus working-class agitation seems to have peaked toward the end of the first downswing (1838—48), again at the beginning and end of the next downswing (early 1870s and 1890s), and again at the end of the following upswing—not correlating with long waves.

Military Evolution

The decades after 1815 "witnessed the transformation of land and sea transport by the development of the steam engine," and this affected military affairs greatly. The railway eliminated prolonged marches and allowed huge armies to be moved quickly and without exhausting them (Howard 1976:97). The professionalism of the armed forces of the eighteenth century could be combined with the massive armies that had emerged after the French Revolution. In the eighteenth century problems of supply limited the size of armies that could be fielded. While Napoleon transcended those bounds, the disaster in Russia showed that "even this ruthless improvisation had its limits. With the introduction of railways these limits disappeared" (Howard 1976:99).

The new military techniques made possible by steam power were perfected by Germany in its ascent to great power status during the 1860s and 1870s, when Prussia
uniformed Germany. A key ingredient of Prussian success was its General Staff, which coordinated the administrative details of moving large numbers of troops and supplies by railway. In 1870–71 Prussia deployed 1.2 million soldiers against France—not the ragtag million of Napoleon’s army but an organized force brought to bear in a coordinated manner. The Prussians also developed breech-loading guns (first used against Austria in 1866 and soon adopted by other European armies) that could be fired both three times as fast as muzzle-loaded guns and from a lying position (Howard 1976:102). And after a poor showing by Prussian artillery in 1866 against Austria, the Prussians also created a new breech-loading steel cannon (developed by Friedrich Krupp), which dominated the battlefield in 1870 against France. France and Austria continued to use brass guns, and Britain used wrought iron, until after 1870–71, but the Prussian steel cannons proved superior (Craig 1964:174).

After the German unification, then, “it was accepted by all the states of Europe that the military effectiveness on which they relied to preserve their relative power and status depended . . . on a combination of the manpower of the population and a strategically appropriate railway network” (Howard 1976:106).

Finally, Germany used nationalism itself as a sort of military innovation, borrowed from France. A group of young officers in the Prussian army became convinced that the Grande Armée had been “something new in warfare” based on “the release of national energies evident in the French revolution” (Howard 1976:86). Nationalist ideology could facilitate raising a large army of “serious, intelligent, reliable patriots” (p. 87). Conscription was introduced throughout Germany in 1813 (during a “burst of patriotic enthusiasm” following Napoleon’s defeat in Russia).

By the end of the nineteenth century European society was militarized to a very remarkable degree. War was no longer considered a matter for a feudal ruling class or a small group of professionals, but one for the people as a whole. The armed forces were regarded . . . as the embodiment of the Nation. (Howard 1976:110).

**Long Waves and German Ascent**

The close correlation of the long wave with great power wars is quite apparent in the nineteenth century. The first downswing, 1815–48, following the Congress of Vienna, was marked by an absence of great power wars and has been called “the Thirty Years’ Peace.”

The long wave upswing, 1848–72, contained a spate of major wars in Europe, although only one of these involved the British (the Crimean War). This period may be seen as a time of jockeying for position among the European powers without challenging British hegemony itself.

During this upswing, Prussia waged three wars in the decade from 1862 to 1872 to unify Germany as an empire and great power. In 1863–64 Prussia and Austria

39. “This General Staff was perhaps the great military innovation of the nineteenth century” (Howard 1976:100). The Prussian General Staff studied closely the first war that had used railways extensively, that between France and Austria in northern Italy in 1859. A French force of 120,000 troops reached the front in eleven days by rail, as opposed to two months on foot (Howard 1976:97).

conquered Schleswig-Holstein, a strategic region at the base of Denmark that controlled the land bridge between the Baltic and North seas. Prussia then defeated Austria in 1866, resolving a long-standing "struggle for supremacy in Germany" (Craig 1964:2). And in 1872, Prussia defeated France largely by virtue of superior organization, supply, and economic base and established the German Empire. The result of this upswing period, then, although it did not upset British hegemony, was a "complete revolution in the balance of power in Europe" with the appearance of a powerful united Germany (Thomson 1950:160). Quigley (1966:211) goes so far as to say that "the unification of Germany . . . ended a balance of power in Europe which had existed for 250 or even 300 years." Nonetheless, up until the 1890s Britain "tended to welcome the rise of Germany" as a counterbalance to France (Quigley 1966:211).

Britain started off this upswing phase of 1848–72 in a more "self-assertive" mood than it ended on. Britain's one major war of the phase, the Crimean War (1853–56), was not successful. The war arose from British and French fears of Russian expansion toward the Mediterranean (which could be blocked by maintaining the Ottoman Empire as a barrier). The war cost Britain seventy million pounds and 25,000 lives and "gave her no clear advantage beyond postponement of the break-up of Turkey" (Thomson 1950:157–58).

Thus the rise of Germany on the long wave upswing of 1848–72 coincided with a weakening of British position—although no power could yet challenge British hegemony outright. The downturn in British overseas economic expansion, discussed above, coincided with shifts in the European balance of power, resulting in an erosion of British hegemony (Thomson 1950:166).

The downswing of 1872–93 saw a halt in great power wars in Europe and a simultaneous "race for colonies," particularly in Africa. Britain and France led this race because of their existing overseas possessions and advanced industrialization. But Germany and even Portugal also participated in the European conquest and partition of virtually all of Africa after 1880 (Fieldhouse 1973:map 3). Figure 14.4 shows the colonial empires of the great powers as they stood at the end of the subsequent upswing, on the eve of World War I in 1914. European control of the world had reached its peak, extending to all the earth's inhabited landmass except for a stretch from Japan to Turkey that was never conquered and most of America, which had become (at least formally) independent following European colonial rule.

41. General von Moltke, chief of the Prussian General Staff, wrote that "the war of 1866 was entered on . . . for an ideal end—the establishment of power. Not a foot of land was exacted from conquered Austria, but she had to renounce all part in the hegemony of Germany" (quoted in Craig 1964:1). A Viennese newspaper wrote of the outcome that Austria's "Great Power status" had been destroyed; "German Power" would henceforth overwhelm Austria and "Prussia's word would be the decisive one in all central European questions" (quoted in Craig 1964:170).

42. As well as the concurrent rise of a united Italy.

43. Especially in the optimistic age of Palmerston, 1855–65 (Thomson 1950:153). In 1848–72, the navy began to improve, after a long period of neglect since 1815 (Thomson 1950:97).
Areas once European dependencies, now fully independent

Source: Fieldhouse (1973: Map 9) by permission of George Weidenfeld and Nicolson LTD.
Russia’s eastward expansion, meanwhile, had reached the Pacific, and Russia turned southward in this period, consolidating its hold over a huge landmass outside of Europe (Fieldhouse 1973:map 1).

The United States for its part emerged as a major military power in the era of 1815–1945, particularly in the upswing phase of 1893–1917. This phase began with a dispute with Britain over Venezuela (1895) and the Cuban revolt against Spain (1895), which precipitated the U.S. war against Spain in 1898 (see Vanderlip, 1898). The United States emerged from this war as an established naval power and gained possession of Puerto Rico, Guam, and the Philippines. The expansionary drive continued with the annexation of Hawaii (1898), intervention in the Boxer Rebellion in China (1900), conquest of Panama (1903), occupation of Nicaragua (1912), and intervention in Mexico (1916) (Quigley 1966:75). The Panama Canal was opened in 1914.

The upswing phase of 1893–1917 also saw Japanese expansion through war parallel that of the United States (both being attempts to enlarge regional spheres of influence at the expense of European powers). Most important were Japan’s defeat of China in 1894–95 and of Russia in 1905. Japanese expansion continued in World War I as Japan took advantage of the European war to capture German colonial possessions in Asia and to gain extensive commercial advantages in China (Quigley 1966:244). From 1918 to 1922 Japan tried to take advantage of the Russian revolution by seizing Vladivostok and the eastern end of the trans-Siberian railroad but ultimately gave these up when the anti-Bolshevik factions supported by Japan were defeated in the Russian civil war (Quigley 1966:245).

Rivalry for Hegemonic Succession

The century from 1815 to 1914 was marked by a prolonged low level of great power wars. By the early twentieth century the “age of general European wars . . . seemed to be at an end. Only after 1900 did even the notion of another general European war loom above the horizon” (Thomson 1950:111). During the long wave upswing of the mid-nineteenth century, Britain was still too strong to be challenged. By the time of the next upswing (after 1893), however, British hegemony had weakened, Germany had emerged as a leading industrial economy, and tensions between the great powers had increased.

In the Anglo-German naval race, beginning in the 1890s, Germany challenged British naval superiority. Rapid technological change in the last half of the nineteenth century had important military implications, especially in naval war. The ships that Britain had used to defeat Napoleon at the beginning of the century (less than two thousand tons displacement) had been made obsolete by the 1840s first by steamships

44. Thomson (1950:221, 220) writes almost in the same breath that the 19th c. in Britain was above all “a period of extraordinary peace” and yet that World War I was “historically the culmination of the nineteenth century.”
and then by iron (rather than wooden) ships, reaching nine thousand tons displacement by the 1860s and twenty thousand tons by 1900 (Howard 1976:123).

The last half of the nineteenth century saw a frantic competition between the British on the one hand and their chief imperial rivals, the French and the Russians on the other—a competition in size of guns, thickness of armour, and speed. At the very end of the century the Germans joined in the race with all the power of the most highly developed industry in Europe behind them. The real competition was now, not at sea, but in the dockyards; and Germans and British set to outbuild one another in the new all big-gun ships, Dreadnoughts and Super-Dreadnoughts, on which command of the sea and with it, so it was thought, command of the world now appeared to depend (Howard 1976:123–24).

The "Bible of European navies at the turn of the century" (Howard 1976) was The Influence of Sea Power on History by American naval theorist Alfred Mahan (1890). Mahan advocated the use of large capital fleets to run the enemy fleets out of the seas so that the ocean could serve as a highway for one’s own trade and an obstacle to the enemy’s trade. This would undermine the enemy’s war-making capabilities, especially if the enemy was a country with a large population dependent on imported food, such as Germany.

Thomson (1950:218) describes the decades leading up to World War I as a period "of rivalry in power . . . ; of periodic war-scares and crises; of feverish competition in armaments; of nervous tensions and anxieties." Quigley (1966:218) lists nine crises that "brought Europe periodically to the brink of war" in the upswing phase before World War I:

The First Moroccan Crisis, 1905–6
The Bosnian Crisis, 1908
Agadir and the Second Moroccan Crisis, 1911
The Tripolitan War, 1911
The First Balkan War, 1912
The Second Balkan War, 1913
The Albanian Crisis, 1913
The Liman von Sanders Affair, 1913
Sarajevo, 1914

By 1914, in the description of J. A. Spender, "the equilibrium was so delicate that a puff of wind might destroy it, and the immense forces on either side were so evenly balanced that a struggle between them was bound to be stupendous." 46

Hegemonic War

The year 1914 (in some ways as much as 1945) seems to mark a sudden change in the nature of world politics. After a century of only occasionally broken peace between

45. The superiority of ironclad ships over wooden ships was demonstrated by Russia at the beginning of the Crimean War. Ironically, the Russian fleet did not keep up with technological change and was decimated by Japan in 1904–5.
the great powers, war erupted on a scale utterly unprecedented. The annual costs and destruction of hegemonic war increased more than tenfold in World War I over the previous high (Napoleonic wars).

I agree with both Wallerstein and Modelski that World Wars I and II are, in effect, two stages of a single hegemonic war period. In the seventeenth century the costs of hegemonic war might be sustained for three decades, but in the twentieth century this was reduced to about five years, and the war had to proceed in pieces, with a long readjustment and recovery period in between.

In World War I, each side's war plans called for rapid mobilization and quick, decisive attacks carried out along preplanned lines—the lessons drawn from the German successes against Austria in 1866 and against France in 1871. Van Evera (1985) refers to the "cult of the offensive" that had grown out of these recent precedents.

As it turned out, the strategists were "fighting the last war," and the offensive strategy had already become obsolete. Since 1871, defense had caught up with offense, so that by 1914, prevailing methods of offense (infantry assaults) were prohibitively costly against prevailing methods of defense (entrenched positions with machine guns). In late 1916, on a single front about twenty-five miles wide (the Somme), a maximum gain of seven miles was achieved in four months at a cost of over one million casualties on both sides (Quigley 1966:231). In 1917, in three months, the British used over four million artillery shells against an eleven-mile front (at Passchendaele, Belgium), almost five tons for every yard of the front, and then lost four hundred thousand men in the ensuing attack, which failed (Quigley 1966:231).

The magnitude of World War I was not expected by political and military leaders but first impressed itself in "the problem of how to pay for [war] supplies." It had been thought that although a great war might be very expensive, it was unlikely to last more than six months:

In July 1914, the military men were confident that a decision would be reached in six months because their military plans and the examples of 1866 and 1870 indicated an immediate decision. This belief was supported by the financial experts who, while greatly underestimating the cost of fighting, were confident that the financial resources of all states would be exhausted in six months (Quigley 1966:256).

In fact, the countries at war all broke from the gold standard and issued currency unbacked by gold, in effect taxing their national economies through inflation (see

47. Though not unforeseen by the more thoughtful observers in the pre-1914 years, such as Bloch (1899) 1903)—see chap. 15.
48. The time it took to exhaust the world economy had been reduced from several decades, to about 15 years, to about 5 years, in the three hegemonic wars, respectively—as annual fatalities climbed from 88,000 to 160,000 to 2 million.
49. The perceived need to stick to these tightly scheduled plans in order to achieve success was one reason that in 1914, once one country mobilized its forces, it was unlikely that the outbreak of total war could be avoided.
50. Quigley (1966:256); see also Hirst (1915:297–303).
Hamilton 1977). And by draining their national economies in this way, the European powers were able to sustain the war for four years.

Everything had changed, to anticipate the famous words of Einstein in 1945, except the way people were thinking. Militarily, the old rules of strategy held sway—there was to be a continuous front in which the attacker would "break through" the strong points of the enemy line by frontal infantry assault with bayonets. Great importance continued to be placed on cavalry, including great demands on supply lines for horse feed (more feed was transported than ammunition), even though cavalry was "obsolete for assault" (Quigley 1966:227). The development of new military innovations was spurred by the war, but they were not employed for decisive advantage by either side because of the initial drain of the war, the long, rigid, front line, and the old-fashioned strategy still prevailing. The nature of war had changed in many ways, but the theory and practice of warfare—from both the immediate military and the long-term political-economic points of view—had lagged behind.

In naval warfare, however, significant innovations did occur and eventually played a major role in World War I. Britain still had the strongest capital fleet, which Germany could not overcome, and Britain was able to impose a crippling economic blockade on Germany. But Germany developed the submarine into a potent counterweapon with which it also crippled the British economy (Howard 1976:126).

The overall costs of World War I were estimated by the Carnegie Endowment for International Peace at over four hundred billion dollars, a figure five times greater than the value of everything in France and Belgium at that time (Carnegie Endowment 1940; Quigley 1966:256). Caron (1979:247) estimates the direct destruction of French industrial capital by the war as only 7.5 percent. But industrial production in France was reduced to 57 percent of its 1913 level by 1919. In Germany, both agricultural acreage and agricultural productivity fell, and food imports ceased. The blockade of Germany caused an estimated eight hundred thousand civilian deaths (Quigley 1966:261). The German submarine warfare against British shipping destroyed almost a million tons of shipping in the month of April 1917 alone and brought Britain within three weeks of exhausting its food supply (Quigley 1966:235).

At the outset, this war of military and economic attrition, pitting the entire economy and social structure of countries against each other, was evenly balanced. According to Thomson (1950:194), the ratio of the industrial potentials of Germany, Britain, and France was three to two to one by 1914. Maddison (1977:126) lists aggregate GNP in 1913 (in 1970 U.S. dollars) for Germany at $70 billion, Britain at $67 billion, and France at $48 billion.

51. The first German gas attack, in 1915, opened a gap in Allied lines for five weeks, but German military leaders who opposed the new weapon did not take advantage of the opening to advance (Quigley 1966:231). Similarly, the use of tanks by the British to break through fortified positions was "resisted by the generals" and their effective use delayed for two years (Quigley 1966:232).
52. A lesson taken from Admiral Mahan’s book.
53. See also Day (1927) and Keynes (1920).
54. Figures are actually for Gross Domestic Product (GDP), little different from GNP.
Entente side were greater than those of Germany, Austria-Hungary, and Italy by something like $171 billion to $104 billion, but the economic clout of the central powers could be brought to bear on the fighting more easily than the more distant resources of Britain or Russia, so the balance was indecisive. Germany was able generally to carry the war beyond its borders but was vulnerable to economic blockade over the long term.

By January 1918, Germany had defeated Russia and was losing men at half the rate of the Triple Entente powers in the West (Quigley 1966:235). But the entry of the United States into the war, particularly at this late stage when the European powers were exhausted and the United States was fresh, decisively swung the balance to the Entente side. By 1914 the United States had already become the world's leading industrial economy, with a national product in 1913 of $176 billion (Maddison 1977:126), a large and growing population, and vast natural resources. The relative position of the United States only improved during the war. Germany was forced to make an expensive and humiliating peace.

The Delayed Transition

The long wave downswing of the 1920s and 1930s seems to follow rather directly from the enormous costs of World War I. Kindleberger (1973:21) argues that the timing of economic phenomena in the 1920s and 1930s paralleled that which followed the Napoleonic wars after 1815.

But while the economic downswing after World War I resembled previous instances, the political situation did not. The United States was instrumental in winning the war in Europe, but the United States was not a European power. The situation in Europe itself was unsettled. Although the devastation of the European economies, coupled with the rise of the American economy, propelled the United States into a leading position in the world, Woodrow Wilson's attempt to translate this into a new world order failed. Instead of a new hegemony, a shaky armistice prevailed for two decades as the world economy recovered from the shock of World War I.

Two factors seem to have contributed to making the transition around 1914–45 unlike previous hegemonic transitions. These factors played a role in the indecisive outcome of World War I, the unstable hegemonic situation that followed it, and hence the quick renewal of hegemonic war at the outset of the next upswing phase.

First, the unprecedented jump in the cost and destructiveness of great power war allowed the European powers to exhaust themselves without a decisive victory by any European power. In the 1920s and 1930s, the core economies were too shaky from the shock of the war to renew the struggle. The withdrawal of the United States

55. Calculated from Maddison's data. I estimated Russian GNP based on per capita GNP figures from Crafts (1983:389) and population figures from Quigley (1966:393, 398).
56. That is, greater at the outset of the war than either of the two coalitions fighting the war.
57. See Kindleberger (1973:20) on the connection of World War I to the Great Depression. Dickinson (1940:332) argues that World War I "cast a long economic shadow over two and possibly three postwar decades."
58. The United States had a long history of dislike for European great power politics, a desire just to be "left alone" by Europe.
into isolationism and the Soviet Union into revolution, along with the further weakening of British hegemony, left an unstable political power balance.

Second (and accelerated by World War I), the rise of the United States as the leading world economy shifted the "center" of the world system for the first time away from Europe. Britain's decline was unmistakable, but Germany, France, and Russia had all been even more devastated by the war. The Soviet Union did not regain its 1913 level of national production until the end of the 1920s (Quigley 1966:393). Japan had gained during the war, capturing German territories in Asia. Thus, not only had the core of the world system expanded beyond Europe, but its "center of gravity" was shifting away from Europe. Barraclough (1964:75) writes: "In every decade after 1900 it became more clear to more people that future centres of population and power were building up outside Europe, that the days of European predominance were numbered, and that a great turning-point had been reached and passed." The rise of the United States was the most visible aspect of that transition, according to Barraclough, but deeper factors were at work. Population trends were shifting—European population growth was slackening, while growth in the rest of the world was increasing due to the importation of techniques from Europe in medicine, agriculture, and transportation (Barraclough 1964:77).

With the decline of Europe—and the rise of America, Russia, and Japan—the center of attention shifted from Europe and the Atlantic to the Pacific (Barraclough 1964). At the outset of the twentieth century, Teddy Roosevelt proclaimed: "The Mediterranean era died . . . , the Atlantic era is now at the height of its development, and must soon exhaust the resources at its command; the Pacific era, destined to be the greatest of all, is just at its dawn."61

The expansion of the European system, then, may have combined with the indecisive outcome of World War I to produce the unique (by historical standards) timing and character of World War II at the beginning of the 1940–80 upswing phase.

World War II will receive only scant discussion here, because it is within living memory and because I wish to emphasize long-term patterns of social change, which tend to become lost when one focuses on important recent events in detail. World War II did, however, see major developments in military evolution that deserve mention because of their role in the transition to the post-1945 era.

World War II was a continuation of the European war begun in 1914 and halted in mutual exhaustion in 1918, combined with the Pacific War—a continuation of

59. This dialectic, in which European conquest of the world led to Europe's loss of centrality in the world, was noted by Morgenthau (1948:370): "Europe has given to the world its political, technological, and moral achievements, and the world has used them to put an end to the pre-eminence of Europe.”

60. Braudel (1984:627) also mentions the possibility of a shift to the Pacific.

61. Barraclough (1964:76). Roosevelt's enthusiasm should be tempered by Barraclough's (1964:23) warning that, despite the appeal of the "Pacific age" concept, "the new period which we call . . . 'post-modern' is at its beginning and we cannot yet tell where its axis will ultimately lie.'"

62. The continuity of the two wars is underscored by the fact that the armies at the outset of World War II "had no new weapons which had not been possessed by the armies of 1918," despite changes in tactics (Quigley 1966:661).
Japan's military strategy for enlarging its economic sphere in East Asia, dating from at least 1894. In World War II, offensive strategy had adjusted to the new realities, and, in place of a continuous front, armored assaults were used to break through the front at selected points and penetrate behind it. In turn, defense adjusted, adopting defense-in-depth to blunt these breakthroughs behind the lines and, if possible, isolate the enemy's advanced units before their armies could catch up with them. The front thus became much more fluid.

Air warfare was a further influence against the fixed front and was an important innovation in World War II. Air forces both on land and at sea evolved from a reconnaissance mission to a primary method for delivering destructive force. After 1941, the aircraft carrier supplanted the battleship as the "primary instrument of naval domination" (Howard 1976:128). Furthermore, air power developed from a tactical to a strategic weapon—a weapon used against the industrial heartland of the enemy country. "Total war" depended on the civilian populations and economies of entire nations, and with the entire population mobilized for war, the entire population became an explicit and not just incidental target of war. The killing of one hundred thousand civilian city dwellers in a great firestorm was not a military art invented at Hiroshima, as the experiences of Dresden and Tokyo attest. The difference at Hiroshima was not the outcome but the cost—one plane, one bomb, no losses, assured destruction of target. Offense, which had been prohibitively expensive twenty-five years earlier, had just become prohibitively cheap.

The Fourth Era, 1945–

As with the war that initiated it, I will say less about the current era than the three preceding it, for two reasons. First, it is within the direct experience of the current generation and hence less in need of historical reconstruction. Second, we have reached only an indeterminate middle point in the current hegemonic cycle, and historical perspective is lacking.

The year 1945 marks one of those restructurings of the international system following a great war that has initiated each era. The United States assumed the hegemonic role but the Soviet Union, which had borne much of the cost of defeating Germany in Europe, won an expanded sphere of control and the status of a separate (but not equal) superpower in a bipolar order.

Continuity or Discontinuity?

The era starting in 1945 seems to differ in some important ways from the previous three. The European system was transformed into one no longer centered in Europe; simultaneously, the nature of war changed with the introduction of atomic weapons. While American hegemony in many ways resembles earlier cases, the current era also represents in several ways a break from the past five centuries and a discontinuity in the development of the world system.

The continuity of the present era with the past is stressed by writers from various world views. Chase-Dunn and Rubinson (1979:280) write:
We contend that, at the level of the basic processes of development, not much is really new in the contemporary period. This flies in the face of most interpretations of the changes which have occurred in the twentieth century. . . . We contend that many of the patterns of change in the contemporary period can be seen in the earlier epochs of world-system development, and that there has not yet been a fundamental reorganization at the systemic level. 63

And Gilpin (1981:211ff.) argues that despite nuclear war, economic interdependence, and the beginnings of global society, the nation-state is still not dead and the practice of international relations has not changed much.

But other scholars have made the discontinuity argument. Barraclough (1964:268) argues that “the European age—the age which extended from 1498 to 1947—is over.” Quigley (1966:831) writes that “the age which began in 1945 was a new age from almost every point of view.” Howard (1976:135) says of the atomic bombs dropped on Japan:

Used by one extra-European power against another, in termination of a conflict between them in which Europeans had figured only as auxiliaries, they marked the end of that era of European world dominance which the voyages of Columbus and Vasco da Gama had opened nearly five hundred years earlier.

Morgenthau ([1948] 1967:21) argues that the transition period around 1945 brought a three-fold revolution in the political structure of the world. 64 And as early as 1941 Rose (p. 106) argued that the long wave “has come to an end. . . . The destructive war of 1914–1918 dealt it a mortal blow,” and World War II “destroyed it completely.”

The anomalous relation of World War II to the long wave (coming at the beginning of an upswing) is an indication of possible discontinuity in this era. It was unprecedented for the world economy in 1939–45 to absorb the costs of a hegemonic war at the beginning of an upswing and then to continue sustained growth for another two decades after the war. 65

Not only was economic growth sustained after 1945 but so was permanent mobilization for war. 66 “Military Keynesianism” assumed an important role in national economic planning. National economies had become thoroughly restructured around the exigencies of the war system. The permanent war economy marks another way in

63. Braudel (1984:20) also stresses the hold of the past on the present: “Is not the present after all in large measure the prisoner of a past that obstinately survives, and the past with its rules, its differences and its similarities, the indispensable key to any serious understanding of the present?” And he quotes Marx: “Tradition and previous generations weigh like a nightmare on the minds of the living” (p. 628).

64. First, the multiple-state system gave way to a bipolar world with centers outside Europe. Second, the “moral unity of the political world” (in the 19th c. especially) was split into “two incompatible systems of thought and action.” Third, modern technology created the possibility of total war resulting in universal destruction.

65. As mentioned above, this may have been made possible by the economic strength of the United States and its ability to insulate itself from the effects of the war. The ability of the United States to generate sustained economic growth at the heart of the world system facilitated the restoration of growth in war-damaged countries—Britain, France, Germany, Japan, and elsewhere.

66. The high rate of military innovation, created by the industrialization of the core countries, means that weapons and equipment must be continually replaced.
which the era after 1945 is dissimilar to those preceding it. The permanent war economy has also apparently brought permanent inflation. After previous wars, wartime inflation had given way to postwar deflation. But since World War II, prices have not declined.\textsuperscript{67}

\textit{American Hegemony}

Despite these differences in the world system after 1945, American hegemony resembles previous instances of hegemony in many ways. The United States emerged from World War II with a monopoly on nuclear weapons and military predominance throughout the world except in the Soviet Union and Eastern Europe (a de facto outcome recognized at Yalta). Like previous hegemons, the United States had survived the war with a healthy economy, while those of the other major powers were in ruins.

According to the data of Rupert and Rapkin (1984), the United States around 1950 accounted for over 70 percent of the total \textit{GNP} and the total capital formation in the seven leading core countries and held over 50 percent of the world’s financial reserves. The United States completely dominated both the Pacific trade and the Atlantic trade. The world’s financial center was in New York, the central international financial institutions (including the World Bank and the International Monetary Fund) were located in the United States, and the dollar was the international currency standard. Thus the United States enjoyed superiority in production, trade, and finance (Wallerstein’s three categories) as well as in military affairs.

The philosophical debates on protectionism and free trade under American hegemony resemble those under Britain. The long wave upswing period of 1940–80 saw “free trade” predominate, particularly in the years of strongest U.S. hegemony. In this respect the period resembled the upswing of 1848–72, the height of British hegemony.\textsuperscript{68} In the current downswing (since 1968 for production and 1980 for prices), the protectionist position seems to be making a comeback in the United States, resembling the downswings of 1872–93 and 1917–40.\textsuperscript{69}

As for American wars in the current era, the “Pacific era” concept just discussed gives a unifying character to the 1940–80 upswing. The U.S.-Japanese war, Korean War, and Vietnam War were all Pacific wars (Bushkoff 1985).\textsuperscript{70} They all concerned

\textsuperscript{67} Under such conditions prices would rise rapidly on long wave upswings and level off during downswings, as happened in the 16th-c. secular inflation. Keynesian economics in general may also have promoted permanent inflation as the government used monetary policies, including deficit spending and control of money supply, to control the economy.

\textsuperscript{68} The period 1848–72 combined a long wave upswing with continuing British preeminence.

\textsuperscript{69} Even the same phrase, “fair trade,” used to justify British protectionism in 1872–93, is now heard in the U.S. Congress.

\textsuperscript{70} Barraclough (1964:28) stresses the Pacific aspect of World War II, dating its start in 1937 with Japan’s invasion of China rather than the traditional (European) date of 1939. The Korean and Vietnam wars were not of course, great power wars in the same sense as World War II, but they involved one superpower directly and the other by way of close material and political support. Levy (1983a) counts the Korean War as a great power war because of the participation of Chinese troops, but I find this questionable. In certain logistical ways, the Vietnam War resembled a great power war—for example
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American hegemony in the Pacific basin. The Vietnam War in some ways resembles the Crimean War, Britain's unsuccessful interventionary attempt at containment to prop up hegemony. And, just possibly, in the potential coming U.S.-Soviet race for military advantage in space can be seen shadows of the Anglo-German naval race of the late nineteenth century.

Soviet Ascent?

The Soviet Union continued to industrialize in this era. The doctrine of "socialism in one country," dating from the 1920s, had required industrialization at "breakneck speed" (Quigley 1966:396) to support a military buildup against foreign threats to the Soviet Union. This program had succeeded, though at staggering cost, in the 1930s. There can be little doubt that this tremendous achievement in industrialization made it possible for the Soviet system to withstand the German assault in 1941 (Quigley 1966:400). After World War II, and helped by the integration of Eastern Europe into its economic sphere, the Soviet Union continued to industrialize. While the USSR has been unable to keep up with the advanced U.S. sectors in technology, it has been able (drawing on a larger population) to roughly equal the United States in overall military strength by the 1980s.

The Soviet Union, incidentally, seems not to have been immune from the production downswing beginning around 1968. Mikhail Gorbachev said in June 1985 that "one cannot fail to see that since the early 1970s certain difficulties began to be felt in economic development."72

Five Centuries of War and Hegemony

Chapters 13 and 14 have focused on three major transitions in the world system, shifts from one "era" to another, in which the international political-economic system was restructured under a new hegemonic power after a period of extremely severe war.

The succession of countries playing the central roles in each of the three hegemonic wars can be summarized thus (see table 14.2):

1. The losing "hegemonic challenger" is the country or empire decisively defeated in the hegemonic war. These countries become "has-beens"—relegated to a lesser role in the future international order.

2. The new hegemonic power emerging from the war is a leader of the winning coalition in the war that survives the war with its economy intact (while that of most great powers is severely drained). These countries reign as hegemon after the war,

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71. Quigley (1966:398) says that 12 million peasants died in the agricultural reorganization that supported this rapid industrialization.

Table 14.2. Succession of Hegemonic Wars

<table>
<thead>
<tr>
<th>Role in war</th>
<th>Thirty Years' War</th>
<th>Napoleonic Wars</th>
<th>World Wars I/II</th>
<th>Eventual Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>Losing hegemonic challenger; defeated in war</td>
<td>Hapsburgs</td>
<td>France</td>
<td>Germany</td>
<td>&quot;Has been&quot;</td>
</tr>
<tr>
<td>New hegemon; emerges from war economically intact at head of winning coalition</td>
<td>Netherlands</td>
<td>Britain</td>
<td>U.S.</td>
<td>Comfortable Retirement</td>
</tr>
<tr>
<td>(Future challenger); an economically decimated member of winning coalition</td>
<td>France (Germany?)</td>
<td>Germany (Russia?)</td>
<td>USSR?</td>
<td>Future Challenger</td>
</tr>
</tbody>
</table>

then decline, and eventually take up a comfortable "'retirement'" under the shield of the next hegemon.

3. Other members of the winning coalition are economically drained by the war, despite being on the winning side, and from these ranks arise future challengers.

Challenges, it seems, are rooted in the previous hegemonic war. They start very early in each era. France's direction very soon after the Thirty Years' War, under Louis XIV, put France on the road to hegemonic challenge. The first war peak in the era (War of the Spanish Succession) already revolved around this challenge. Likewise, Germany's response to the Napoleonic wars was a nationalist upsurge and military reorganization that played a central role in the next war peak (Franco-Prussian War). And looking back to the Hapsburgs, their drive toward world empire certainly goes back more than a century before the Thirty Years' War. Thus each hegemonic challenge has taken a century to mature. It is not a sudden lunge for power, an attempted coup. It is no surprise which country becomes the eventual challenger but is clear from early in the era.

The same cannot be said of the future hegemon. A century ahead of time, it is anything but clear who will emerge on top after the next hegemonic war. The Netherlands in the early sixteenth century was firmly in the Hapsburgs' grasp. Britain after 1648 was embroiled in civil war, and although it soon emerged to challenge the

73. Who came of age in 1659.
74. Charles V was crowned emperor in 1519.
Dutch on the seas, Britain was not obviously stronger than France, the Netherlands, or Sweden. Likewise, the United States after the Napoleonic wars was just emerging as an independent nation, had yet to face its own civil war, and hardly looked like the next world leader.

These patterns suggest new perspectives on the contemporary world situation. Currently, the United States seems to be in an early stage of hegemonic decline. The next hegemon is indeed unclear—China? Japan? A Western European consortium? But, if history is a guide, the “challenger” would be the Soviet Union. This suggests that, for at least the next few decades, the issues of U.S.-Soviet balance, cold war, detente, and related matters will remain central to world politics and to the now-imperative effort to avoid the recurrence of great power wars. But these are issues for the next chapter, in which I take up the relevance of long cycles—and of history—to the rapidly changing world of the present and future.

75. China, in my view, best fits the profile of a possible successor to hegemony. It “got on its feet” after the last hegemonic war, and its population and resource base are large and young. I can imagine possible paths of rapid Chinese industrialization in a new “technological style” (bypassing oil-steel industrialization in favor of silicon and plastics) that could eventually make China economically preeminent. To actually succeed to hegemony in the traditional manner, however, would require China to remain insulated from a U.S.—USSR hegemonic war, which is highly problematical. Thus, as I argue in chap. 15, hegemony itself will more likely give way to a new kind of world order.