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## **Part Three: HISTORY**

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## CHAPTER THIRTEEN

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### Continuity and Change: 1495 to 1648

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**T**he methodology of Part Three differs from either the hermeneutical analysis of Part One or the quantitative analysis of Part Two. This part relies on historical interpretation and is more overtly adductive. It turns from abstract, statistical, and theoretical understandings of long cycles to their historical instantiation in the European-centered world system over the past five centuries. Hegemony cycles, unlike long waves, seem to be completely inaccessible to quantitative statistical analysis.

In this chapter I lay out the framework for, and begin to elaborate, a new synthesis of historical material. I adduce a dating scheme for hegemony cycles based on three hegemonic wars and the corresponding rise and decline of three hegemonic powers—the Netherlands, Great Britain, and the United States. I discuss the idea of “structural history” and give the background of European political economy around 1500 (the starting point for the study). I then present a historical reconstruction of the first era (the first hegemony cycle), lasting through the Peace of Westphalia in 1648. The historical period since 1648 is left for chapter 14.

#### Hegemony and Hegemonic War

Hegemony essentially consists of being able to dictate, or at least dominate, the rules and arrangements by which international relations, political and economic, are conducted (see chapters 5 and 6). Economic hegemony implies the ability of one country to center the world economy around itself. Political hegemony means being able to dominate the world militarily.

Marxist analyses tend to emphasize the economic side of hegemony. Wallerstein (1974, 1980) and Braudel (1977, 1984) give predominant emphasis to the economic sphere, with less emphasis on war. In Wallerstein’s framework, the “core” dominates the “semi-periphery” and “periphery,” imposing unequal terms of exchange and thus extracting surplus value (wealth) toward the core, where capital accumulation is concentrated (see chapter 1). A hegemonic power is a core country that temporarily dominates all other core powers economically (Wallerstein 1983).

Braudel’s (1984:27–39) definitions are similar but narrower. He stresses the single city at the center of every world-economy around which is a narrow “core” (the

country containing the central city), a broad “middle zone,” and a large periphery. Dominant cities do not remain dominant forever; they replace one another in sequence. But there is room for only one center at one time; the rise of one means the downfall of another, according to Braudel.

More traditional Marxists also see hegemony in economic terms but concentrate on the core itself rather than core-periphery relations. Mandel (1980:31) sees hegemony within the core as necessary for capitalist stability: “Only a high degree of international concentration of economic and political-military power makes it possible to impose on the capitalist world currently pragmatic solutions in times of crisis.”

Realist and peace-research approaches focus more on military than economic hegemony. Organski (1958) stresses the pyramidlike structure of international power—one country at the apex and others trying to maintain or improve their position in the political hierarchy. Modelski (1978) emphasizes military capabilities and sees hegemony in terms of preponderant “global reach” capabilities.

In my approach, consistent with my theory of the reciprocal influence of war and economics (chapter 12), the military and economic aspects of hegemony receive equal billing. I am particularly interested in the connections between the two aspects.

In my conception of the hegemony cycle, countries rise and decline in relative position within the hierarchical international structure in the core.<sup>1</sup> The hegemony cycle is defined by the succession of countries that occupy the very top position in the international hierarchy. At the end of each hegemony cycle, and the beginning of the next, is a period of very intense great power war, out of which emerges a new hegemonic power with a predominant share of world capabilities (economic and military). This war period ends with a restructuring of the world order around the new hegemonic power. I refer to this war period as “hegemonic war.”<sup>2</sup>

The overwhelming predominance that emerges at the end of, and as a result of, a hegemonic war is temporary. Gradually other powers rebuild from the war, and the gap begins to narrow.<sup>3</sup> New technologies underlying the hegemonic power’s economic advantage are imitated in other countries. Countries rebuilding from war incorporate a new generation of technology, eventually allowing competition with the hegemonic country. For these reasons, each period of hegemony gradually erodes. Recurring wars, on several long wave upswings, eventually culminate in a new hegemonic war,<sup>4</sup> bringing another restructuring of the core and a new period of hegemony.

Each new hegemonic power emerges from the leading position in the winning

1. Position indicates how much power a country has to “get its way” in international affairs and to benefit from international arrangements.

2. Other terms that have been used are reviewed in chap. 6. In my opinion, “hegemonic war” (Farrar) best gets at the special nature of these wars in revamping the world order. “World war” (Wallerstein) or “global war” (Modelski) could imply only a war of global scope (in which case other wars like the Seven Years’ War should be included). “General war” (Toynbee, Levy) implies the participation of all great powers, again suggesting the inclusion of other wars. “Systemic war” (Midlarsky) may connote a change in system structure but can also be taken to mean a war of systemwide scope.

3. See Organski and Kugler (1980) on the “phoenix factor.”

4. The connection between declining hegemony and hegemonic war (where and how a hegemonic war occurs) would seem to be the most unpredictable part of the cycle.

coalition in hegemonic war. Among the winners are countries heavily damaged by war and others relatively insulated from war damage. The new hegemonic power comes from the latter group.<sup>5</sup> After each hegemonic war, the winning coalition has fragmented. The next challenger has come from within the ranks of the winning coalition in the last hegemonic war.

This outline of the hegemony cycle has been cast in general terms and is largely consistent with both Wallerstein's (1983) and Modelski's (1978) approaches. However, when it comes to describing the historical instances of hegemonic war and hegemony—dates and countries—the two approaches diverge (see chapter 6).

### *The Historical Dating of Hegemony Cycles*

Wallerstein's dating concentrates on war periods about 150 years apart, which have recurred three times since 1618. Modelski stresses war periods about 100 years apart, recurring five times since 1500. I have chosen Wallerstein's datings as the basis of hegemonic wars and periods of hegemony in the scheme adduced below. There are a number of reasons for this choice.

First, of course, this dating of hegemony cycles fits with the shifts in economic hegemony described by both Braudel and Wallerstein. Maddison (1982:29) comes to parallel conclusions in terms of economic leadership in the world: "Since 1700 there have been only three lead countries"—the Netherlands until the 1780s, then Britain until around 1890, then the United States. He documents these changes in terms of productivity (gross domestic product [GDP] per worker-hour)<sup>6</sup> and elaborates them with interpretive historical narrative for each case.<sup>7</sup>

It seems to me that three is indeed the correct number of identifiable shifts in world leadership since the sixteenth century and that even Modelski acknowledges this (but reconciles it with his dating by having two British cycles in a row). While different scholars date the shifts at somewhat different points, they line up more or less with Wallerstein's dates.

These three shifts also line up with the most cataclysmic wars. Looking back over the past five centuries, three great war peaks stand out above all the others:

The Thirty Years' War, 1618–48

The French Revolutionary and Napoleonic wars, 1793–1815

World Wars I and II, 1914–45

These are empirically (see chapter 11) the most severe wars,<sup>8</sup> corresponding with the highest peaks of inflation and hence presumably the most "costly" wars. They also

5. The effect of a war front passing through territory (from mercenary days on) is devastating. A central realist principal of war is to try to keep war off one's own territory (Machiavelli).

6. GDP per worker-hour expressed in 1970 \$U.S.: Netherlands falling from 0.35 in 1700 to 0.33 in 1785; Britain rising from 0.32 in 1785 to 0.38 in 1820, to 1.00 in 1890; U.S. rising from 1.06 in 1890 to 8.28 in 1979 (Maddison 1982:30).

7. Maddison suggests (pp. 40–42) that the continuing erosion of U.S. productivity relative to Europe and Japan will likely cause technical leadership to "pass from the U.S. to a collective grouping."

8. Respective battle fatalities are 2.1 million, 2.5 million, and 21 million. Only the War of the Spanish Succession at 1.2 million and the Seven Years' War at 1 million come close to these levels.

seem to divide the war data into eras marked by shifts in the nature of war recurrence (chapter 11). From my perspective, the crucial issues are how costly a war period was, how disruptive it was of the world economy, and what effect it had in restructuring relations among the core countries. From this perspective, the three wars included are the most important landmarks on the historical map.

Each of these three wars marks a transition, a transformation of world politics and its reconstitution on a new level of development. While slow, underlying change takes place all the time and transitions from one era to another are long and drawn out in many ways, one can still identify the most visible, most intense phases of these transitions as residing in the three hegemonic war periods, 1618–48, 1793–1815, and 1914–45.

At the end of each of these three war periods, a new configuration of international politics at the core of the world system emerged. The Treaty of Westphalia, the Congress of Vienna, and the arrangements of 1945 each revamped the hierarchical system of great powers, coronating a new hegemonic power at the head of a fresh world order. Each war period thus brought a political restructuring of the core and a realignment of economic relations among core countries (winners and losers, new trading spheres, differential costs of the war to participants, bankruptcies, reparations, and so forth).

This dating of hegemony cycles also resonates well with the work of several other scholars. In chapter 5 I mentioned Quincy Wright's dating of eras in military evolution: 1450–1648; 1648–1789; 1789–1914; and 1914–. Again, while the specific dates vary, the overall scheme corresponds with the dating of Wallerstein rather than Modelski.

Tilly (1975:46), in discussing the role of wars among established states in creating new states, lists the most “dramatic demonstrations” of this as the Treaty of Westphalia, the Congress of Vienna, and the Treaty of Versailles.<sup>9</sup> These major reorderings of the international system again correspond more closely with Wallerstein's than Modelski's dating of hegemony cycles.

The division of time into these eras also resonates with Doran's (1971) study of the “assimilation” of losing countries after drives for European supremacy. His list of such drives is: the Thirty Years' War, the War of the Spanish Succession, the Napoleonic wars, and World Wars I and II. However, he finds the Treaty of Utrecht (1713), which ended the War of the Spanish Succession, to have been a “failure” of assimilation (p. 110), allowing France's drive for supremacy to resume later. Leaving this case aside, then, the remaining wars are the same “big three.”

The importance of these three wars is reflected in evidence from prices as well. A graph of wheat prices for most of the past five centuries (Valley Camp Coal Co. 1942) shows that the greatest inflationary peaks accompany the same three hege-

9. In general, however, states went out of rather than came into existence: from 1500 to 1900 the number of independent political units in Europe dropped from 500 to about 25 (Tilly 1975:15). I would add that the world order born around 1945 (especially the United Nations and the decolonization process) led to dramatic additions to the membership of the state system.

Table 13.1. Summary of Historical Hegemony Cycles

Era	Dates	Initial hegemon	Eventual challenger	Culminating hegemonic war	Restructuring treaty	Evolution of world system	Military evolution
1	1350(?) –1648	Venice <sup>a</sup>	Hapsburgs	Thirty Years' War 1618-1648	Westphalia 1648	Expansion of periphery; increased surplus finances wars to consolidate core nation-states.	Mercenary wars
2	1648– 1815	The Netherlands	France	Fr. Rev. & Napoleonic Wars 1793-1815	Congress of Vienna 1815	Balance-of-power system in core; consolidation of periphery.	Professional wars
3	1815– 1945	Great Britain	Germany	World Wars I and II 1914-1945	Yalta <sup>b</sup> 1945	Industrialization; railroads & steamships; dividing up the remaining periphery.	National wars
4	1945–	United States				Shift from Europe to Pacific center; nuclear war; space; information age.	Technological wars

a. Hegemony in 1st era is unclear but seems to predate 1495.

b. Formal and de facto arrangements following World War II (Yalta, United Nations, Bretton Woods, etc.).

monic wars. Warsh (1984:77) notes that the price data of Phelps-Brown and Hopkins (1956) resembles “a cross section of a set of steps.” Major price “explosions” have taken place three times: once in the late sixteenth century, once in the late eighteenth century, and once in the mid- to late twentieth century. These correspond with Braudel’s (1984:77) “logistics,” described in chapter 3, and again divide the five centuries since 1500 at roughly (though not exactly) the same places.

The adduced historical dating and characteristics of hegemony cycles are summarized in table 13.1. The *first cycle* is dated from sometime before the start of this study in 1495 and may go back to a period of Venetian hegemony in the fourteenth century, already in decline before 1495 (see below).<sup>10</sup> The date of 1350 as a possible start for the first cycle is taken from Braudel’s dating of “logistic” price movements, in which the corresponding dates are 1650, 1817, and 1974.<sup>11</sup> In the part of this cycle after 1495 hegemony is unclear and there are disagreements between Modelski, Wallerstein, and Braudel about which power was dominant (see chapter 6). Eventually, the first cycle culminated in a challenge for hegemonic position by the Hapsburgs that ended in the Thirty Years’ War, in which the Hapsburgs were defeated and the Netherlands succeeded to hegemony.<sup>12</sup> The *second cycle* began

10. The possibility of Venetian hegemony is outside the scope of this study. If it existed, it seems to have been more a commercial than a military hegemony.

11. Braudel marks 1974 with a question mark.

12. Dutch military hegemony was quite short-lived, apparently resting on a temporary advantage gained from the weakening of competitors by war (see chap. 14).

with the ascendancy of the Netherlands in the Thirty Years' War and continued through the decline of the Netherlands and the rivalry of France and Britain for succession. The era ended with the French drive for hegemony in 1793–1815, its failure, and the resulting restructuring of world order around British hegemony in the Congress of Vienna in 1815. Britain dominated the early decades of the *third cycle* and declined more slowly than the Netherlands had. The third era culminated in the German hegemonic challenge in World Wars I and II and the succession of the United States to hegemony after German failure. The *fourth cycle* began with U.S. hegemony and has continued, to date, through the initial stages of partial U.S. decline.

*The Secular Evolution of the World System*

I refer to each hegemonic cycle as an era in recognition of the secular evolutionary change from one to the next. The very long-term evolution of the world system encompasses the decline of the Mediterranean “world” (Braudel 1972) and the rise of Europe as the most advanced economic and political region, the development of capitalism and of the nation-state, and the eventual “take-off” of industrial growth in Europe. Europe comes to embrace the entire world in its economic and political reach, dividing up the rest of the world’s territory into colonies and spheres of influence. And eventually, Europe itself declines with the rise of the superpowers outside Europe and the loss of European control over the periphery (Barraclough 1964).

Wallerstein sees the rise of capitalism as starting around 1500 and as rooted in expanded world trade through which Europe extracted the world’s wealth toward the center. This is not a consensual approach among Marxists. Brenner, for instance, likens Wallerstein’s approach to that of Adam Smith, not Karl Marx (see Thomas and Denmark 1985). Whereas Wallerstein sees international trade as crucial in the development of capitalism, Brenner sees the impetus coming from domestic sources within the advanced countries.<sup>13</sup>

The issue of when and why capitalism began lies outside the scope of this book. I assume merely that at my starting point of 1495, capitalism and nation-states were beginning to emerge, and the European system was taking shape with the decline of Venice and the rise of Portugal, Spain, Austria, France, and England.

During the first hegemony cycle, before 1648, the evolution of the world system was characterized by a long steady process of expanding the reach of the Eurocentric system, extracting economic surplus from the periphery, and using that wealth as

13. Wallerstein, generally following Sweezy’s line, sees the transition from feudalism to capitalism arising from trade: “the provision of luxury goods (and weapons) via trade engendered in feudal lords a need to increase their incomes. This need manifested itself in the search for more efficient forms of accumulation” (Thomas and Denmark 1985:2). Brenner, following Dobb’s general approach, stresses internal changes in productivity, innovation, and worker alienation as driving the transition from feudalism to capitalism. Wallerstein defines capitalism in terms of “production for exchange in a market,” while Brenner argues that the commodification of labor power, not just the trade-based division of labor, must be central to the definition (Thomas and Denmark 1985:3). Thomas and Denmark (1985) review this debate in the context of Polish history in this era and come out generally on Wallerstein’s side.

well as Europe's own surplus production to finance wars between emerging nation-states (see table 13.1, right columns). The culmination of this stage came in the formalization of the nation-state system in the Peace of Westphalia, in 1648. The stage of military evolution in this first cycle was one of wars fought by paid mercenaries on behalf of monarchs.

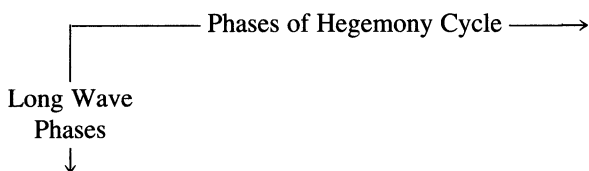
The second era was characterized by a multipolar balance-of-power system in the core, which led to the most regular recurrence of great power wars on long wave upswings in any era (see chapter 11). Europe's hold on the periphery was further extended, and its control was consolidated, in this era (at least until Britain's loss of America near the end). The military technology in this era was characterized by large, trained, professional armies.<sup>14</sup>

The third era was initially dominated by Britain and was characterized by the industrialization of the core at a rapid pace. Railroads and steamships opened up the world to European penetration on a new scale, and as British hegemony slowly declined, the great powers competed to colonize the remaining peripheral areas of the globe. Industrialization also changed the nature of war, ushering in national wars that mobilized an entire national economy toward sustaining mechanized warfare.

The fourth era marks a very different stage of development for the world system. Europe's conquest of the world ultimately drew the center of power away from Europe—leaving Europe itself split in half. This is an era of technological wars fought by small groups operating expensive weapons at large stand-off distances. New developments in world politics include the presence of nuclear weapons, the extension of global reach into space, and the effects of an information revolution still in progress.

### *Hegemony Cycles and Long Waves*

Given the above dating and overall outline of hegemony cycles, then, how do those cycles relate to long waves? I find the connection between the causal dynamics of these two cycles—long waves and hegemony cycles—to be weak. They are not synchronized, and there is no exact number of long waves that “makes up” a hegemony cycle. Rather, I see the two cycles as playing out over time, each according to its own inner dynamic but each conditioned by, and interacting with, the other. The world system can thus occupy, in rough terms, any position in a two-dimensional space at a given time, depending on the phases of the two cycles (see chapter 15):



14. In each era, the hegemonic war initiating the era seems to be the instance where the new stage of military practice emerges in force. Professional armies emerged in the Thirty Years' War, national armies in the Napoleonic wars, and technological armies in World Wars I and II (submarine, air, nuclear).



The path of the world system may be seen as moving repeatedly from top to bottom in this space, while more slowly drifting toward the right (weak hegemony) and then suddenly pulling back to the left (hegemonic war and renewed hegemony).

Each hegemony cycle contains several long waves, but not a fixed number. Each of the long waves *within* the hegemony cycle ends in a war peak<sup>15</sup> that readjusts the international power structure *without* bringing in a new hegemony.<sup>16</sup> The treaties marking the end of each long wave are as follows (war peaks ending a hegemony cycle are marked with arrows):<sup>17</sup>

	1529	Paix des Dames
	1559	Cateau-Cambresis
	1598	Vervins
→	1648	Westphalia
	1713	Utrecht
	1762	Paris [end of Seven Years' War]
→	1815	Congress of Vienna
	1871	Frankfurt [end of Franco-Prussian War]
	1920	Versailles
→	(1945)	(Yalta, etc.) [before long wave peak]
	1970s	Helsinki, SALT I/II(?)

In the first era, to 1648, the war peaks coinciding with long waves all concerned north-south competition for succession to hegemony, culminating in the Thirty Years' War. In the second era, to 1815, the war peaks all concerned French-British competition, culminating in the Napoleonic Wars. In the third era, to 1945, the war peaks concerned Germany's drive for hegemony, culminating in World Wars I and II.

Overlaid on the long wave is the longer-term sequence from hegemony to hegemonic decline to hegemonic challenge to hegemonic war. The two are loosely synchronized in that hegemonic war tends to occur on the "war upswing" of the long wave. But the synchrony is imperfect, as World War II shows.

### Toward a Historical Synthesis

The above pages have laid out the general concept of the hegemony cycle, its historical dating, and its interaction with the long wave. I will now move toward using the hegemony cycle as a framework for looking at history.

15. To recap, economic growth creates surplus, providing the revenue base for great powers to wage war (a costly activity). War, however, drains this surplus (away from reinvestment, which means growth) and disrupts the stable growth of production, undermining the economic base on which war depends. Thus the world system lurches forward in long waves with this sequence: prosperity-war-stagnation-peace.

16. All great power wars affect relative positions in the international "pecking order." Hegemonic wars determine the top position in that order.

17. Braudel (1972:897-98) gives these dates up through 1648. It would be interesting to do a comparative study of all nine treaties.

### *Structural History*

The development of world political economy may be seen as an intersection of processes operating on four time scales:

1. Very long-term evolution—the development of the world system and its changing geographical size and composition.
2. Hegemony cycles—the rise and fall of successive international orders.
3. Long waves in economics and war at the core of the world system.
4. Day-to-day and year-to-year change, including short cycles, events, and random or local influences.

My historical interpretation emphasizes the first three levels of change: secular evolution, hegemonic cycles, and long waves. The fourth level of change—people, events, locations, and dates—will be largely ignored.

This “structural history,” pioneered by Braudel,<sup>18</sup> emphasizes the systemic level of analysis, especially the level of the world as a whole, and examines the traces of long-term forces of change in society.<sup>19</sup> Those who study history, Braudel argues, help society to develop and refine its collective self-temporalization—how we see our society in time. “World time” is Braudel’s (1984:17) term for time “experienced on a world scale,” which governs certain realities and excludes others.<sup>20</sup>

For Braudel, structural history means not only a new time scale but a change in focus, from the political to the economic/social/cultural aspects of history. His interpretations tend toward “geohistory” in which politics is “secondary to other historical ensembles of action” and the emphasis is on “a space ecologically articulated rather than on a nation politically expressed” (Kinser 1981:103). While shifting the focus away from the state and “politics,” Braudel (1984:19) also steers clear of the approach in which economics drives all other aspects of society (economism):

It would be a mistake to imagine that the order of the world-economy governed the whole of society. . . . An economy never exists in isolation. Its territory and expanse are also occupied by other spheres of activity—culture, society, politics—which are constantly reacting with the economy.

Reality is a totality, the “set of sets,” in which each set (economics, politics, culture, society) “extends beyond its own area” (Braudel 1984:45).<sup>21</sup>

18. Kinser (1981) discusses Braudel’s structural history.

19. *Structure* refers to the deeper forces of social change and *conjuncture* to the actual course of history. One can look at long-term change (structure), medium-term change (conjuncture), or very rapid change, “the shortest being the easiest to detect” (Braudel 1984:17).

20. Ruggie (1985:8) quotes Jacques Le Goff to the effect that history of “*la longue durée*” means not only lasting a long time but “having the structure of a system.”

21. Wallerstein’s (1979:673) view of long cycles resonates with “structural history.” He sees cyclical patterns as a “central part” of “long-term, large-scale social reality.” “To seize this reality, we need data over wider space and longer time, and we have to search first of all for the continuities.”

*The Geopolitical Economy of Europe*

The political economy of Europe is rooted in the physical geography of Europe, a huge peninsula surrounded by water on three sides. The rivers—the central inland arteries for trade—run from the center of the peninsula outward toward the water on every side (see fig. 13.1). Trade took place between the major cities up and down the long coastline of Europe and up and down the rivers that connected the inland areas to that coastline. There was also trade with North Africa and with the Middle East, the latter connecting with the land routes to Asia.

The areas of Europe that would become great power nation-states are located circularly around the continent, each with its river basins and ports (fig. 13.2). Some twelve countries played a central role during the evolution of the core of the system. Each went through various political embodiments, ranging from disunified groups of political entities to nation-states to empires and so on. Some played a significant role in great power politics for only a limited period. But each of the twelve has played a major role during the past five centuries. They are, clockwise from the corner facing Turkey:<sup>22</sup>

- Austria
- Italy
- Spain
- Portugal
- France
- Great Britain
- The Netherlands
- Germany
- Sweden
- Russia
- United States } (non-European countries
- Japan } joining core in third era)

By 1500, according to Tilly (1975:18), Europe had a “cultural homogeneity” that grew out of earlier Roman unification, which had “produced some convergence of language, law, religion, administrative practice,” and so forth. Most of Europe by 1500

shared a common culture and maintained extensive contacts via an active network of trade, a constant movement of persons, and a tremendous interlocking of ruling families. A single relatively centralized church dominated the continent’s religious life, an enfeebled empire sprawled over the continent’s central sections, clutching fragments of a common political tradition.<sup>23</sup>

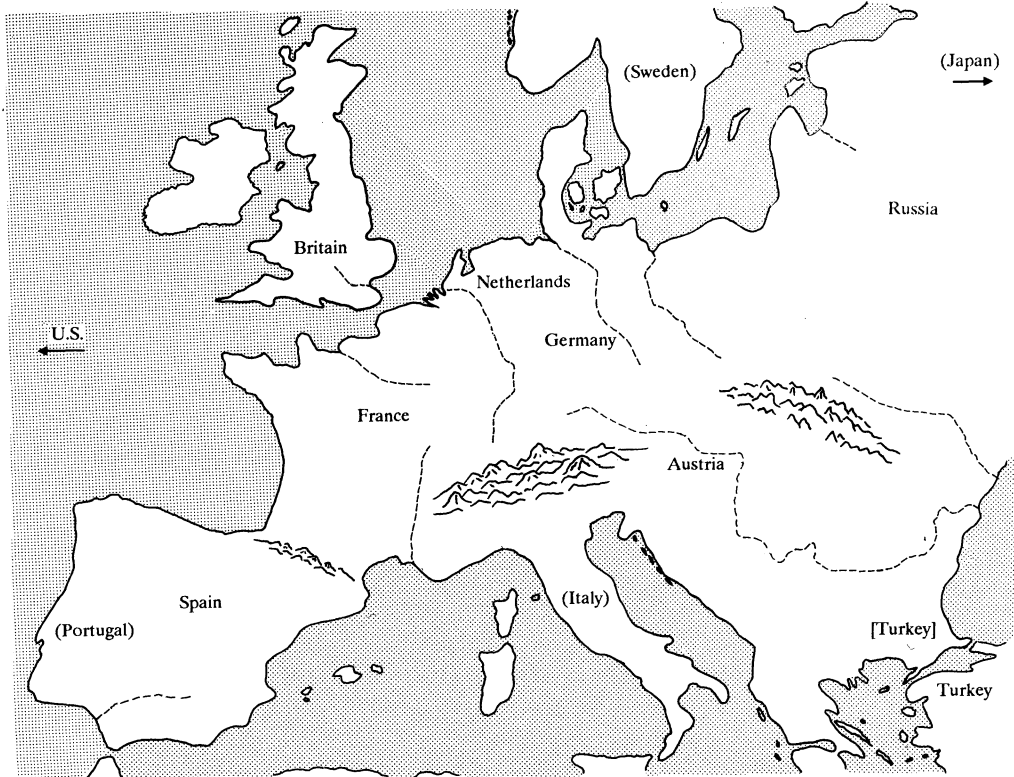
22. I exclude Turkey from the list, considering it external to Europe, although important to Europe’s development.

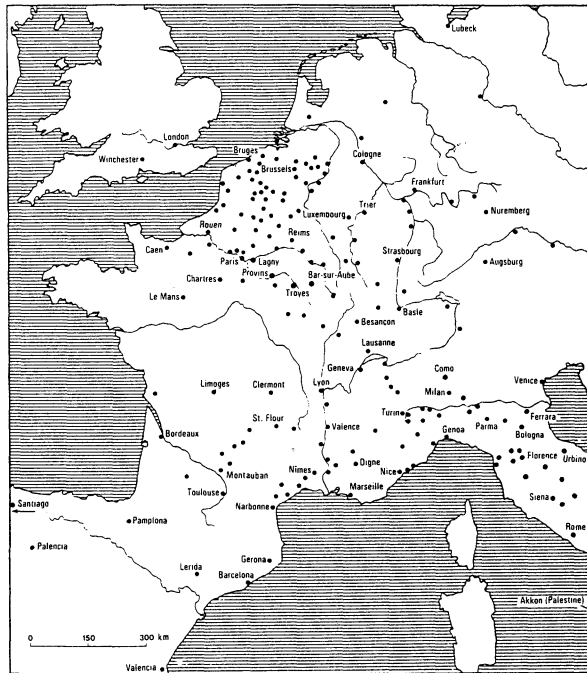
23. Wight (1977) argues that Europe went from a more unified to a less unified political system (from empire to bipolar order to multipolar order) in the early modern period.



**Figure 13.1. Europe -- Physical Geography**

**Figure 13.2. The Major Nations**



**Figure 13.3. Towns in Contact with the Champagne Fairs**

Note: Map represents twelfth and thirteenth centuries.

Source: Hektor Ammann, *Hessisches Jahrbuch für Landesgeschichte*, 8, 1958. Reprinted in Braudel (1984: 113).

Braudel (1984) describes Europe before 1500 as already a “world-economy.” By this he does not mean that the extended system centered in Europe had yet embraced the entire world but rather that it was “an economically autonomous section of the planet able to provide for most of its own needs, a section to which its internal links and exchanges give a certain organic unity” (p. 22). Boundaries between such world economies are zones that are rarely economical to cross, according to Braudel (p. 26).

### *Venetian Hegemony?*

By the end of the fourteenth century, according to Braudel (1984:119), Venice had become the central city in this European “world-economy.” Europe itself contained two “complexes” of advanced growth, one in the Northwest, centered around the Netherlands, and one in the South, centered around Italy (p. 97). Each had its own trading basin based on water routes—the Baltic/North Sea trade in the north, and the Mediterranean trade in the south.

The Champagne fairs in the thirteenth century epitomized the land trade between these two complexes (pp. 98, 111). The northern and southern clusters of towns in contact with the Champagne fairs are distinguishable already in the thirteenth century

(fig. 13.3). The trading community represented on the map follows in many respects what were to become the borders of the French nation-state. For France, however, the Champagne fairs were “the first and last time that France saw the economic centre of the West located on her soil” (p. 116). The sea trade routes linking the North Sea with the Mediterranean, as well as the overland routes linking Germany with Italy, had already (by the thirteenth century) foreshadowed the bypassing and encirclement of France that was to prevail hundreds of years later.

Braudel refers to a “Venice-Bruges-London axis,” along which the most advanced development was taking place and away from which lay more peripheral areas. At the southern end of this axis, where it intersected the Mediterranean trading area, lay the dominant city of the whole system, Venice. Venice linked this north-south trade with the east-west trade to distant countries in Asia, via the Middle East. Venice was “a sort of universal warehouse of the world” (p. 125). From the northwestern complex came textiles, and from Germany and Austria came copper and other metals. Venice’s “merchants firmly controlled all the major commodity trades in the Mediterranean—pepper, spices, Syrian cotton, grain, wine and salt” (p. 123). Most importantly, Venice had a string of outposts that formed a secure trading route to the Middle East, where goods from Europe were exchanged for goods from Asia.<sup>24</sup>

### *The Decline of Venice*

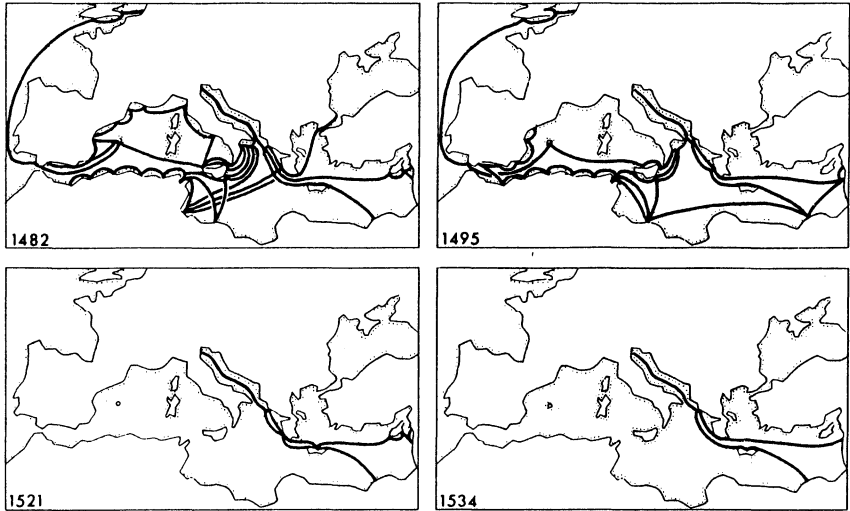
At about the time that my study begins, the end of the fifteenth century, Venice lost its position as the dominant economic power.<sup>25</sup> In just over fifty years Venetian trade routes were drastically reduced (fig. 13.4). Several factors at this time both undermined Venice and laid the basis for a new stage of competitive great power relations.

First was the development by the Portuguese of efficient sailing ships, allowing a relatively small crew to move a ship over long distances. These ships could carry cargo or cannons (or both) and thus laid open new areas of the world for conquest and economic exploitation. The Portuguese “voyages of discovery” started in 1416 and worked their way down the west coast of Africa throughout the fifteenth century, reaching the Cape of Good Hope in 1487. In 1497, Vasco da Gama sailed around the cape and reached India. Using their guns freely on ships and ports in the Indian Ocean, “the newcomers made themselves masters and before long reigned unchallenged” (Braudel 1984:139). The Portuguese expansion “culminated spectacularly in the direct shipment of pepper and spices to Lisbon.” The Asian trade was pulled out from under Venice.<sup>26</sup>

24. Venice captured Candia (Crete) in 1204, Corfu in 1383, and Cyprus in 1489. It lost Cyprus in 1572 and Candia in 1669 (Braudel 1984:89, 34).

25. It is not clear that Venice was ever hegemonic in the sense used for later cases. But the situation in 1500, in any case, resembled weak or declining hegemony.

26. China had launched its first maritime expeditions from Nanjing early in the 15th c., but in 1421 the Ming rulers moved the capital from Nanjing to Beijing to face dangers coming from the north. This created a “new landlocked metropolis . . . deep in the interior [that] began to draw everything towards it” (Braudel 1984:32), and China lost out in maritime competition.

**Figure 13.4. Decline of Venetian Trade Routes**

Note: Sketch maps summarize the decline of the system of convoys of *galere da mercato* linking Venice with Flanders, Aigues-Mortes, Barbary, the "Trafego," Alexandria, Beirut, and Constantinople.

Source: Alberto Tenenti and Carrado Vivanti, *Annales E.S.C.* (1961). Reprinted in Braudel (1984: 127).

Spain, England, and France soon followed in Portugal's path, expanding the European trading system to reach most of the coastlines and ports of the world (fig. 13.5). Spain, not surprisingly given its location, was first to follow Portugal's successes and concentrated on Latin America. The Treaty of Tordesillas in 1494 divided the world, giving Portugal all rights in Asia and in the Atlantic up to Brazil and Spain all rights in lands west of Brazil.<sup>27</sup> Britain and France, however, made sure that their exclusion did not last long, and all four countries developed colonies outside Europe.

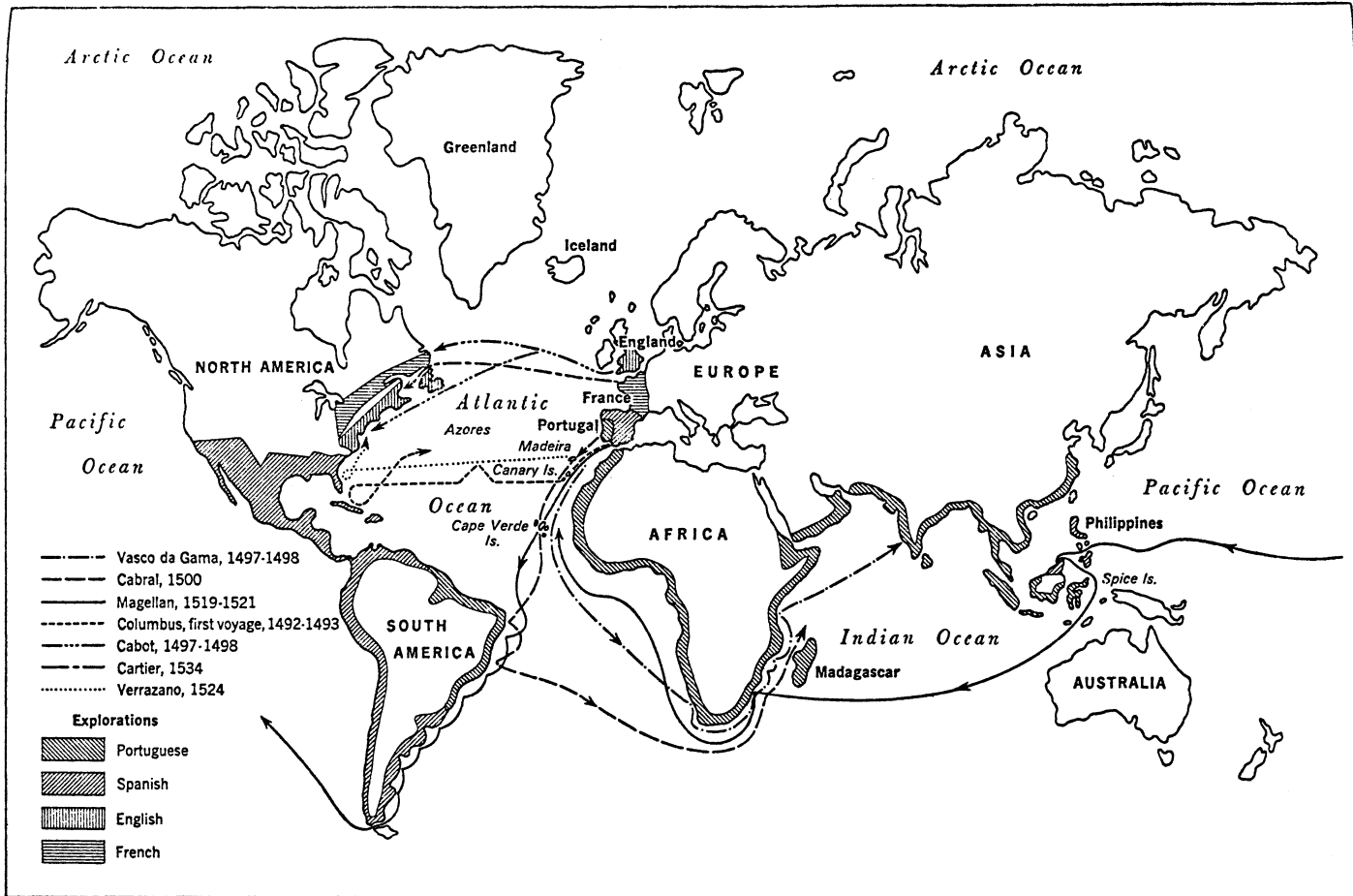
A second element of change in Europe around 1500 was the overrunning of Italian city-states by larger, territorial states—Austria, France, and Spain. These nation-states, because of their size, could concentrate more economic surplus (more revenue) in one central authority (the monarchy, the central government) than could the smaller nation-states, even the wealthy ones. They thus had bigger armies that no city-state could stand up to. To play in this league, one had to become a nation-state or risk being overrun by one.

A new style of warfare came with the new nation-states. Taylor ([1921] 1973:2) writes:

The fruit of this period of intensive cultivation of the art of war was the military science of the modern world. . . . When, in 1529, the treaty of Cambrai brought the Italian wars to a close

27. It was Portugal's bad luck that Spain, with a much smaller overseas domain, was eventually able to extract from it large amounts of gold and silver—Europe's monetary standards—and use this wealth to purchase large land-based military forces against which Portugal was helpless.

Figure 13.5. Voyages of Discovery, circa 1500



Source: Clough (1968: 133) by permission of the McGraw-Hill Book Company.



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there had already appeared in Europe such modern phenomena as the principle of the balance of power, trained standing armies, and competitive armaments.

Howard (1976:20) describes the army of Charles VIII of France as “the first ‘modern’ army,” made up of soldiers paid from a central treasury and organized in three “arms”—cavalry, infantry, and artillery—deployed for mutual tactical support.<sup>28</sup>

A third noteworthy element of the period around 1500 was the crystallization of the theory of *power politics* in the writings of Machiavelli. The practice of Machiavellian power politics has been at the heart of the great power system from that time until the present. I will touch on this again in chapter 15.

### The First Era (1495)–1648

The first hegemonic era begins before 1495 and lasts through the end of the Thirty Years’ War in 1648. It is characterized by protracted competition between northern and southern European countries.

#### *Hegemonic Decline*

I pick up the first era in 1495 at a time of weak hegemony. The economic decline of Venice was in full swing. It is perhaps a good indication of weak hegemony that scholars disagree about what country was dominant after 1495. Modelski claims that Portugal, by virtue of its dominance of long-distance sea trade and naval capabilities, was the “world leader” until around 1579–1609. Braudel, however, argues against Portugal and states that the economic center of the European world economy shifted to Antwerp and then to Genoa in this period. Wallerstein (1980:64) argues against considering any power hegemonic at this early point but calls Spain the “dominant naval power”—directly contradicting Modelski.<sup>29</sup> Despite these disagreements, it is clear that the early part of this era saw the displacement of Venice and the rise of a Portugal/Antwerp combination (but not to the exclusion of Spain, Austria, France, the Netherlands, and England, which also were rising).

As the era progressed, a grand competition emerged for predominance between the southern and northern European countries. Several deep factors worked against the south and in favor of the north, in this rivalry. These included industry, trade, and war.

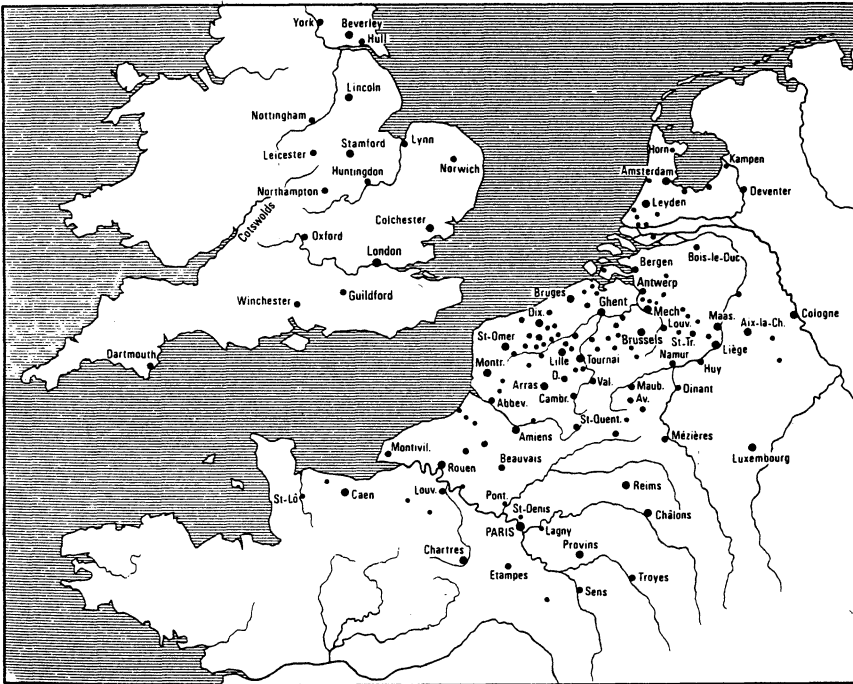
#### *North-South Industrial Competition*

Three industries predominated in Europe in this era: shipbuilding, textiles, and mineral extraction (Wallerstein 1980:16).

28. Howard (1976:21) notes, however, that the transition was gradual. In the early 16th c. “warfare still consisted of personal quarrels between individual princes over rights of inheritance, and not in any sense conflicts between states, let alone nations.”

29. By 1600 (nearing the end of the era) Wallerstein (p. 37) locates the “core of the European world-economy” in “northwest Europe”—the United Provinces, England, and France.

Figure 13.6. Textile Industry in the Northern "Pole"



Note: Map indicates the cluster of textile workshops, from the Zuyder Zee to the Seine valley, before 1500.

Source: Hektor Ammann in *Hessisches Jahrbuch für Landesgeschichte*, 8, 1958. Reprinted in Braudel (1984: 97).

Shipbuilding flourished all along the Atlantic coast (Portugal, Spain, France, the Netherlands, England), but increasingly through the period the advantage in this industry shifted to the Dutch (Wallerstein 1980). By 1570, the Dutch had developed a new merchant ship, the flute, which could operate with a 20 percent smaller crew on long journeys—a significant innovation in an industry where labor costs were the single greatest expense (Braudel 1984:190).

The textile industry had also been concentrated in the north (the Low Countries and southern England) since before the fifteenth century (see fig. 13.6). The “largest single industrial agglomeration in Europe” by the seventeenth century was the textile industry at Leiden in the Netherlands. The Netherlands textile industry in turn depended on English wool.<sup>30</sup>

Thus productive advantage in both shipbuilding and textiles was shifting to the Netherlands and England in this era. In addition, industrial production in England was beginning to expand rapidly. Braudel (1984:552), after Nef, calls 1560–1640 the “first British industrial revolution.” Braudel attributes this British advance in

30. England made efforts throughout this era to divert wool from raw export to domestic textile production in order to export cloth instead of wool (Glamann 1974:501).

industry to a fuel switch from scarce wood to abundant coal and to the enlargement of British home markets in the sixteenth century due to population growth and growing agricultural income. The switch to coal meant that “one way or another, coal was introduced to glassmaking, to breweries, brick-works, alum manufacture, sugar refineries and the industrial evaporation of sea-salt. In every case, this meant a concentration of the workforce and inevitably of capital” (p. 553). Thus large-scale manufacturing emerged earlier in Britain than in other countries that had larger timber resources.

The third major industry of Europe, mineral extraction, was centered in the northeast—in Germany and, to a growing extent, Sweden—where copper, silver, and other metals were mined. The German silver mines were overwhelmed in the course of this era with silver and gold from the Americas, imported to Europe by Spain and then by Portugal. Copper, however, was used by the Hapsburgs in the sixteenth century and by Sweden in the seventeenth as an export product by which to finance war. Glamann (1974:490) calls copper “a key to much of the great-power politics of Europe.” Copper had “high strategic value” because it was used to make bronze cannons. Virtually all the copper in international trade in the sixteenth century came from three producing districts in Central and Eastern Europe (Glamann 1974: 491).

Copper remained important throughout this era, but iron cannons gradually replaced bronze ones (Wallerstein 1980:101). Cipolla (1965) dates the innovations in cannon production as follows:

- 1530–60 Wrought iron
- 1560–80 Cast bronze
- 1580– Cast iron

By the end of the era, the switch to cast iron gave great advantage to Sweden with its advanced iron production (when combined with imported Dutch entrepreneurship and technology).<sup>31</sup>

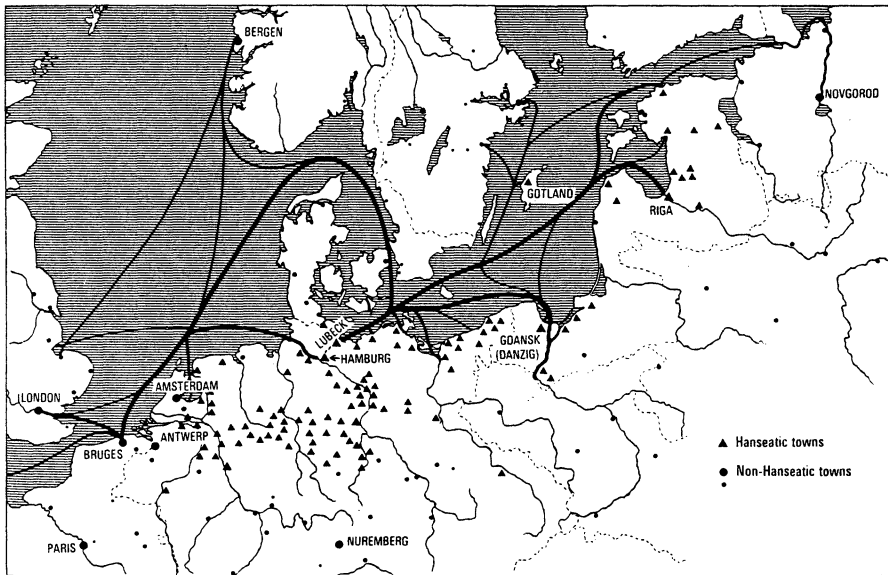
### *The Baltic Trade*

Also strengthening the north was access to the Baltic trade, which became crucial in this era as a source of food and wood. Grain was grown for export in Eastern Europe and shipped via the Baltic to areas that were not self-sufficient in grain, including the Mediterranean.

Economics in this period centered around agricultural production, especially the production of grain. As Braudel (1984:84) put it, “wealth in the sixteenth century meant the accumulation of sacks of grain.” Bulky and heavy, grain was particularly suitable for long-distance transport by water (Glamann 1974:455). The Baltic taps four rivers—the Oder, the Vistula, the Memel, and the Duna—that “reach deep into

31. Exports of cast-iron cannon from Sweden increased from 20 to 1,000 metric tons between the 1620s and 1640s, during the Thirty Years’ War (Sella 1974:388).

Figure 13.7. Baltic Trade Around 1400



Note: Map indicates trade of the Hanseatic League in about 1400.

Source: F.W. Putzger, *Historischer Weltatlas* (1963): 57. Reprinted in Braudel (1984: 105).

Reprinted by permission of Cornelsen-Velhagen & Klasing, Berlin.

the heartlands of central Europe,” where climate and geography favor grain production, and that hence “can tap the agricultural surpluses of a very extensive area” and “provide inexpensive water transport” to move these to the Baltic (Miskimin 1977:58). Thus the Baltic was “the granary of northern Europe” (Glamann 1974: 441). Poland had gained secure access to the Baltic by conquering Danzig in the war of 1454–66, and thereafter grain exports through Danzig increased sharply.<sup>32</sup>

The Netherlands developed agricultural productivity but had little land for a large population and hence depended on grain imports in order to feed its population.<sup>33</sup> For the Low Countries, the Baltic trade was the “mother trade,” carrying imported grain. The Dutch called the grain trade “the source and root of all trade in this country” (Glamann 1974:457). Already in the 1490s, Dutch ships formed a majority of those passing through the Baltic Sound, the Dutch having pioneered this route to bypass the sea–land route via Lubeck and Hamburg (Glamann 1974:442) (see fig. 13.7). The main terminal for Dutch ships in the Baltic was in Danzig (Gdansk), at the head of the Vistula River (Glamann 1974:457–58). The Baltic region was also a

32. From about 150,000 bushels annually to about 500,000 by 1500, 3 million by 1560, and a peak of about 6 million by 1618–48 (Thomas and Denmark 1985:13).

33. Verlinden, Craeybeckx, and Scholliers ([1955] 1972:60) argue that the dependence of the Low Countries on imported grain in the 1560s was as low as 13% of the total, which was tolerable except in bad harvest years. But even in moderate harvest years “the least threat of a bad harvest or a ban on shipping in the Sound would result in hoarding and speculation on the part of wholesalers.”

source of salt herring and of cattle, which were raised in the Eastern European countries and moved westward overland.<sup>34</sup>

In addition to grain, Eastern Europe produced wood for export. Wood played a key role as both a fuel and a building material, the latter particularly as seaborne shipping took off in this era. The fuel problem affected different countries differently. In England, as mentioned above, by the mid-sixteenth century wood had already become scarce and costly, forcing a fuel shift away from wood and toward coal. In the Netherlands, peat was a major fuel, being shipped downriver from the inland areas to the coastal cities (see Zeeuw 1978). In France, wood was more plentiful.

Perhaps more important than the use of Baltic wood for fuel was its use in construction, particularly shipbuilding. England was a major importer of Baltic timber for this purpose. Spain also came to rely on Eastern Europe for timber and other naval supplies.

### *The Asia and America Trade*

Most trade in this era was between adjacent regions; the volume of trade dropped off as the distance increased. The most profitable trade, however, and hence a trade that played a disproportionate role in the development of the core despite its small volume, was the long-distance trade—particularly the Asia trade.

The Asia trade centered on the exchange of precious metals, primarily from Germany (and later Latin America), for pepper and spices primarily from India and the East Indies. Pepper was one of the first goods imported from outside Europe to reach the poorest classes in Europe (it was used to make old meat palatable) and hence had “the character of an article of mass consumption” (Glamann 1974:475). The East Indies also produced gold and tin for Europe.

As mentioned above, Portugal captured the Asia trade from Venice early in the era, using the sea route around the Cape of Good Hope. But the pepper and spice trade by sea from Asia was an uncertain proposition throughout the sixteenth century, triumphing decisively over the land route only in the seventeenth century (Glamann 1974:477). The Portuguese depended on a string of bases that controlled access to the Persian Gulf and other routes in order to block trade across the Middle East and to protect its own trade around Africa (Glamann 1974:480). The Turks contested these bases in the 1530s to 1550s. In 1586–91, only about two-thirds of the shipments from Goa reached Lisbon (Glamann 1974:477). Again in the 1630s supplies of pepper to Europe dropped, especially with the Dutch blockade of Goa around 1636–45 and their capture of Malacca in 1641.<sup>35</sup>

The second important long-distance trade in this era was the shipment of silver and gold from South and Central America to Spain and Portugal, which was supported by

34. On Eastern European production, see Wallerstein (1980:133).

35. All three instances—the 1540s to 1550s, the 1580s, and the 1630s to 1640s—were on long wave upswing periods. The disruption of imports from Asia may have contributed to price inflation in Europe in these periods. Extreme pepper prices in 1639–40 (during the Thirty Years’ War) caused an upsurge of imports, and by 1652 (after the war) “Europe was glutted with pepper” and prices dropped (Glamann 1974:485).

the slave trade from Africa to America, largely controlled by the Portuguese at the outset.

Where did these patterns of industry and trade leave Spain and Portugal? They were not mining centers, and they fell behind on cannon production by the late sixteenth century, becoming dependent on imported weaponry (Cipolla 1965). They were not competitive with the northwest European countries in textiles. And although they had advanced shipbuilding industries, they became increasingly dependent on imports of timber and other naval supplies from northeastern Europe. Against these disadvantages, Spain and Portugal had the profits from the long-distance trade, including the inflow of bullion from the New World, to pay for the supplies and weapons they needed. But over the course of the sixteenth century, as the inflow of bullion accelerated, its value declined (the prices of things bought with bullion rose) and the southwest corner of Europe became more and more squeezed. Austria, in the southeast, was not competitive in advanced sectors of production and was not favorably located to benefit from either the long-distance or Baltic trades. All these factors may have contributed to the decline of the southern countries and the rise of the northern countries at the end of the era.

#### *Antwerp*

Also favoring the north was the difficulty of operating the long-distance trade from Portugal or Spain as a center (much less Austria in its awkward inland location). Both Portugal and Spain were forced to use Antwerp as a center for world trade. The reason is probably the same as that mentioned by Glamann (1974:446) for the later rise of Amsterdam: the timing of the arrival of grain in Danzig simultaneously with Asian spices in Lisbon meant that only in the Low Countries could the two meet before the onset of winter. Furthermore, as Braudel (1984:143) notes, about nine out of ten consumers of pepper lived in the north.

The first Portuguese ship carrying pepper arrived in Antwerp in 1501, and Antwerp soon became the distribution center for northern Europe. Copper and silver now flowed from Germany to Antwerp, rather than south to Venice. In just six years—1502–3 to 1508–9, the proportion of Hungarian copper going to Antwerp increased from 24 percent to 49 percent, while only 13 percent ended up going to Venice by 1509 (Braudel 1984:149). In the early sixteenth century, then, Antwerp brought together Baltic and German products—metal, food, and wood—with spices from Asia.<sup>36</sup>

#### *Long Waves in Antwerp and Genoa*

After 1523, according to Braudel (1984:150), Antwerp experienced “lean years.”<sup>37</sup> Venice fought to regain its share of the pepper trade with some success (transport by

36. Braudel (1984:56) writes that Antwerp “gained control of the whole of Europe and of those areas of the world dependent on the old continent.”

37. During the trade slump of 1521–35, capital in Antwerp shifted toward loans, and an Antwerp money market came into being (Braudel 1984:151).

sea lowered the quality of Portugal's pepper). Meanwhile Portugal and Spain began to get silver from America rather than Germany, making Lisbon itself the logical meeting place of silver and pepper (but still not of food or wood).

After about 1535, though, so much silver was flowing into Spain from the Americas that Spanish expansion became dependent on products from northern Europe—shipbuilding materials, food, and products that could be sold in America. Thus the “Portuguese Antwerp” was replaced by a “Spanish Antwerp” (Braudel 1984:151). This second period of Antwerp prosperity “came to an abrupt end with the Spanish state bankruptcy of 1557” (Braudel 1984:153), which resulted from war with France.

These two waves of prosperity in Antwerp correspond fairly closely with the first two long waves in the base dating scheme.<sup>38</sup> This correspondence further corroborates long waves in this era, which had previously (chapter 9) been found primarily in English prices.

With the decline of Antwerp, the financial center (though not the trade center), according to Braudel, passed to Genoa, where it remained until the ascendancy of Amsterdam. The Genoese rose to ascendancy by bailing out the Spanish in 1557, used control of gold to exert influence, particularly on the Spanish, and declined by around 1627 (Braudel 1984:173),<sup>39</sup> when the Spanish again went bankrupt. The height of Genoese prosperity thus seems to correspond generally with the third long wave upswing (1575–95).

### *Long Waves in Prices and Wages*

The “price revolution” of the sixteenth century also follows long waves—sharply inflationary periods are followed by leveling-out periods. The causes of sixteenth-century inflation are disputed. Earl Hamilton's (1947) “quantity theory” of money attributes the inflation to the influx of silver and gold from America. The more precious metal poured in, the less it was worth and the more was needed to pay for a given good. Others contest this theory. Cipolla ([1955] 1972:46) argues that the connection of the influx of American metals with the price curve is not “mechanical” or “obvious.” Chabert ([1957] 1972) responds to Cipolla, and so forth.<sup>40</sup>

According to the data of Clough (1968:150), shown in table 13.2, Spanish imports of gold from America were highest from about 1530 to 1620, peaking in the 1550s. Spanish silver imports were high from about 1560 to 1650, peaking in the 1590s. These two peaks correspond roughly with successive long wave upswing periods and may help to account for inflation on those upswings as due to the surplus of precious metals.<sup>41</sup>

My reading of Cipolla's ([1955] 1972:44) data on price movements in this period

38. Upswing from 1509 to 1529, then down to 1539, then up to 1559 (see chap. 4).

39. Elsewhere, however, Braudel (1977) dates the shift to Amsterdam earlier, in 1590–1610.

40. See Braudel and Spooner (1967) and Hoszowski ([1961] 1972).

41. But, as discussed elsewhere, I think wars are even more important in explaining these inflationary periods (and perhaps in explaining the higher influx of precious metals).

**Table 13.2. Spanish Imports of American Gold and Silver**

Period	Silver	Gold	Long Wave Phase Periods <sup>a</sup>
1503-1510		4,965,180	_____ 1509
1511-1520		9,153,220	U
1521-1530	148,739	4,889,050	_____ 1529
1531-1540	86,193,876	14,466,360	D
1541-1550	177,573,164	24,957,130	_____ U
1551-1560	303,121,174	42,620,080	_____ 1559
1561-1570	942,858,792	11,530,940	D
1571-1580	1,118,591,954	9,429,140	_____ 1575
1581-1590	2,103,027,689	12,101,650	U
1591-1600	2,707,626,528	19,451,420	_____ 1595
1601-1610	2,213,631,245	11,764,090	D
1611-1620	2,192,255,993	8,855,940	_____ 1621
1621-1630	2,145,339,043	3,889,760	U
1631-1640	1,396,759,594	1,240,400	_____ U
1641-1650	1,056,430,966	1,549,390	_____ 1650
1651-1660	443,256,546	469,430	
Total	16,886,815,303	181,333,180	

Source: Earl J. Hamilton, *American Treasure and the Price Revolution in Spain* (Cambridge, Mass.: Harvard University Press, 1934), cited in Clough (1968:150). Reprinted by permission of Harvard University Press.

a. Base dating scheme (not shown in original table).

supports an interpretation in which the effects of wars (whose correlation with inflationary upswings has been shown) are supplemented by the effects of precious metals. Cipolla notes an inflationary period (5.2 percent annually) from 1552 to 1560 that is “hard to explain . . . in terms of the influx of American gold and silver.” The war peak of the second long wave, in 1552–56, might help to explain it. The next inflationary period, 1565–73 (3.3 percent inflation after an interlude of –1.2 percent) might be best explained by the influx of Spanish silver, which more than tripled in the decade from the 1550s to the 1560s (Clough 1968:150). Cipolla’s final inflationary period, 1590–1600,<sup>42</sup> like the 1552–60 period, corresponds with a long wave upswing and is probably best explained by the war peak of 1593–1604.

The data analysis in chapter 10 suggests an inverse movement of real wages, and hence possibly of “class struggle,” with prices. This relationship seems to “fit” in this era. Verlinden, Craeybeckx, and Scholliers ([1955] 1972) discuss the effects of the sixteenth-century inflation on workers in Belgium, who were dependent on imported grain. Revolts followed price increases and tended to be aimed primarily at grain merchants (p. 67).

In the eyes of contemporaries, including the government, monopolies were . . . the main if not the only cause of high prices. It was not until 1568, when high prices had long been a

42. This period has 3.1% inflation and comes between two deflationary periods, 1573–90 (–0.4%) and 1600–1617 (–0.8%).



universal fact of life, that Jean Bodin suggested that increased stocks of money were the chief and almost the sole explanation (p. 69).

Verlinden et al. also note periods of crisis in which wages remained far below prices in Belgium: 1531–32, 1565–66, and 1586–87 (p. 77). The first two roughly match up with the long wave price peaks (real wage troughs) and hence also with the end of each of Braudel's periods of prosperity in Antwerp. The third such crisis, however, does not match the long wave.

These observations on long waves in the prosperity of Antwerp and Genoa, and in prices and class struggle, are consistent with my long wave theory but tangential to the main issue at hand—the evolution of European society and the north-south struggle. The economic factors at work in this struggle have been discussed. I will now consider the military struggle, beginning with some general considerations concerning the state of military practice as it evolved in this era.

### *Military Evolution*

As noted earlier in this chapter, the nature of great power war changed at the outset of this era with the advent of large national armies that city-states could not match.<sup>43</sup> Advances in military technology in this era, as in all subsequent eras, had the effect of making war more deadly and more costly. Braudel (1984:57) writes that by the sixteenth century, “advanced warfare was furiously engaging money, intelligence, the ingenuity of technicians, so that it was said that it changed its nature from year to year.” In this era a “rising and unprecedented amount of resources was channelled into military use” (Sella 1974:384). The “favorite Latin tag of the period,” according to Howard (1976:27), was “*pecunia nervus belli*” (money is the nerves of war). Only the core powers could afford to engage in the new style of war,<sup>44</sup> and small political units could not muster the wealth required. War was “an ever-open abyss into which money poured. States of small dimensions went under” (Braudel 1984: 61).<sup>45</sup>

Strategically, a central rule in this era was to “always take the battle on to the enemy's territory, taking advantage of the weaker or the less strong” (Braudel 1984:61). This avoided the cost of damage from the new weapons and tactics in the home country, if not the cost of waging war itself at a distance. But even those latter costs could often be reduced by living off the enemy's countryside.

At the outset of this era, cavalry (the heart of war-making in the Middle Ages) was still regarded as “the most important instrument of battle” (Taylor [1921] 1973:8) but began to be displaced by infantry, guns, and artillery (Sella 1974:385). Artillery had made its appearance in this era, but its initial “effectiveness was slight compared with [its] heavy cost” (Howard 1976:30). By the end of the sixteenth century a single

43. Denis (1979:155) argues that the political-military structures of the Italian cities were inadequate in the context of the “new European reality.”

44. Indeed, Braudel (1984:58) states that such a style of warfare was not even effective outside the core.

45. See also Braudel (1972:840ff.) on the ruinous costs of war in this era.

artillery gun required sixty horses to draw it and its ammunition carts. “The effect of these lumbering convoys on the movement of armies over the unsurfaced roads of Europe may be well imagined” (Howard 1976:31). Artillery played a lesser role, though a necessary one in the case of siege warfare, up until the Thirty Years’ War (1618–48).

Artillery had looked promising at the beginning of the era when it proved effective against fortifications (feudal society had been structured around fixed fortifications). Previously, only a long, slow siege could guarantee the defeat of a castle. In 1494 Charles VIII of France used artillery to bring Italian fortresses to terms in short order (Howard 1976:35). But defenses also adopted artillery and were able to keep the offense at bay with the help of redesigned fortifications (“the arrangement of mutually supporting bastions projecting from the walls”).<sup>46</sup> These fortifications “began to develop into that system of continuous frontiers” that emerged in the seventeenth century. The new defenses blunted the offense, because the fortifications could neither be taken by assault nor bypassed (leaving supply lines vulnerable) but had to be masked by leaving a force behind (weakening the main force) or besieged (losing much time).<sup>47</sup>

Thus, after the changes in warfare that had occurred around the beginning of this era (about 1500), there followed a “prolonged” and “indecisive” period of warfare in Europe that lasted through the rest of the era, until the Thirty Years’ War (Howard 1976:37). Howard (1976:34, 26) writes of “the virtual disappearance of major battles from European warfare” from 1534 to 1631. Big battles were replaced with “a long succession of sieges.”<sup>48</sup>

Cautious professional competence took the place of the quest for glory in the planning and conduct of campaigns . . . ; and not the least effective way of terminating a campaign successfully was to prolong it, avoiding battle and living off the enemy’s country until his money ran out, his own mercenaries deserted and he had to patch up the best peace he could (p. 27).

### *Long Waves and North-South Wars*

The war peaks corresponding with long wave upswings in this era all consist of north-south wars. These north-south wars recur on each long wave until the ultimate resolution of the north-south struggle. The first war peak was the First and Second Wars of Charles V, the Hapsburg ruler, against France and England in 1521–29. Charles V became king of Spain in 1516 and emperor of the Holy Roman Empire in 1519. His Hapsburg forces made war against France with initial success. Francis I of

46. “Fortifications of this kind, at first improvised ad hoc by the Italian cities in the last decade of the fifteenth century, spread all over Europe during the next fifty years” (Howard 1976:35).

47. And “for sixteenth-century armies time was money, and money meant, or failed to mean, troops” (Howard 1976:36).

48. “By the end of the Italian wars in 1529 the broad outlines of siegecraft had been established” (Howard 1976:36). Siege warfare, relying heavily on tunnels, mines, and above all trench warfare, was a “tedious, dangerous, murderously unhealthy” business, not unlike the later conditions in World War I (p. 36).

France was taken prisoner in battle in 1525, and the peace agreement of 1529 went against France.<sup>49</sup>

A lull coincided with the long wave downswing, and the fighting between the Hapsburgs and France began again in 1542, near the start of the next long wave upswing. This next upswing (1539–59) culminated in the second war peak—the Fifth War of Charles V against France (1552–56) and its continuation in the Franco-Spanish war (1556–59). In these wars, France and Spain battled to a standoff by 1557, when both declared bankruptcy due to the costs of war (Wallerstein 1974:183, 185; Braudel 1972:943). The treaty of Cateau-Cambresis in 1559 followed from this exhaustion and marks the end of the long wave upswing. The negative impact of Spain's bankruptcy in particular was felt throughout Europe, weakening the extended Hapsburg empire, especially Germany (Wallerstein 1974:185–86). Cateau-Cambresis “led directly to the beginning of Spain's decline,” according to Wallerstein (p. 185).<sup>50</sup>

The long wave downswing after 1559 saw a decrease in great power wars, but at the outset of the following upswing, in 1572, the Dutch rebelled against Spain. The third war peak was the War of the Armada,<sup>51</sup> pitting (Hapsburg) Spain against England and the rebellious Dutch, in 1585–1604. A truce in the Dutch-Spanish fighting prevailed during the next long wave downswing, from 1609 to 1621, but the war resumed in 1621 (along with the Thirty Years' War) at the start of the next upswing. The fourth war peak was the Thirty Years' War, 1618–48, which saw the northern countries finally break the power of the Hapsburg countries. Each war peak in this era, then, pitted the southern Hapsburg countries against the northern powers.<sup>52</sup>

### *North-South Military Competition*

Militarily, Europe was divided on a north-south basis. This division became more polarized as the era went on and culminated in the great war at the end of the era, the Thirty Years' War.

Initially, naval predominance was held by the south, first by Portugal and then by Spain. Wallerstein (1980:64) stresses the naval predominance of Spain during most of the era, arguing that even after the “invincibility” of Spain was disproved in the War of the Armada (1588), Spain's navy was still, in 1600, larger than the English

49. The draining effect of the war peak is illustrated by the sack of Rome for plunder in 1527 (after the treaty of Madrid in 1526), by the unpaid imperial army.

50. Wallerstein (1974:184) argues that 1557 marks the defeat of the attempt of the Hapsburgs to “recreate political empires that would match the [expanded] economic arena.” He says that “a whole world had come tumbling down.” But it seems to me that the treaty of 1559 was indecisive in the sense that bankruptcy on both sides halted the fighting without resolving the central issues—a situation somewhat analogous to that of World War I some centuries later. Thus not long afterwards the same battle lines began to be drawn.

51. See Howarth (1981) and Mattingly (1962).

52. Each of the final three successive long wave peaks in this era is emphasized by one or another scholar as important turning points in the European power balance: 1557 for Wallerstein (1980); 1579–1609 for Modelski (1978); and 1618–48 for Wight (1977), Wallerstein (1983), and others.

Figure 13.8. Europe Around 1610



Source: Steinberg (1966: 1).

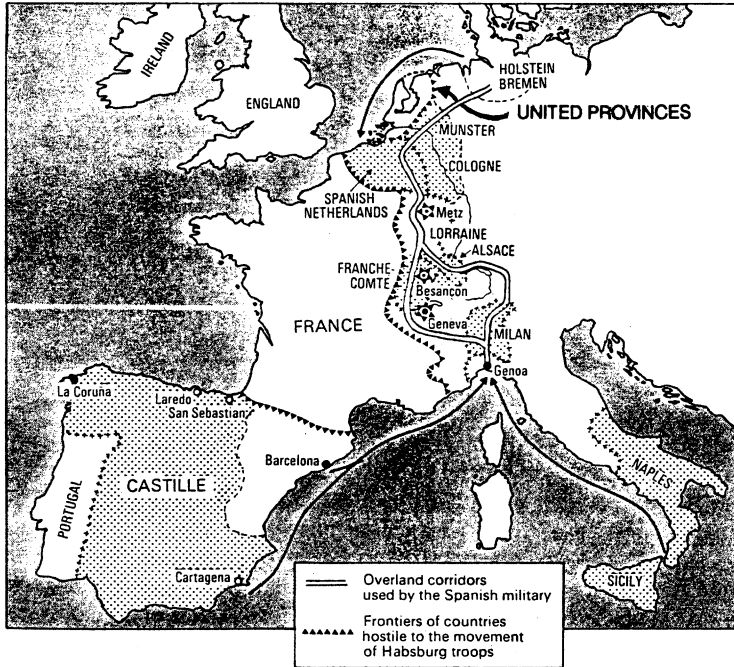
Reproduced from *THE THIRTY YEARS' WAR and the Conflict for European Hegemony, 1600-1660*, by S. H. Steinberg, by permission of W. W. Norton & Company, Inc. Copyright (c) 1966 by S. H. Steinberg.

and Dutch navies combined. It was not until 1645, when the Dutch gained control of the Baltic Sound (through which passed their “mother trade”) that Dutch naval power triumphed (Wallerstein 1980:64).

On land Spain was also a formidable power and was closely allied with Austria throughout the era. The Hapsburgs—centered on the Spain-Austria alliance—thus had one of the two great land armies on the Continent. The second great land army belonged to France, the central power on the northern side of the European division. Wight (1977:137) calls the Hapsburgs and the French the “superpowers” in a bipolar order. The strongest naval power in the north, emerging as a formidable force in this era, was England.<sup>53</sup> England eventually aligned with France as the polarization of Europe proceeded in this era.

The Hapsburgs unified Austria, Spain, and the Netherlands in the early sixteenth century (redivided but still allied after 1556) and also gained effective control of Italy. This threatened to encircle France, but France also stood between Spain and its prized possession, the Netherlands (see fig. 13.8). Spanish troops had to follow a circuitous route from Italy to the Netherlands, inside what is today France (see fig. 13.9).

53. Dehio ([1948] 1962) particularly stresses England’s role.

**Figure 13.9. Spanish Military Corridors, circa 1600**

Note: Map indicates logistical system for Spanish war effort, with routes over Alps and up to North Sea. Holstein was an area of recruitment of soldiers for the Flanders army.

Source: Geoffrey Parker, *The Army of Flanders and the The Spanish Road, 1567-1659*; 1971, p. 51. Reprinted in Braudel (1984: 203). Copyright Cambridge University Press. Reprinted by permission.

When Spain under Philip II took over Portugal in 1580—thereby consolidating in one family alliance the two great overseas trading empires along with the bulk of European land power—the Hapsburgs reached their pinnacle and were well on their way to taking full control of the European “world.”<sup>54</sup>

The reaction to the Hapsburg expansion came from the north of Europe and largely overlapped the division between northern Reformation and southern Catholicism. Two northern revolts played an important role in the period leading up to the decisive showdown of 1618–48. First, the Netherlands rebelled against Spain, and although the southern (Spanish) Netherlands<sup>55</sup> reunified with Spain fairly quickly, the northern United Provinces won independence after an eighty-year struggle. The second revolt came from the mostly northern Protestant princes in Germany, who rebelled

54. Braudel (1984:55) downplays this “spectacular” but “anachronistic” achievement of the Hapsburgs; Wallerstein (1974:165) calls it a “valiant attempt to absorb all of Europe” that “failed.”

55. Roughly corresponding to modern Belgium.

against Hapsburg rule as embodied in the fragmented Holy Roman Empire to which they still nominally belonged.<sup>56</sup>

Thus in the last part of this era both the Spanish and Austrian Hapsburgs faced revolts in northern territories. This increased the north-south polarization of Europe: France, England, the Netherlands, and Sweden on one side and Austria, Spain, and Portugal on the other. The decisive showdown between these blocs came with the hegemonic war of 1618–48, the Thirty Years' War.

### *Hegemonic War*

As Rabb (1981a:ix) notes, the designation of the Thirty Years' War is only shorthand for a set of overlapping wars among the European powers: the Dutch war of independence against Spain of 1568–1648, the Franco-Spanish war of 1635–59, and others. The majority of the fighting took place in Germany, and the dates of that fighting, 1618–48, have come to stand for all the wars of the first half of the seventeenth century. But in fact the fighting raged throughout the European "world" and is sometimes referred to broadly as "the crisis of the seventeenth century" (see fig. 13.10).

"Above all," writes Rabb (1981a:x), "the wars of the early seventeenth century have been regarded, ever since their own day, as one of the worst catastrophes in history." There has been much debate in recent years about the true extent of the war and its effect on society and economy<sup>57</sup> as well as on the causes of the war.<sup>58</sup> Despite these continuing debates, the main points concerning the war for present purposes are clear—that the war took place on a scale previously unknown (Levy's data confirm this); that it caused tremendous economic losses, particularly in Germany; and that it ended with the defeat of the Hapsburgs by the northern coalition.

The scale of the Thirty Years' War is important in classifying it, along with the Napoleonic wars and World Wars I and II, as one of the three "great wars" of the five-century period. Rabb (1975:119) refers to the "frightful specter of total anarchy raised by the new military tactics, the unprecedented slaughter." He stresses the perception of the war by its contemporaries as an unprecedented human disaster, as reflected in paintings and writings from that period. Langer (1978) captures this spirit in a book filled with pictures of the war as seen by contemporaries. The images of wholesale destruction of civilian society are familiar to us inhabitants of the twentieth century. Figure 13.11, an etching from 1633, conveys this gruesome atmosphere.<sup>59</sup> Howard (1976:37) writes that "warfare seemed to escape from rational control . . . and to degenerate instead into universal, anarchic, and self-perpetuating violence." Mercenary forces could survive only by plundering the civilian population, and

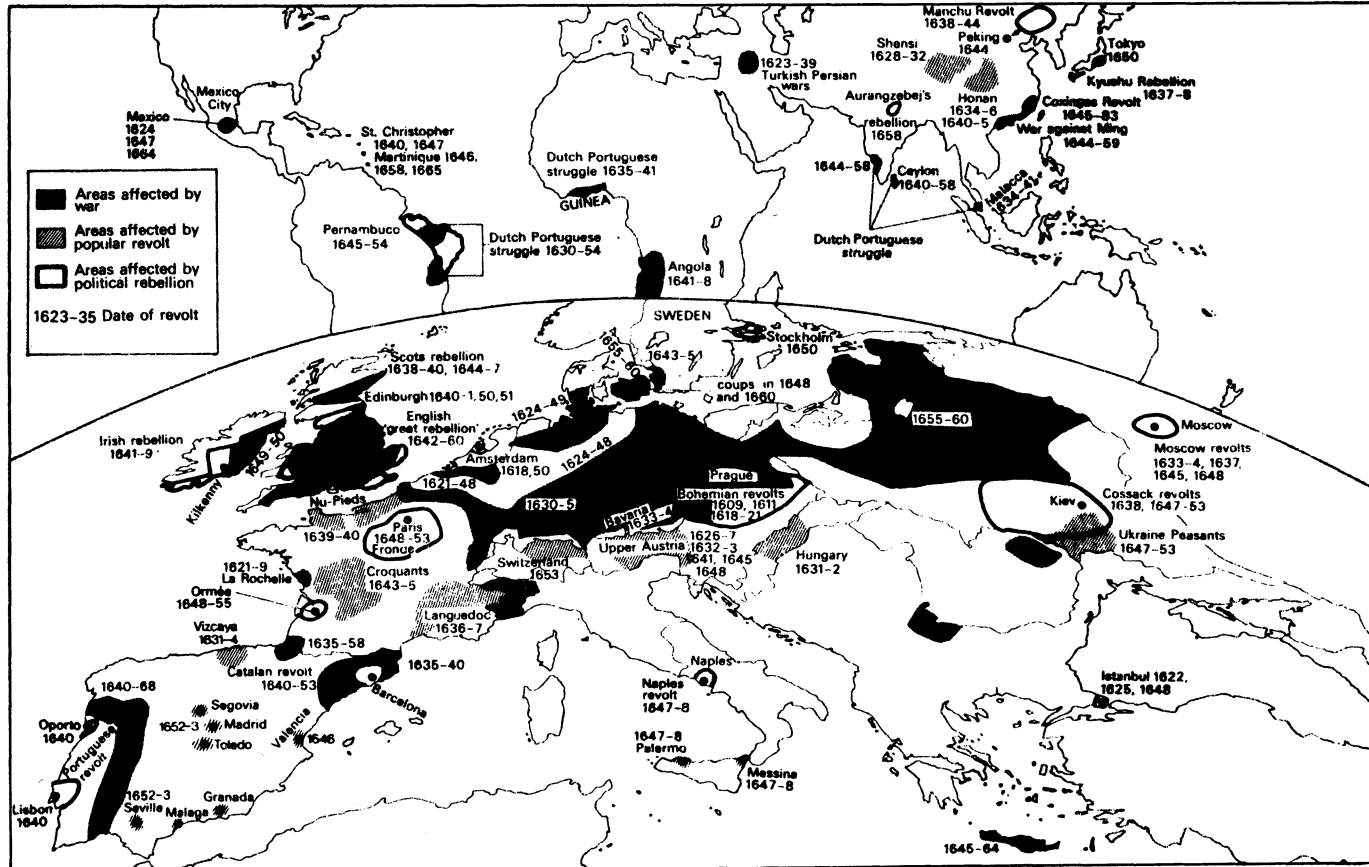
56. Wallerstein (1974:186) suggests that this German revolt, nationalist in character, was a reaction to the decline of the Hapsburgs beginning with the Spanish bankruptcy of 1557.

57. Rabb (1962; 1975; 1981b); Steinberg (1966:2–3).

58. Polišenský (1981); Wedgwood (1981); Mehring (1981).

59. The "looters" being hanged are no doubt civilians deprived of their livelihood by the war and essentially competing with soldiers for subsistence.

Figure 13.10. The General Crisis of the 17th Century



Source: (Parker & Smith, 1978: 5) The General Crisis of the 17th Century (London: Routledge & Kegan Paul).

Figure 13.11. "The Hanging", Jacques Callot, 1633



Note (from Mehring, 1981: 14): Jacques Callot (1592-1635), a seventeenth century master of etching, received a number of commissions from princes who wanted representations of heroic moments in battle. Near the end of his life, however, he became deeply unhappy about the effects of warfare, and in 1633 he produced two magnificent series of etchings entitled *The Miseries of War*. *The Hanging*, his most famous, depicts a mass execution of looters, surrounded by the panoply of war and religion, a scene almost certainly inspired by a real incident.

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civilians in turn could survive only by turning mercenary. “A soldier, in this period, was well described as a man who had to die so as to have something to live on” (Howard 1976:37).

The war and its accompanying hardships, including famine and plague, reduced the German population by as much as one-third and put a severe strain on the entire European economy. It ended the period of economic prosperity of the sixteenth century and inaugurated the “unusually prolonged depression”<sup>60</sup> (or at least long-term secular stagnation) of 1650–1750.

The Thirty Years’ War brought, predictably, huge increases in tax burdens. Tilly (1981:119) estimates that the amount of time a taxpaying French household worked for the government may have tripled in the seventeenth century.<sup>61</sup> Tax resistance also rose. “Warmaking and statemaking” took place at the expense of ordinary people and “placed demands on land, labor, capital, and commodities” already committed for other uses (Tilly 1981:121).

The political effect of the war was primarily to break the power of the Hapsburgs and shift the center of European military and economic power northward. Wedgwood ([1938] 1981:31) claims that “the war solved no problem . . . it is the outstanding example in European history of meaningless conflict.” But in fact major changes in the structure of European international relations emerged from the war. As Steinberg (1966:1–2) notes, the war brought to a close the “struggle for European hegemony between Bourbon and Habsburg” that lasted from 1609 to 1659 and succeeded, from France’s point of view, in breaking France’s encirclement by the Hapsburgs.

At the outset of the war, the anti-Hapsburg camp was “a free grouping of ‘maritime’ powers under the leadership of the United Netherlands,” the latter having broken away from Spain (Polišenský 1978:12). From 1621 on, the Netherlands used financial subsidies to enlarge the coalition, which culminated in the Hague Coalition of 1625 (Netherlands, England, Denmark, and Norway, among others). Denmark collapsed in 1629, and Sweden entered the coalition in its place. France supported the coalition unofficially beginning in 1631. After 1635 the anti-Hapsburg German princes played an increasing role, and France took over leadership of the coalition from the Dutch, who eventually withdrew along with England (whose civil war began in 1642). In 1648 the Peace of Westphalia was concluded, giving major concessions to France and Sweden at the expense of the Hapsburgs.<sup>62</sup>

Westphalia was a restructuring of international relations based on the principle of

60. Slicher van Bath’s phrase, from Wallerstein (1980:3).

61. The Thirty Years’ War brought “a spectacular rise in the per capita tax burden” in France. The French government “raised money for its military purchases in a variety of ways”—through forced loans, sale of offices, confiscations, “and a number of other devices to which officials increasingly applied their ingenuity as the seventeenth century wore on. But . . . one form of taxation or another provided the great majority of the essential funds” (Tilly 1981:119).

62. The Treaty of the Pyrenees (1659) completed this settlement.

balance of power and giving predominance to the northern coalition that had defeated the Hapsburgs. Albrecht-Carrié (1965:40) writes that Westphalia

registered the final failure of the unitary tendency in Europe. For, if Westphalia registered a French success and a corresponding Habsburg setback, it did not substitute one hegemony for another, but established instead an equilibrium of forces. What is more, this condition of equilibrium came to be recognized and accepted until it was enshrined as the desirable principle which was the strongest guarantee of . . . the equal right of all to separate existence.

Thus “Westphalia is usually spoken of as the event that marks the birth of the European state system.”

But Wight (1977:152) seems closer to the mark in calling Westphalia not the birth but the “coming of age” of the states system, culminating more than a century of previous political development. By 1648 a “system of states acknowledging, and to some extent guaranteeing, each other’s existence” had crystallized (Tilly 1975:45). “Over the next three hundred years,” Tilly adds, “the Europeans and their descendants managed to impose that state system on the entire world.”