# CHAPTER ONE

# World System and World Views

In 1983 President Ronald Reagan, in a speech to the American Legion, accused the American peace movement of making "the same old mistake" British prime minister Neville Chamberlain had made before World War II—trying to "wage peace by weakening the free."

The next day, the Soviet Novosti news agency commented that "as usual, [Reagan] seems not to be well-versed in history." The real mistake of the 1930s, according to Novosti, had been committed by Western governments that had equated the peace and anti-Nazi movements in their countries with socialism and communism, while ignoring the threat from fascism. It is President Reagan, according to Novosti, who repeats the same old mistake "when he insists that the current peace movement is communist-inspired."<sup>1</sup>

Political leadership in today's world is dominated by the generation that came of age in World War II; and the ''lessons of history'' for this generation tend to be the lessons of World War II and the forty years since. These ''lessons'' underlie the practice of world politics today, especially superpower deterrence, in fundamental ways.

But world history is more than the history of one generation. World politics today grows out of many centuries of evolution and is rooted directly in the development of the Eurocentric world system over the past five centuries. This book examines the dynamics of that integrated world system of politics and economics, centered in Europe, as it developed between the sixteenth and twentieth centuries.

The *world system*, as a useful and appropriate concept with relevance to contemporary world politics, is the first of four themes that intersect in the book. The second theme is the close connection between *economics and politics* at the international level. A third theme is the concept of *social cycles*, for which the book seeks to develop an appropriate definition and framework—drawing on both quantitative and qualitative approaches. And the fourth theme is the interplay of revolutionary, liberal, and conservative *world views* that shape the ways in which different research schools see the first three themes (the world system, political economy, and social cycles).

1. Boston Globe, 24 Aug. 1983, p. 1; 25 Aug. 1983, p. 9.

The style of this work is *adductive*. The goal is to develop a *plausible* account that is both internally consistent and largely consistent with empirical evidence. The adduced long cycle theory lies somewhere between proven "fact" and ungrounded speculation. It is a first cut at a comprehensive treatment of long cycles and a starting point for future work (which will undoubtedly force revisions in the theory). The work is intended to be "definitive" in its comprehensive treatment of the subject of long cycles; but the state of knowledge resulting from my study is still quite preliminary.

### The World System

My first theme is the world system as a meaningful unit of analysis. A world level of analysis is distinct from an international one. The international level consists of the interactions of separable units—sovereign nation-states while the world level consists of a single, holistic system whose parts are mutually constitutive rather than separable.<sup>2</sup>

The most important features of the world system for this book are its political and economic structure and dynamics. The world system is characterized *economically* by the unequal geographical division of labor between the core (secondary producers of manufactured goods) and the periphery (primary producers of raw materials). *Politically* the system is characterized by the systematic use of violence both to maintain and to change the power relationships in the system. Those power relationships include both the dominance of the core over the periphery and the struggle for dominance of one political unit over others within the core (hegemony).

The pattern of regional division of labor between primary and secondary producers—along with the violently enforced dominance of the core over the periphery—traces back to early societies and empires. In the ancient city-state on a river, peasants upstream produced food, which was shipped downstream to the city at low cost using the river as an energy source. The city in turn shipped (lighter-weight) weapons and luxury goods upstream to the local warriors who suppressed the peasants. In later, larger, Mediterranean empires, a similar pattern occurred, with oar-driven slave boats bringing food and raw materials to the metropolis from the peripheral regions along the coast.

With the advent of the sailing ship in fifteenth-century Portugal, a few individuals could move a large cargo efficiently almost anywhere in the world, using the wind as their energy source and the ocean as their medium. This, with the addition of shipborne cannons,<sup>3</sup> allowed the Europeans to dominate trade globally and laid the basis for a truly world system of politics and economics. The core of the world system consisted of the most developed European countries, and the periphery was

<sup>2.</sup> The world system perspective thus, in my opinion, goes beyond the level of analysis labeled as "international" by Waltz (1959) or Singer (1961). In addition to the individual, national, and international levels, the world system constitutes a fourth level of analysis (see North 1985: chap. 12).

<sup>3.</sup> See Cipolla (1965).

wherever their sailing ships (and later steamships along with railroads to the interior) could take them. European monarchs thus concentrated economic surplus from large areas, using that surplus, among other things, to fund the making of wars on each other. These wars brought about the consolidation of the nation-state system in Europe beginning about five centuries ago.

This book is about the economic and political core of the world system. It focuses on the most advanced, largest economies at the center of the world economy, which generally are also the military great powers at the center of world politics.<sup>4</sup> It does not, except in passing, deal with relations between the core and periphery of the world system or the issues of underdevelopment in the periphery, of global exploitation, or of violence and war in the periphery, although these areas contain many interesting and important questions. The world system has been a Eurocentric one,<sup>5</sup> and this book, focusing on the core, will be Eurocentric as well.

Immanuel Wallerstein (1974, 1980) sparked the current world system debates with his Marxist interpretation of the development of the "modern world-system" in sixteenth- to eighteenth-century Europe. Capitalism has been a "world-economy" from the outset, Wallerstein (1974:86) argues, with a division of labor between world regions.<sup>6</sup> Manufactured goods are produced mainly in the core and raw materials mainly in the periphery; between them are intermediate producing regions called the "semi-periphery." Each of these three zones has its own form of production, its own historical mode of labor (slaves, serfs, and wageworkers, respectively), and its own modes of political control (Wallerstein 1974:87).<sup>7</sup>

Wallerstein (1974:38) states that three things were necessary for the creation of a capitalist world-economy: (1) the expansion of the geographic size of the "world" (led by the Portuguese sailing ships),<sup>8</sup> (2) the differentiation of labor by product and zone, and (3) the creation of strong state machineries in the core states.

Core and peripheral areas are not unchanging, according to Wallerstein, nor are they homogeneous. An area such as North America, which began outside the worldeconomy, could become incorporated into the periphery and later become part of the core. Within the core, there is constant competition and conflict between rival states and elites, and within states there is conflict between classes. The overall structure of

4. I will not distinguish separate economic and military definitions of the core.

5. The core eventually expanded to include the United States, Soviet Union, and Japan. The present configuration of core and periphery is global, dividing the industrialized north from the impoverished south.

6. Wallerstein's neo-Marxist approach differs from traditional Marxist approaches in its stress on international class divisions rather than on domestic class divisions within industrialized countries.

7. Bergesen (1980:124) notes that all three zones constitute "one mode of production [capitalism]. To make the *slavery* that harvests cotton which is then spun into cloth by British *wage* earners into two modes of production denies the obvious connection."

8. A "world-system" in Wallerstein's usage need not include every area of the globe. Rather it implies a system that is (1) international (though this does not negate the strong dynamics operating at the national and subnational levels), and (2) the dominant system in the world. Wallerstein's (1974:301) "world-economy" does not encompass certain "external arenas" that are not integrated into the world-economy, for example, Russia until the 18th or 19th c. These differ from the "peripheral" areas that are integral to the world-economy.

the world-system remains the same, however, despite this "game of musical chairs" (Hopkins and Wallerstein 1979:485).

My approach to the world system in many ways flows out of Wallerstein's but is not a Marxist interpretation. It does not see capitalism as the essential defining characteristic of the world system, and it sees politics as coequal with economics even over the long run, not as arising ultimately from economic forces.<sup>9</sup> I have focused on the core countries rather than the periphery and have given war a central place in the analysis. In both these ways my approach reflects "realist" rather than neo-Marxist conceptions of the world system.<sup>10</sup> But in other respects this study draws more on Marxist than realist conceptions, and despite the differences in my approach from Wallerstein's many of my conclusions converge with his.

## **Economics and Politics**

I will develop in this book the theme of interconnection between economics and politics in the core of the world system.<sup>11</sup> On the *economic* level, I focus on the economics of the core countries as they developed over five centuries. Whereas most economic histories of Europe stress secular economic growth (and technological advances as a driving force of that growth), I will stress the different phases—expansion and stagnation—along the way as these economies developed. The economy of Europe did not develop in one continuous forward motion but in phases marked by accelerated growth or by stagnation, by high or low inflation. The long-term ups and downs of national economies are not autonomous but synchronous throughout the core. Synchrony spreads to larger and larger regions of the world over the centuries as the core expands (see chapter 9).<sup>12</sup>

9. Politics is, however, constrained by economic forces and certainly not autonomous from economics.

10. In neo-Marxist approaches, the unequal relationship between core and periphery is the primary contradiction (to use Mao's terminology), and relationships within the core are secondary. In my approach, contradictions *within* the core itself are central to the development of the world system, and I give the periphery less attention. Also, Marxists generally treat war as an outcome of deeper so-cioeconomic forces rather than as a driving force in itself. My approach gives war a central role in the development of the system. The system of war among great power nation-states strongly influences both economic development and class relationships.

11. I will emphasize politics at the international level (primarily war) and will delve only slightly into domestic politics. Likewise in economics the emphasis will be on the world economy as a whole rather than the domestic economies of each country. While this approach is consistent with the level of analysis of this study, it goes against both traditional Marxist approaches (stressing class struggle within core countries) and contemporary "comparative politics" (stressing domestic factors and comparisons among countries).

12. Jozsef Nyilas (1976:14–16), a Hungarian Marxist, says of the past two centuries: "The production and thus the very existence of each nation of the world . . . depend, more or less, on other nations' production." The world division of labor represents "the socialization of production of the highest order, reaching over frontiers and tending increasingly to integrate the independent economies of their units into a uniform whole—a world economy." Even today, with the split between socialist and capitalist economies, the "world-economy remains . . . as a peculiar antagonistic unity of the two existing socio-economic systems."

On the *political* level, the core experiences structural shifts over time, from greater hegemony (a hierarchical structure in which one nation is firmly on top) toward greater competition (a flatter hierarchy in which nations are vying for position). Ultimately, the position of nations in such a system has been decided by resort to war. In studying wars among the core countries, I rely on Levy's (1983a) quantitative data set on wars in the "great power system" since 1495 as well as his definitions of countries that belonged to that system (a membership that changes over time). "Great power wars" (wars between two or more great powers) have occurred sixtyfour times between 1495 and 1975 according to Levy's count. These sixty-four wars are particularly important in this study.<sup>13</sup>

Although no country has yet exerted complete control in the sense of an embracing empire, a few countries have at times gained ascendancy within the core. At other times the structure of the core has not centered so strongly on one country, being more multipolar and competitive. A *hegemonic* power is a core state that commands an unrivaled position of economic and military superiority among the core states and is thus able largely to shape the operation of the international system. The position of the Netherlands in the seventeenth century, of Great Britain in the nineteenth century, and of the United States in the mid-twentieth century are commonly cited as such cases. Other countries have made concerted drives for world dominance but have failed (for example, Napoleon's France and Hitler's Germany).

The economic and political processes of the core are closely intertwined. There is a strong historical connection between economic long waves and bouts of severe<sup>14</sup> great power wars. And the struggle for hegemony is as much an economic as a political phenomenon. The strongest economic units can support the most powerful political and military capabilities and hence gain position in the world order. Conversely, political and military position are used to further a country's economic enrichment.

### **Social Cycles**

The third theme of the book—and the immediate object of study—is the attempt to understand long cycles in social life, cycles that take longer than a generation to complete. The very word *cycle* seems to ring alarm bells for many social scientists. They presume it to mean something mechanistic or even mystical, beyond scientific inquiry, and unproven if not unprovable. Social systems,

13. Violence within the core cannot be claimed to be either more important or more pervasive than in (or against) the periphery, but this book limits the focus to the core as the locus of forces that drive the development of the world system. Galtung (1980:70) distinguishes four types of violence: (1) revolutionary violence directed against exploitation (vertical violence from below); (2) counterrevolutionary violence (vertical violence from above); (3) horizontal violence between equals over some incompatible goals; and (4) random violence "related neither to interests nor to goals." This book focuses on the third type (horizontal violence between the core states).

14. The "severity" of war is a term borrowed from Singer and Small's (1972) approach (which Levy also uses) and refers to battle fatalities.

unlike the physical world, are not only enormously complex but self-directing and continually evolving. The word *cycle*, for some, evokes images of clockwork mechanisms exhibiting strict periodicity and regularity of a type ill-suited for describing social processes.<sup>15</sup>

One of the challenges of this book is to develop appropriate definitions and methodologies for the study of social cycles. In the physical sciences, the interval of time making up a cycle can be treated as a fixed, constant, and measurable number, a frequency. In the social sciences, however, the length of a phase can vary, and the appropriate emphasis is on a regularly recurring sequence rather than a fixed periodicity. As Part Two tries to show, it is possible to define, measure, and analyze long cycles using "cycle time" rather than periodicity.

In the physical world, cycles are central to the structuring of mass/energy throughout the universe at every level; but every level also manifests noncyclical, irreversible change in time. Electromagnetic radiation, a basic form of mass/energy in the universe, contains a cyclical component (wave nature) as well as a forward or linear component (particle nature), and I find these two kinds of motion to be very basic to systems at all levels. Doran (1971:2) writes of social change:

Historical continuity and change manifest themselves in two basic forms: as a *cyclical repetition* of events, which gives the appearance of novelty but in fact reasserts the fundamental similarity and uniformity of events; and as a long-term *linear evolution or progression of events*, which . . . represents the emergence of new ideas and problem-contexts.

My approach acknowledges the importance of both repetitive and evolutionary change. The image of a *spiral* embodies both types of motion—cyclical and linear. The end point of a long cycle is not the same as its beginning. Long cycles are not a mechanical process but a repetition of themes, processes, and relationships along the path of an evolving social system. The world system itself is not only changing through time in a quantitative sense but also passing through qualitative stages of development over time. I will thus combine repetition and evolution, cycles and stages, continuity and change, in tracing the development of the core of the world system over five centuries.

The cyclical view of social change seems to gain adherents during stagnant phases of social growth (see chapter 2). Historian E. H. Carr describes the cyclical approach as "the characteristic ideology of a society in decline."<sup>16</sup> Van der Zwan (1980:199) agrees that "in the face of a crisis there is a psychological inclination to look for security. The concept of recurrent movements . . . seems to offer an element of continuity."

Cycles of many lengths are woven into social life. Braudel (1972:892) refers to a

15. This is one reason many writers have adopted the terminology of *waves* rather than *cycles*. But neither wave nor cycle conveys an inherently mechanistic implication, in my view. Both terms can refer either to physical periodicity or to a non-periodic repeating sequence (see chap. 8). In this book, the term *long wave* will be reserved for the economic cycle of about 50 years' duration, and the term *long cycle* will refer to the more general class of social cycles longer than about 20 years.

16. Carr (1975) quoted in Eklund (1980).

"web of vibrations which makes up the economic world." In existing research on all long cycles (real or imagined), the greatest interest lies in two clusters: (1) economic cycles of roughly 50 years' duration (long waves), and (2) longer cycles of hegemony and hegemonic war.<sup>17</sup> These two cycles are the subject of this book.<sup>18</sup> The long wave (roughly 50 years) will be taken up in chapters 2–4 and 8–12 and the hegemony cycle (roughly 150 years) in chapters 5–6 and 13–14.

Long waves (or Kondratieff cycles) are defined by alternating economic phases an expansion phase (for which I will often use the more convenient term upswing) and a stagnation phase (which I will often call the downswing).<sup>19</sup> These economic phase periods are not uniform in length or quality. The transition point from an expansion phase to a stagnation phase is called a *peak*, and that from stagnation to expansion is a *trough*.<sup>20</sup> The long wave, which repeats roughly every fifty years, is synchronous across national borders, indicating that the alternating phases are a systemic-level phenomenon.

Hegemony cycles are ultimately defined by a special set of wars that I call hegemonic wars (see chapter 13). These wars mark the end of a long period of hegemonic decline and rivalry and the rise of a new hegemony in the world system. Shifts between hegemony and rivalry in the core follow a cyclical pattern but on a longer time scale than the long wave. Hegemonic war is followed by strong hegemony (as one country emerges from war in the strongest position), followed by the weakening of hegemony, increasing competition, and ultimately another hegemonic war. This sequence, which I call the hegemony cycle, takes on the order of a century and a half to complete. Thus several economic long waves occur within one hegemony cycle. But the hegemonic wars, dating the long hegemony cycle, do not seem to be tightly synchronized with the shorter ups and downs of the long wave.

Superficially, the long wave is an economic phenomenon, and the hegemony cycle is a political one. But in fact the long wave contains key political elements (war plays a central role), and the hegemony cycle contains economic elements (economic hegemony and competition).

- 17. Cycles of different lengths are not mutually exclusive: the hegemony cycle contains long waves, and the long wave contains shorter economic fluctuations.
- 18. They should be distinguished from other postulated cycles that will be treated only superficially if at all:
- 1. Business (or "trade" or "Juglar") cycles, about 5 years long (see also Macrae 1981 on "political business cycles" of 4–5 years, based on the frequency of elections in democratic countries).
- 2. "Kitchin" cycles, about 10 years long, thought to be based on depreciation of short-term capital investments.

3. "Kuznets" cycles ("building cycles" or "long swings") about 20 years long, based on waves of migration and the associated construction booms.

4. Very long cycles. Forrester (1981a:5) refers to an S-shaped "life cycle of economic development" lasting over 200 years. Earl Cook (1972) identifies four long logistic curves of energy and materials use and human population over the past million years—of which Forrester's curve would be the fourth. Taagepera (1978, 1979) describes "life cycles" of empires often spanning many centuries.

19. The stagnation phase does not always show actual decline, however, but only a lower rate of growth than the upswing phase.

20. The dates of these transition points define the historical dating of the long wave phases (see chap. 8).

The long wave has been historically realized in nine cycles between the years 1495 and 1945.<sup>21</sup> The same period has seen three hegemony cycles. These cycles have been not fixed and mechanical but irregular and evolutionary through time. They do not allow us to predict the future, but they can help us to understand the dynamics of international politics in its deep context and to understand better how the "lessons of history" apply to today's world.

### **Revolutionary, Liberal, and Conservative World Views**

In the first part of the book I review, compare, and integrate various bodies of literature relevant to the study of long cycles. The existing literature on long cycles consists of disconnected fragments of theory and evidence, with no consensus on what a long cycle is, how to measure and identify it, or how to account for it theoretically. The book's first task is to make sense of these past studies, to compare them, and to account for differences and similarities among them.

As an ordering principal for that review, I distinguish three *world views*—revolutionary, liberal, and conservative—that shape different perspectives, approaches, and epistemologies. They are the lenses through which people see the world and the frameworks within which theories of that world are built.

The three world views shape the outlines of the major theoretical traditions in the long wave debate (see chapters 2 and 3) and in the war/hegemony debate (chapters 5 and 6). The different research schools rooted in each world view have different vocabularies, theoretical frameworks, methodologies, and results—and communication among them is problematical. I will try to interpret between them without being wedded to one particular school or world view. The three world views are only approximate ideal types. They should be seen not as a rigid framework but as a tool for understanding the long cycle field and its development from a philosophy of science perspective (see chapter 7). I will not try to give a definitive or full explanation of each world view.

Theoretical and empirical work from six research schools (three on long waves and three on hegemony cycles) will be drawn on in an effort to find both agreements and differences between them. Despite the major differences among the theories of different research schools, many areas of convergence can be found. I call this approach *triangulation* in the sense of locating the object of study by taking bearings from different angles.<sup>22</sup>

The idea of triangulation is shown schematically in figure 1.1. In the center is the

<sup>21.</sup> While most past work on long waves has referred only to the industrial period of history (the 19th and 20th c.), this book extends the analysis back to around 1500—the starting point for Wallerstein's (1974) "modern world-system" and Levy's (1983a) "great power system."

<sup>22.</sup> Alker and Biersteker (1984) use a triangular framework to structure their summary of the international relations field. They argue that "alternative approaches to International Relations theorizing . . . should be taken seriously . . . . There are genuine insights to be gained from any of the major traditions which are hard to appreciate until their genuine vantage points and learned achievements are better appreciated."

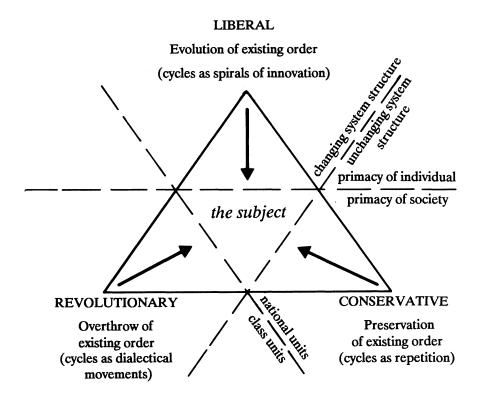


Figure 1.1. The Triangulation of World Views

subject being studied—long cycles. Each of the three world views represents an angle from which this reality is seen—conditioning the thematic questions asked, the types of data examined, the methodologies used, the theories postulated, and the conclusions drawn.

The conservative approach centers thematically on the "preservation of the established order" and is "opposed to change or innovation."<sup>23</sup> Conservative theories tend to portray the world as a relatively timeless and unchanging structure and hence see cycles as repetition—a regular repetition of the same rhythms over time.

The liberal approach centers thematically on the evolution of the existing order. Continual progress, brought about through human innovation, leads to greater freedom (material and political) for the individual. Liberal theories portray cycles as upward spirals leading to higher stages of social evolution.

<sup>23.</sup> Webster's Collegiate Dictionary, S. V. "conservative."

The revolutionary approach centers thematically on the overthrow of the existing order and on its internal contradictions, which inevitably produce crises. Cycles are seen as dialectical movements—the product of internal contradictions that drive the system in which they are found toward its own negation and transformation.

Figure 1.1 also indicates some distinguishing aspects that separate each world view from the other two (dotted lines). Conservatives tend to see the structure of society as essentially fixed; liberals and revolutionaries tend to see that structure as changing (in an evolutionary or revolutionary manner). Liberals see the important driving force of society as residing in the individual person; revolutionaries and conservatives see society as more important than the individual.<sup>24</sup> For revolutionaries, the social class is the key actor in world affairs; for conservatives and liberals, it is the nation. Finally, revolutionaries tend to see economics as shaping politics, conservatives see politics as shaping economics, and liberals tend to see the two as autonomous.

### World Views and International Economics

Benjamin Ward (1979:viii, 461–62) structures his overview of economic theories around these three world views (a term he also uses).<sup>25</sup> He argues that these (and only these) three distinctive world views have shaped the study of economics; that each builds its own framework of reference within which its theories and their variants are judged; and that communication among them is problematical. The "shift from one world view to another is really like shifting from one world to another."

The *liberal* tradition, according to Ward (1979a:3, 8, 9), first reached maturity in the eighteenth century and currently is the "ideological heart of the belief system" of almost all practicing U.S. economists. It is embodied in the economic and political structures of the most advanced industrialized countries, in the principles of affluence, social openness, and concern for public welfare. Free markets as opposed to bureaucracies are supported by liberalism (Ward, 1979a:25–26), as markets sum up the actions of individual people and individual deals: "The market captures the essence of the liberal notion that what counts is not nations but individuals and that big changes are made up of a large number of small ones." Ward (1979a:102) sums up the liberal view of human nature as hedonism (seeking pleasure, avoiding pain), rationalism (making deliberate choices), and atomism (the essential separateness of human beings).

Ward's (1979:175) *radical* world view is defined by two qualities—a "commitment to the wretched of the earth" and a belief that human wretchedness is unnecessary and yet "cannot be eliminated within the framework of existing society." Capitalist society, with its "constant contrasts between extremes of deprivation and

<sup>24.</sup> See n. 27, below.

<sup>25.</sup> Ward uses the term *radical* rather than *revolutionary*, which I prefer. My triangular scheme was developed independently of Ward's, which I was not yet aware of. I took the term *world view* from Thomas Kuhn (1970:111). Ward, although Kuhnian in flavor, does not cite Kuhn. Readers interested in explorations of economic issues from each of the three world views will enjoy Ward's book.

wealth," makes the best case for the radical world view. And radical theory is not just "academic" but explicitly a tool for developing successful strategies to change the world. According to Ward (1979:175), radical thought is centered on political economy, because "material deprivation is at the heart of most of the misery in the world today." Radical thought has been in the process of developing for at least two centuries, although its concern with practical change means that contemporary affairs are of greatest interest. Radical thought is currently at a "relatively low ebb" in U.S. economics departments<sup>26</sup> but is surging in the third world and is firmly rooted in the socialist countries, according to Ward.

Ward (1979:325) argues that the *conservative* world view is even more underrepresented in U.S. economics departments than the radical view, although conservatives have played a major role in the reevaluation of Keynesian economics and the emergence of public choice theory in recent years. The conservative tradition rests on four points, according to Ward (1979:326): rejection of utopian and mechanistic solutions to social problems; recognition of the individual person as the primary element in society;<sup>27</sup> emphasis on the family as the most important social unit; and belief that government must provide order if society is to function effectively. Ward (1979c:20) points to ancient China and Venice as examples of successful, durable societies based on conservative principles. Finally, Ward (1979c:33) stresses the centrality of property rights in the conservative economic view. Property rights must be exclusive, transferable, well defined, enforceable, and not prohibitively expensive to define, enforce, and transfer.

Moving from Ward's general economic distinctions to international economics in particular, the three world views may be seen as shaping the traditions of Marxist theories of imperialism, liberal free trade theory, and conservative mercantilism, respectively. With respect to international trade, the Marxist perspective sees trade as an exploitative relationship benefiting the capitalists of the core countries. In the liberal view, free trade benefits all parties involved, since each uses its comparative advantage for maximum efficiency. The conservative mercantilist view holds that trade should be used to build up national wealth to compete more effectively with other nations.

### World Views and International Politics

As with economic theories, so too in the study of world politics, different world views generate different explanations and areas of focus (see Thompson, ed., 1983). For example, Wallerstein's (1974) interpretation, discussed earlier in this chapter, is

<sup>26.</sup> A number of journals, however, do publish Marxist economic thought, and radical political economy is still alive, though not dominant, in the United States.

<sup>27.</sup> In my view, the paramount importance of the individual is more a liberal than a conservative belief. It traces back to classical liberalism in the 18th c., when it was a rather radical, antimonarchist idea. Two hundred years later, and in contrast to today's socialist radicalism, the same belief looks rather conservative. Ward's version of "conservatism" resembles libertarianism, which he calls the "pure breed" of conservatism. Milton Friedman's views are included in Ward's "conservative" grouping, but Friedman (1962) himself calls those views "liberal" in the classical sense.

a Marxist elaboration in which the world system is inherently structured by capitalism and defined by global class divisions between core and periphery.

Conservative scholars of international relations, by contrast, see world politics as a balance of power system made up of roughly equal, autonomous states. In this view, the division between core and periphery is much less important than the balance of power among core states. While revolutionary approaches see the modern world system as a phase in the development of human society through successive modes of production, conservative approaches see the balance of power system as more or less timeless and eternal.

Liberal approaches to the world system tend, like revolutionary ones, to see the system as evolving (developing) over time but see the political and economic elements of the system as largely independent of each other. Revolutionaries, by contrast, tend to see economic factors as shaping political ones internationally as well as domestically,<sup>28</sup> while conservatives tend to see power politics as dominant over economics. These distinctions will be discussed further in chapters 5 and 6.

### **Methodological Issues**

As these four themes indicate, I undertake in this book a macro analysis of social dynamics over relatively long historical periods. Such an inquiry is fraught with difficulties. It is not clear that *scientifically* meaningful statements can be made about macrohistorical processes that are historically unique,<sup>29</sup> especially if one believes, as I do, that the future is indeterminate (see Popper 1957; Fischer 1970). But in my view we should not give up on trying to understand an important subject just because it presents difficulties for "scientific" study. Rather, we should use as much "scientific" apparatus as is useful and as much "interpretive" apparatus as is appropriate and proceed with caution, tentatively.

This book is full of numbers. There are two dangers here. First, some people may be scared off by the numbers. Many scholars in the social sciences and humanities have little interest in statistics and certainly doubt that a statistical analysis could help them understand the historical political economy of the world system. For that group, I have tried to boil down numerical data into summary and graphic form, with verbal explanations, so that no knowledge of statistics is necessary to follow my arguments and conclusions.

The second danger comes from those who believe in "hard" social science methodologies (behavioralism, statistical inference, formal models, and so forth). Because this book contains a lot of numbers, this group may expect it to conform to harder scientific standards than is in fact the case. To this group, I stress that my study addresses a "universe" (the world), not a "sample"—and hence the spirit behind my statistics is descriptive rather than inferential.

<sup>28.</sup> This view is crystallized in Lenin's (1917) theory of imperialism as an outgrowth of finance capitalism.

<sup>29.</sup> There is only one planet Earth and one world system passing through historical time once.

By combining quantitative analysis with historical interpretation, I walk a thin line between two opposing tendencies. Yet I believe that both approaches are needed in order to understand a social reality containing both generalizable patterns and historical singularities.

This book works in both a deductive and an inductive manner in building a theory of long cycles. But more importantly it stresses an "adductive" approach (Fischer 1970) that "tries out" possible answers to relevant questions, checking whether they can be made consistent both with empirical evidence and with the tentative answers to other questions. Each tentative answer affects the next questions asked.

The idea of a world system, for example, is both an assumption and a hypothesis in this book. I assume, provisionally, that there has been a world system since around 1495. In this context, I study historical data in search of long cycles at the world level and ultimately find an international synchrony in long-term price movements back to 1495. This synchrony of political-economic forces across national entities corroborates and strengthens the original assumption that a world system exists. The logic is partially circular and does not exclude the possibility that another study, in another theoretical framework, would select, view, and interpret the data differently, also corroborating its own framework.<sup>30</sup>

I begin by wondering, "What if there are long cycles in world politics and economics?"—a question raised repeatedly in the social sciences in recent years. I then show what a *consistent* long cycle theory would have to look like and what it would imply in terms of how we could interpret historical and present social realities. I do not seek to convince the reader that my theory of long cycles is *necessarily true*—only that it is plausible, that it might be true, that if true it would have interesting and important ramifications, and that it is an advance over previous long cycle theories.

This study, then, proceeds as though piecing together a jigsaw puzzle (drawing on induction, deduction, intuition, and common sense), without requiring that all the pieces fit or that there be only one correct solution to the puzzle. There will always be missing pieces and pieces that do not fit well, but in some solutions more pieces will fit than in others. The iterative process of building theory and sifting evidence gradually narrows the possible solutions, but the book never arrives at a single, complete, or final answer to the questions regarding long cycles. We are left with an impressionist painting rather than a photograph.

# **A Preview**

I have discussed up to now in this chapter the themes of the book and its general approach to the study of long cycles. It might help the reader for me also to outline the book in summary form.

The book is organized in three parts. Part One reviews the past work-both

<sup>30.</sup> See chap. 7 on competing research programs.

theoretical and empirical—on long economic and political cycles. Part Two presents a quantitative analysis of long waves, using historical time-series data, and develops a rough theoretical model of the long wave. Part Three discusses the hegemony cycle and its historical connection with the long wave and draws out some implications of long cycles for the present and future.

# Part One: Debates

Part One reviews, organizes, and synthesizes the past work on long cycles, a task complicated by the nature of the existing literature. The past work is scattered among various disciplines, approaches, and languages and has never been adequately cataloged, reviewed, or integrated into one framework. In particular, there has been a divide between the economic and political disciplinary territories, so that instead of one debate on long political-economic cycles, there have been two debates—one on economic cycles and one on political cycles. Within each of these, there have been subdebates, the structures of which I will investigate.

In the economic long wave debate, although many scholars have examined long waves over the past sixty years, little agreement has been reached on the central questions:

- Do long waves of approximately fifty years' duration exist in the economies of the core countries, synchronized internationally and across different economic variables?<sup>31</sup>
- 2. If so, what causes these long waves, and which variables are central to them?

The overall empirical evidence for long waves is still quite mixed, but surprising consensus is found on the dating of price phases. Drawing on the existing literature, I develop a consensual *base dating scheme* covering 1495–1975.

The debate on long waves has proceeded in two rounds of activity, centered in the 1930s and 1970s–1980s respectively—times of stagnation in the world economy. In the first round of the debate, four theoretical schools emerged in accounting for the causal dynamics of the long wave. These focused on capital investment, innovation, capitalist crises, and war, respectively, as the driving force of the long wave. In the second round of the debate, the "war" school withered away,<sup>32</sup> but the other three schools (reflecting three world views) continue to define the contours of the debate today. No theory has gained broad acceptance, and no consensus has been reached on the central issues of the debate. Each research school continues in its own framework but understands only with difficulty what another research school has learned; this impedes the cumulation of knowledge in the long wave field.

The debate on hegemony cycles has followed a somewhat parallel development. Out of several different roots in the 1940s and 1950s, the debate has coalesced around three main research schools, again corresponding roughly with the three world

<sup>31.</sup> Prices, production, trade, wages, interest rates, and so on.

<sup>32.</sup> Discussion of war cycles became a separate debate as the disciplinary boundaries between economics and politics were more sharply drawn after World War II.

views. As in the long wave debate, these three schools have difficulty communicating effectively with each other and building on each other's work.

Part One uses these difficulties in knowledge cumulation to explore the philosophy of science aspects of long cycle research. The difficulties of knowledge cumulation in the long cycle field are attributed to the character of the long cycle research community—a fragmented community that crosses but never fully bridges the borders of ideology, language, nationality, and discipline. Part One reviews the past empirical evidence for long waves and concludes by codifying the alternative hypotheses put forward by different scholars in the debate.

# Part Two: Analysis

Part Two uses empirical analysis to address several outstanding questions in the long wave debate:

- 1. Can long waves be found in historical data?
- 2. In which economic or political variables can they be found?
- 3. Are they synchronous across countries?
- 4. How early in history can they be found?
- 5. Do wars play a role in economic long waves? What is the connection between the economic and political aspects of long waves?

In order to test my long wave base dating scheme against a variety of economic data, I compiled a set of fifty-five economic time series—price series, production series, and a handful of series on investment, trade, innovation, and wages. The data cover, in various segments, the period since 1495 and come from a variety of core countries. I analyze these time series data to find out whether the data follow the long wave patterns defined by the base dating scheme. I develop a statistical methodology to determine whether growth rates in expansion phases are in fact higher than in stagnation phases.

The results of this analysis show that long waves in prices can be identified over the entire period from 1495 to the present and that severity levels of great power wars are also strongly correlated with the long wave base dating scheme, at least since the seventeenth century. Much more severe wars occur during upswing phases than downswings. Long waves in production can be identified,<sup>33</sup> but the synchrony between production and prices is lagged. Trends in production seem to lead war and price trends by about ten to fifteen years.<sup>34</sup>

Using the relationships among production, war, and prices that emerge from the analysis, I develop a new theory of long waves, in which wars play a crucial role in relation to economic growth. Growth creates the economic surplus required to

<sup>33.</sup> In the period since about 1800 for which data are available.

<sup>34.</sup> This allows a new interpretation of the previously anomalous "stagflation" of the 1970s, which lies between the end of the production expansion phase around 1968 and the end of the price expansion phase around 1980 (making it structurally analogous to the post–World-War-I inflation of the early 1920s).

sustain major wars among core powers. But these large-scale wars drain surplus and disrupt long-term economic growth.

Two data appendixes at the end of the book provide additional materials related to the data analysis in Part Two. Appendix A lists the sources of, and other notes on, each of the fifty-five economic time series. Appendix B reproduces the economic and war data used in the empirical analysis; these have been pieced together from about thirty sources and are listed here in a standardized format suitable for use by other researchers.

### Part Three: History

Part Three turns from quantitative analysis to qualitative interpretation in elucidating a structural history of the core of the world system. Structural history emphasizes long-term social processes rather than day-to-day events, people, and narratives. This part of the book builds a reinterpretation of European political-economic history around hegemony cycles and long waves.

Three hegemony cycles (and the beginning of a fourth) structure the past five centuries. These cycles are delineated by three periods of very large *hegemonic wars*, ending in 1648, 1815, and 1945 respectively. These datings in turn correspond roughly with other changes in war and politics discussed in chapter 13. Part Three considers each of the three hegemony cycles from 1495 to 1945 in succession, tracing out the historical instantiation of both hegemony cycles and long waves within each hegemonic era.

Each hegemony cycle begins with a period of strong hegemony following a hegemonic war (the Netherlands after 1648, Britain after 1815, and the United States after 1945).<sup>35</sup> The predominance of one core country over the others erodes, however, and the system moves toward a more multipolar, competitive power structure, eventually resolving the question of hegemonic succession with another hegemonic war. This hegemony cycle takes one to two centuries to complete and encompasses several long waves. Long waves and hegemony cycles do not appear to be tightly synchronized or linked. The long wave affects all countries in synchrony, while the hegemony cycle concerns the *relative* rise and decline of nations. Nonetheless the two cycles intersect in the same political-economic arenas.

The book ends by drawing on this historical analysis to consider the relevance of past history to present-day world politics and to the future. Projection of cyclical patterns into the future is problematical, especially with the various anomalies and conflicting interpretations concerning the period since World War II.<sup>36</sup> But with appropriate caution, it is possible to make a rough projection that can offer new

35. The starting date of 1495 was not, apparently, also the start of a hegemony cycle. Braudel (1984:77), for instance, dates a parallel longer cycle in prices as beginning around 1350. In this framework, used in chap. 13, the hegemonic decline of Venice was already well under way by 1495.

36. The advent of Keynesian economics, the permanent war economy, nuclear weapons, and the transition from the European states system to a global bipolar order all mark the current era (since 1945) as different in important ways from those that preceded it.

insights into possible futures. The cyclical projection as a baseline for thinking about the future results in different interpretations of trends than the more common linear or static modes of projection. The long cycle perspective points to useful historical precedents—past periods in which dynamics might be similar to those of the present or near future.

The specific interpretation and projection put forward in this book is tentative and open to revision but seems to fit best the available evidence. The world is currently moving from a period of strong hegemony following hegemonic war (the 1950s and 1960s) to one of declining hegemony (a process that may stretch out over many decades to come). In terms of the long wave, we are in a period of stagnation in production, war, and prices.

Looking to the future, my projection suggests that reinvigorated world economic growth could occur somewhere around 1995 to 2020. A period of increasing war could be expected sometime around 2000–2030 and an inflationary phase around 2010–35. While these dates are extremely rough, the sequence suggests that, structurally, the early decades of the twenty-first century may see a dangerous combination of economic expansion and declining hegemony. Such a period would not resemble any part of the period 1945–85 but would most resemble the buildup to World War I around 1893–1914.

To return to the theme with which this chapter started, this suggests a "lesson of history" missed by both President Reagan and his Soviet critics—the importance of the period before 1914, not 1939, as a precedent. The pre-1914 period showed that an arms race in which both sides seek deterrence through a "balance of terror" can lead to a catastrophic war.

In the concluding sections of the book I speculate about change and continuity in the world system in the twentieth and twenty-first centuries. If the system of international power politics continues to operate as it has over the past five centuries, the world will drift closer to another hegemonic war, and the early twenty-first century will be a very dangerous time. Only major changes in the nature of world politics can temper these dangers. Some of these changes have already occurred with the advent of nuclear war; others are beginning to develop in such areas as the information revolution, the conquest of space, and the development of new international regimes. Evolving patterns of international relations are bringing a globalization in which the only security is common security. The next world order will have to be built around this common security, not power politics, if the cycle of great power war is finally to be broken.