The War/Hegemony Debate 1: Roots

As I noted in chapter 3, war was discussed less often as the long wave debate moved into its second round after the 1950s. But the debate on war cycles, although separated from that of economic cycles, continued in a separate research community with its disciplinary center in political science.¹ I will review in this chapter and the next the debates on long cycles of war and related political phenomena.

This chapter could be called the "Quincy Wright chapter" in that it explores three strands of research that trace back to Wright's work in the early 1940s. These strands of research are illustrated in figure 5.1.

The first strand (at the left) concerns fifty-year cycles in war and politics correlated with long waves. Because of the disciplinary border between politics and economics, these studies have not been well integrated in the long wave debate and remain a scattered collection of research projects. The second strand of research concerns the statistical search for periodicity in war data. This line is a self-proclaimed dead-end, currently inactive. The third strand concerns longer cycles of very large wars that take more than a hundred years,² which I call hegemony cycles. Toynbee integrated Wright's idea of hundred-year war cycles with Dehio's framework of long cycles of hegemonic challenge and succession. Organski's "power transition" theory (an offshoot of post-World War II realism) became joined with this theoretical framework and gave rise to the current "war/hegemony debate," which I will review in chapter 6.³

Quincy Wright

Wright (1942) occupies a position with respect to war cycles similar to that of Kondratieff with respect to long economic cycles. Like Kondratieff,

2. These longer cycles were originally conceived as composed of two long waves of war, one more severe and one less severe, totaling about 100 years. In the recent war/hegemony debate, however (see chap. 6), the longer cycles are being theoretically decoupled from long waves; and my interpretation (chap. 13) sees them as about 150 years long and not closely tied to long waves.

3. Farrar's 1977 synthesis best captures the essence of the hegemony cycle strand originating with Wright's work and will close this chapter.

^{1.} As with long waves, however, the war cycle theorists were always a minority within the discipline.



he advances tentative hypotheses of what might cause such a phenomenon but mainly presents the evidence descriptively rather than theoretically.

Wright (1942:227) studies "fluctuations in the intensity of war" and concludes that "There appears to have been a tendency in the last three centuries for concentrations of warfare to occur in approximately fifty-year oscillations, each alternating period of concentration being more severe" (p. 227). Wright defines these concentrations as follows:⁴

*War of the Spanish Succession (1701–14) Concentration of wars around the Seven Years' War (1756–63)
*Napoleonic wars (1795–1815) Concentration of wars around 1853–71⁵
*The World War (1914–18, renewed in 1939)
*More severe war concentration

He concludes that "in the modern period of world-civilization fluctuations of war and peace have tended to become stabilized at about fifty years" (p. 378). These fifty-year concentrations of war are synchronous with Kondratieff's long waves.⁶

Wright is aware of Kondratieff's argument that economic long waves, endogenous to the world economy, determine the timing of wars and revolutions rather than that wars determine the timing of long waves, as Trotsky held.⁷ But Wright (1942:1273) finds available evidence insufficient to judge the direction of causality. Nonetheless, Wright's speculations on the possible causes of war cycles point toward causes arising from political factors rather than reflecting economic cycles.

Wright tentatively suggests three factors that might contribute to war cycles:⁸ psychological factors, economic factors, and the embedding of these factors in an international system that tends toward war:

Fluctuations in the intensity of war in the history of a state would tend to assume a definite periodicity if the international system exerted a persistent pressure toward war and if the economic and technological period necessary to recover from a severe war and to prepare for another were identical with the psychological and political period necessary to efface the anti-war sentiment after such a war and to restore national morale (p. 231).

4. It seems to me that the Thirty Years' War (1618–48) could well be added at the beginning of the list, about 50 years before the War of the Spanish Succession.

5. Crimean War (1853-56), War of Italian Unification (1859), Austro-Prussian War (1866), and Franco-Prussian War (1870-71).

6. The war periods correspond with the long wave expansion phases of 1689–1720, 1747–62, 1790–1814, 1848–72, and 1893–1917 (the renewal of war in 1939 comes just at the start of the long wave expansion phase, out of line with the previous wars near the end of expansion phases).

7. Wright seems to have been unaware of his contemporaries, Silberling and Åkerman, from the war school of the long wave debate (see chap. 2). Thus, already in the 1940s the disciplinary boundaries seem to have been formidable. Wright's student, Frank L. Klingberg, who studied 50-year cycles, had not heard of Åkerman or Silberling (conversation with author).

8. Wright (1942:1272) also mentions the possible influence of the "average dominance of a political party in democratic countries" of 40 to 60 years. This seems less plausible, however, since it would apply only to recent times and would be internationally synchronized only if connected with economic long waves and/or wars.

Among psychological factors, Wright suggests the *alternation of generations* as an explanation for the recurrence of major war about every fifty years: "The warrior does not wish to fight again himself and prejudices his son against war, but the grandsons are taught to think of war as romantic" (p. 230). This generation cycle theme is picked up by Toynbee (see below).

Among economic factors, Wright argues that the *costs of war* create a "tendency to postpone a new war until there has been time to recover economically from the last" (p. 1272). Wars cost money, so countries fight until they run out of money and then save up to fight again. The cost of war theme is picked up by Farrar (see below).

The economic factor for Wright operates in the context of a balance-of-power system with an inherent *tendency towards war*. Countries consistently try to build up their war-making capabilities, which rest on national economic strength. After a major war, nations rebuild their capabilities, and shifts begin to occur in the balance of power. Then, "after the activity of building up from the losses of a great war, heavy industries find it possible to induce armament-building at an increasing rate and for this purpose mobilize demands first for imperialistic expeditions, then for defense from reported aggressions" (p. 1319). Gradually the great powers tend to polarize into two hostile alliances, and the side that calculates time running against it in the new dynamic provokes "a war which is now considered inevitable" (p. 230).

Wright sums up the possible causes of war cycles as: (1) "fading social memory with the passage of a generation"; (2) economic factors; (3) "the lag of national policies and constitutions behind changing international conditions"; and (4) "the tendency of unsettled disputes to accumulate, aggravating the relations of states" (p. 1318).

Wright is not explicit about any longer-term cycles and does not elaborate on the alternation of more severe and less severe war recurrences (which, as Toynbee argues, form a one-hundred-year cycle). Wright does, however, delineate four long-term periods (about 150 years) that define the stages of development of military technology in Europe:⁹

Experimental adaptation of firearms and religious wars
Professional armies and dynastic wars
Industrialization and nationalist wars
The airplane and totalitarian war

I will refer to these long-term periods later, in chapter 13, since they line up fairly closely with the divisions I will use to date the hegemony cycle.

Fifty-Year Cycles in War and Politics

The first main branch from Wright's work consists of studies of fifty-year cycles (synchronous with long waves) in war, foreign policy, social values, and public opinion. I will review each area in turn.

9. Wright (1942:294-303) cited in Klingberg (1970:505).

War

William Thompson and L. Gary Zuk (1982:624–25) revive the central question of the war school of the long wave debate—the role of war in the long wave. They consider three hypotheses: (1) the initiation of a major war inaugurates the upswing of the Kondratieff long wave; (2) the termination of major war inaugurates the downswing of the Kondratieff long wave; and (3) major wars significantly reinforce the upswing of the Kondratieff long wave.¹⁰

Thompson and Zuk find that, contrary to hypothesis 1, "upswings tend to precede major wars" (p. 632). As for hypothesis 2, they find that "the termination of major wars . . . may initiate downswings, but downswings may occur in their absence. Thus, a major war termination is not a *necessary* cause of the Kondratieff downswing, but . . . may have been a *sufficient* cause" (p. 632). Hypothesis 3 receives the strongest support—although economic upswings have preceded major wars, those wars have in turn caused "an impressive proportion of the [eventual] price upswings" (p. 639). "Overall, one gets the impression that, were it not for wars . . . , Kondratieff's long waves might well have more closely resembled ripples" (p. 634).

Thompson and Zuk then statistically analyze the impact of war on prices, focusing on British and U.S. wholesale prices from 1750 and 1816, respectively, to the present. They use Box-Tiao intervention analysis, a statistical technique designed to ascertain the immediate and subsequent effects of an event on a time series. Thompson and Zuk find "significant percentage increases [in prices] during the war followed by a drawn-out period of readjustment that may last as long as twenty years" (p. 637). Only the biggest wars,¹¹ however, had a statistically significant impact.

W. W. Rostow (1975a:753)¹² likewise concludes that wars play a role in "reinforc[ing] the inflationary tendency at work in the Kondratieff upswings." In the first Kondratieff upswing (about 1790 to 1815), war "reinforced, if, indeed, it did not largely create" the price upswing. But in the next three upswings, "the price increases of the early 1850's, 1890's, and late 1930's, preceded the relevant wars." Thus wars do not seem to be the only factor in price upswings, Rostow notes.

Paul Craig and Kenneth Watt (1985)¹³ show a strong correlation of war with economic long waves, using L. F. Richardson's data on war fatalities.¹⁴ They date long waves since World War II in an unusual way—with the trough in 1936, the peak in 1955, and the next trough due around 1987.¹⁵

10. The third hypothesis is considered a contradiction of the first, but not necessarily of the second.

11. Global wars as defined by Modelski (see chap. 6).

12. See chap. 3 on Rostow's approach to long waves.

13. Craig and Watt—an engineer and a zoologist—illustrate the variety of disciplines represented in the long cycle debate (creating problems of disciplinary cohesion within the field).

14. These results converge with my results based on Levy's war data, reported in Goldstein (1984b, c; 1985; 1986).

15. They note that World War II was "premature," coming early in an upswing, "for reasons probably relating to the extremely harsh terms of the Versailles treaty" (p. 26).

Foreign Policy

In addition to studies directly relating war and long waves, there have been several studies of long waves in American foreign policy, beginning with the work of Frank Klingberg (1952), who traces his roots from Quincy Wright (Klingberg 1970:505).

Klingberg argues (1952) that American foreign policy since 1776 follows alternating phases of "extroversion" and "introversion."¹⁶ These alternating twenty-tothirty-year-long phases are dated as follows (p. 250):

Introvert	Extrovert
1776-1798	1798-1824
1824-1844	1844-1871
1871-1891	1891–1919
1919–1940	1940?

Klingberg supports this theory with empirical indices based on such events as treaties, wars, armed expeditions, annexations, and diplomatic warnings (p. 241). He also judges the "popular mood" by means of political platforms, election results, and contemporary writers and speakers. Klingberg observes that "all but two of America's wars were fought during the extrovert phases, and these two wars were begun near the close of extrovert phases" (1979:40).¹⁷ During the extrovert phase, he argues, presidential leadership is widely supported, while during the introvert phase Congress reasserts its constitutional prerogatives.¹⁸

Klingberg's phases correspond very closely with the base dating scheme for long waves—the introvert phases corresponding to the economic downswings and the extrovert phases to the upswings. Klingberg himself, however, does not (in 1952) connect his cycles with long waves. Rather, he suggests internal (self-generating) explanations for the cycles of foreign policy moods, such as "a need for a period of rest and relaxation following a period of intense activity" (p. 262).¹⁹ Klingberg

16. For instance, the mood of the 1930s was introvert, because "America was unwilling to exert much positive pressure upon other nations." The mood from 1941 through the time of writing in 1952 was extrovert, as seen by the country's "willingness to bring its influence to bear upon other nations, to exert positive pressure (economic, diplomatic, or military) outside its borders" (pp. 239–40).

18. Klingberg (1979:39) describes the alternation of foreign policy moods as "spiral in character, with the U.S. becoming more deeply involved abroad during each extrovert phase, followed by a relative plateau or modest withdrawal." Klingberg states that each complete cycle has been devoted to a particular problem: (1) 1776–1824, building independence; (2) 1824–71, responding to the challenges of slavery and manifest destiny; (3) 1871–1918, becoming an industrial world power; (4) 1918–66, meeting the special crisis for world democracy; and (5) 1966–, "apparently being challenged to lead in establishing a stable world order." The argument is reminiscent of Trotsky's stages, Rostow's phases, and Schumpeter-Kuznets's "Industrial, Bourgeois, and Neo-Mercantilist Kondratieffs."

19. He notes a correspondence of his periods with a possible "world political cycle" (p. 263) as reflected in periods of intense diplomatic pressures and wars among the European powers—but doubts this causes the American foreign policy cycle, noting that "it is more likely that some larger factor or inherent tendency affected both" (p. 266).

^{17.} The Revolutionary War of 1775 and the Vietnam War of 1966/67. The latter is just past the end of Klingberg's extrovert phase in 1966 but before the period 1968–74, in which most long wave scholars date the end of the upswing.

(1979:39) speculates that the length of the cycle derives from the length of a "political generation"... of about 25 years."²⁰ Neither economic causes nor the effects of recurring war play a role in Klingberg's theory.

Klingberg (1979) predicts that a current introvert phase²¹ will last through about 1986 or 1987 and warns that "another Great Power might be able to move aggressively, in some significant region of the world, with impunity" (p. 45). Nonetheless, challenges from abroad would be likely to stimulate the United States toward extroversion sooner than would otherwise be the case (p. 40).

Jack Holmes and Robert Elder follow up on the work of Klingberg (see also Alexander 1985). Elder and Holmes (1985a,b) present a variety of empirical data based mainly on content analysis of political documents—in support of Klingberg's conclusions. Holmes (1985), and Holmes and Elder (1985), focus particularly on the relationship of Congress and the president as correlated with the foreign policy cycle (and hence with long waves). Holmes and Elder tabulate (by phase period) such phenomena as presidential vetoes, struggles over executive privilege, war powers actions, Congressional action on treaties and supreme court nominations, and the results of content analysis of inauguration speeches. Holmes and Elder (1985) conclude that 'institutional interactions between the Presidency and Congress are roughly congruent with Klingberg/Holmes mood phases.''²²

Social Values

Possibly related to foreign policy "moods" are more general phases of "social values," studied by J. Zvi Namenwirth and (his student) Robert Philip Weber. They use content analysis of political documents to connect "value changes" in society to economic long waves.²³

Namenwirth (1973) develops a theory of cyclical value shifts (as measured by U.S. party platform analyses) closely synchronized with the long wave.²⁴ He finds cycles of various lengths, the most important being a 152-year cycle and (in its simplified description) a 48-year cycle with four alternating sets of concerns that he calls the conservative, parochial, progressive, and cosmopolitan phases of value concerns (see fig. 5.2).

In the *parochial* phase, economic concerns and "wealth" values reach a peak; "there is little concern with the world, and long-range planning or the concern with wealth is associated with a 'Fortress America' stance" (p. 678). The *progressive* stage sees a "preponderant concern with political strifes" (p. 676), as economic

20. He also (1983) suggests connecting the foreign policy cycle with a longer cultural-political-spiritual cycle.

24. "The history of value change is neither progressive nor regressive, but basically cyclical" (p. 649).

^{21.} He calls the 1980s a "presumed neo-isolationist period" (1979:37).

^{22.} My reading of Holmes and Elder's evidence finds it generally convincing.

^{23.} This work builds on Namenwirth and Lasswell's (1970) use of content analysis to measure the frequency of key words in (American) Democratic and Republican party platforms. Namenwirth and Lasswell distinguish such value categories as "power," "affection," "respect," and so on. They argue that party platforms are "especially suitable for the study of values of the whole society" (p. 8), representing the party's best guess about policies that will win popular support.



The Internal Structure of Short-Term Value Changes (Cycle lengths set at 48 years, Variable Origins)



Source: Namenwirth (1973: 674). Reprinted from *The Journal of Interdisciplinary History*, III (1973), 674, with permission of the editors of *The Journal of Interdisciplinary History* and The MIT Press, Cambridge, Mass.

growth accelerates and concern with economic matters diminishes. Then, "with increasing surplus, attention turns again to the world scene, [and] value articulations become more cosmopolitan" (p. 681). The *cosmopolitan* phase stresses long-range planning; an increasing concern with technology, industry, and training; and "a maximum concern with the world at large" (p. 677). Finally, there follows a *conservative* "preoccupation with authoritative restoration of former structures and values" (p. 677) as the economy begins to decline again.

Namenwirth notes "a rather striking fit" between these value cycles and the long wave (p. 680) and suggests the long economic wave as "the most plausible explanation" (p. 682) for the sequential articulation of value categories: "During long-wave economic deterioration, the nation turns inward, gradually relinquishing international ventures and then obligations, becoming more and more parochial in its orientations" (p. 681).

Namenwirth's analysis suffers from certain methodological problems,²⁵ particularly in fitting data to sine waves and then averaging the resulting wavelengths.

25. Including the inadequate length of the time series relative to the cycle lengths postulated—most notably using a 120-year data set to identify a 152-year cycle.

For instance, cycles varying from 104 years to 232 years are "assumed" to have a "true wave length" of 152 years, with "deviations due either to measurement error or to estimation procedures" (p. 659). But cycles of widely varying wavelengths cannot be at all synchronous, which goes against the idea of long waves as synchronous movements of different variables.

Namenwirth's resulting cycle of value change corresponds closely to the economic long wave. His methodology, although problematical, does not appear biased to give those results. This suggests that Namenwirth's results do reflect an underlying relationship of long waves with social values.

Namenwirth's theory receives further support when Weber (1981) finds corresponding results in a similar analysis of British ''speeches from the throne.''²⁶ Weber tests Namenwirth's theory against the British data (1795 to 1972, or 178 years), again using content analysis. He finds, after removing a secular trend and a longer sine curve (the latter being equivalent to Namenwirth's 152-year cycle), that a short sine curve emerges in many content categories. The wavelengths vary from 27 to 89 years, and Weber (like Namenwirth) ''assumed that change in concern with these categories proceeds at one rate or wavelength . . . Therefore the estimated wavelengths . . . were standardized to the median wavelength'' of 52 years (p. 1134). As with Namenwirth, this is a dubious methodology, but the resulting curve again correlates well with Namenwirth's cycle and the long wave (see table 5.1). Weber concludes that ''as in America, the British . . . cycle is correlated with the Kondratieff economic cycle. In addition, the British and American thematic and Kondratieff cycles are all in phase'' (p. 1132).

John Langrish (1982), like Namenwirth and Weber (but independently), studies long cycles in social values. Langrish finds that periods of technological optimism and confidence in science and technology have corresponded with the upswings of the long wave. Conversely an "anti-science" mood since 1965 may be connected with the downswing. Langrish analyzes changes in social "optimism," using a content analysis of advertisements in the *Journal of Decorative Art*—each of which he classifies as forward-looking, backward-looking, or time-neutral (p. 156).²⁷ He constructs an "optimism index" based on these categories and tabulates the average index value in each long wave period to show that optimism increases on the upswing and decreases on the downswing (p. 156). However, the analysis covers only selected years in the period 1924–81 (one long wave).

Michael Barkun (1984) considers another aspect of social values—the formation of utopian communities in America. Of 270 such communities founded between 1787 and 1919, fully one-third began during two seven-year-long concentrations—

^{26.} Delivered at the opening of each parliamentary session and similar to the American "state of the union" address. Weber "assume[s] that these speeches reflect . . . the dominant concerns of at least the upper classes of British society" (p. 1132).

^{27.} Forward-looking advertisements contain such words as "modern" and "scientific" and futuristic symbols, while backward-looking ones refer to established traditions and such symbols of the past as coats of arms.

	Minima	Parochial	Maxima	Cosmopolitan
	Economic	Value	Economic	Value
	Cycle*	Phase**	Cycle*	Phase**
Britain	1789 1849 1896 1932	1790 1842 1894 1946	1819 1873 1920	1816 1868 1920
America	1790 1849 1896 1932	1788 1836 1884 1932	1814 1866 1920	1812 1860 1908
	Minima	Parochial	Maxima	Cosmopolitan
	Economic	Value	Economic	Value
	Cycle***	Phase**	Cycle***	Phase**
Britain	1783	1790	1815	1816
	1837	1842	1866	1868
	1884	1894	1921	1920
	1938	1946	1967	1972
America	1783	1788	1815	1812
	1837	1836	1866	1860
	1884	1884	1921	1908
	1938	1932	1967	1956

*From Table 1 in Kondratieff (b, 110). Kondratieff did not estimate the minima corresponding to the Great Depression; 1932 is used as an approximate date.

**The estimates for the American short cycle are from Namenwirth (674).

***Estimates from van Duijn (b, 563). Reprinted from <u>Social Forces</u> 59 (June 1981). "Society and Economy in the Western World System" by Robert Phillip Weber. Copyright c The University of North Carolina Press.

1842–48 and 1894–1900. He identifies a third concentration in the 1930s. Each of these three concentrations corresponded with an upsurge of "millenarian movements" in America. Barkun notes (p. 43) that each period comes near the trough of a long wave. A fourth concentration in the late 1960s, however, does not fit the pattern. "While the first three waves indisputably took place in times of severe deprivation, the most recent did not" (p. 47).²⁸

A different approach to social values is found in Arthur M. Schlesinger, Sr.'s (1939), suggestion that American politics since 1765 have swung between alternating periods of (roughly speaking) liberalism and conservatism. These cycles (like so

28. The fourth wave of millenialism might fit the long wave better if one used Rostow's unusual dating scheme, in which the 1950s and 1960s are considered a downswing.

much else in the long cycle field) have recently been resurrected (Arthur Schlesinger, Jr., 1986). These Schlesinger cycles, however, average 16.6 years in length and do not correspond with the cycles being discussed here. As Schlesinger (1939:226) notes, "a scrutiny of the [liberal/conservative] oscillations reveals no clear relationship to any rhythms which students of the business cycle have yet discovered in our economic life."

Public Opinion

A final line of work relevant to fifty-year political cycles concerns data from public opinion polling. Do these data reflect changes in public attitudes toward extroversion and introversion? The available data extend back only through one long wave,²⁹ but within that period the evidence is supportive.

Lloyd A. Free and Hadley Cantril (1967:62–65) study shifts in American public opinion on foreign policy questions. They distinguish between generally "internationalist" and "isolationist" outlooks. Public opinion polls show strongly isolationist tendencies in the 1930s (a long wave downswing) but strongly internationalist tendencies in the 1960s (an upswing phase):

Results from 1936–37				
If another war like World	War I developed i	n Europe, should America take part again?		
	Yes 5%	No 95%		
If one foreign nation insists compel it to stop?	s upon attacking ar	nother, should the U.S. join with other nations to		
	Yes 29%	No 71%		
Would you like to see the United States join the League of Nations?				
	Yes 33%	No 67%		
Results from 1964:				
The United States should	mind its own bus	iness internationally and let other countries get		
along as best they can on t	heir own. Do you	agree or disagree?		

Disagree 70%, Agree 18%, Don't Know 12%

The United States should cooperate fully with the United Nations. Do you agree or disagree? Agree 72%, Disagree 16%, Don't Know 12%

These results, although limited in time, are consistent with the hypothesis that "internationalist" public opinion correlates with the expansion phase along with extrovert foreign policy, "cosmopolitan" values, and increased war.

Furthermore, recent public opinion data show a return movement toward isolationism, coinciding with the current long wave downswing phase. Free and William Watts (1980:47) present data that show a sharp shift toward isolationism in the 1970s (which has partially eroded in the 1980s):³⁰

29. And I have evidence only for the United States.

30. There were no meaningful differences between Republicans, Democrats, and Independents on the internationalist-isolationist spectrum.

	U.S. should mind its own business: Agree (%)	U.S. should cooperate with the U.N.: Agree (%)
1964	18	72
1974/76	41	46
1980	30	59

Free and Watts interpret the partial decline in isolationism since 1975 as a sign that "defense-oriented internationalism has come of age"—that there is "a new desire to put an end to what is seen as a weakening U.S. role in the world, and to resume the position of being 'number one'" (p. 47).

However, such a conclusion seems exaggerated and is contradicted by William Schneider's (1983:7–8) poll results, which indicate that ''in areas not related to America's own defense and security, the trend in public opinion since the late 1960's has been away from internationalism.'' The response to the question, ''Do you think it will be best for the future of the country if we take an active part in world affairs or if we stay out of world affairs?'' showed a steady trend away from internationalism from the 1950s through the present:³¹

1950s	about 70%
Mid-1970s	66%
1978	59%
Nov. 1982	54%

Although the United States is not currently as isolationist as in the 1930s (neither is the economy as depressed), the mood has shifted in that direction since the 1960s.³²

In conclusion, results from a number of scattered research projects that search for fifty-year cycles in war, foreign policy, and social values consistently support the presence of long waves at this level of society, and not just in economics.

The Search for Periodicity

The second line flowing from Wright's work is the search for periodicity in war data.³³ This research was part of the larger enterprise of creating quantitative "behavioral" data on war for statistical analysis as exemplified in the research program of J. David Singer's Correlates of War (cow) project begun in the 1960s at the University of Michigan.

31. Elites ("a leadership sample of Americans in senior positions") followed a similar pattern over time but were more internationalist across the board than the general public.

32. The most recent polling data available to me (Gallup-Newsweek poll, Boston Globe, Apr. 8, 1985, p. 4) seems to show continuing sentiment against at least the military side of internationalism. As of April 1985, 63% of those polled felt the United States made a mistake in sending troops to Vietnam (27% disagreed), and 75% felt the United States should be more cautious in using military force (17% favored more military force).

33. See also Goldstein (1984a) and Thompson (1985a) for further reviews of this literature.

Singer is not primarily concerned with war cycles, but he looked into the periodicity of war along with other aspects of the "correlates of war" (see Small and Singer 1982:143–57). Singer and Thomas Cusack (1981:411) use the cow project data (1816–1965, or 150 years) to test for constancy in the elapsed time between one war and the next. "The passage of time since the prior war experience seems to have little effect" on the probability of a country finding itself at war again. After considering other possible ways to measure war periodicity, Singer and Cusack find little supporting evidence and take a "dim view" of war periodicity (p. 419).

Aside from the work of Singer and his associates, there have been a few other studies of war "periodicity." The first of these, J. E. Moyal (1949), followed closely after Quincy Wright and used Wright's data, which covered 450 years. Moyal claims to show a 200-year cycle in the outbreak of war, using statistical means, including 50-year moving averages. But Moyal's methodology is problematical, and his 200-year cycle has not been pursued.

Frank Denton and Warren Phillips (1968:185) find "a definite tendency for a periodic increase in the level of violence about every 25 years," as well as a longer cycle of 80–120 years, in Quincy Wright's data (for 420 years up through 1900). They use 20-year averages to bring out this longer cycle graphically. Denton and Phillips interpret these data to support a long cycle theory, but their long cycle matches up neither with the 100-year cycle of Wright (and of Toynbee and Farrar, see below) nor with economic long waves, and their data are unconvincing.

Singer (1981:1) sums up the war-periodicity line of research thus: "Much research on periodicity in the occurrence of war has yielded little result." The efforts to identify war cycles based on fixed periodicities are a self-proclaimed dead-end and may be seen as a "degenerate research program" in Imre Lakatos's terms (see chapter 7).

Longer Cycles of War and Hegemony

The third strand of research coming out of Quincy Wright's work leads into the current debate on cycles of war and hegemony. The influences of Ludwig Dehio, Arnold Toynbee, and A. F. K. Organski come to bear, as shown on the right-hand side of figure 5.1.

This strand focuses not on fifty-year cycles (long waves) but on longer cycles defined by the very biggest wars, which I will call "hegemonic wars."³⁴ This conception of war cycles flows out of Wright's observation that every other fifty-year war concentration was "more severe." Toynbee formulated this into a one-hundred-year war cycle scheme, and his contemporary Dehio formulated a similar scheme based on the recurrent efforts of Continental powers to gain hegemony in Europe.

^{34.} I follow Farrar (and Gilpin) in this usage. Other terms referring to the same concept but with different emphases are general war (Toynbee, Levy), global war (Modelski), world war (Wallerstein), and systemic war (Midlarsky). Levy (1985) reviews these interpretations (see chap. 6). My choice of "hegemonic war" is explained early in chap. 13.

This concept of a cycle of hegemonic challenges eventually drew Organski's "power transition" theory into the debate, since that theory deals with the outbreak of war when a rising challenger surpasses the dominant power in capabilities.

Different conceptions of what constitutes hegemony, hegemonic war, or a hegemonic challenge lead to different interpretations and datings of these phenomena. By hegemony I mean the position of the leading country in the world, which is able, by virtue of superior economic and military capabilities, to largely shape the rules by which international relations (both economic and security relations) are conducted.³⁵ I will return to the definition of hegemony in chapters 6 and 13.

Ludwig Dehio

German historian Ludwig Dehio ([1948] 1962), writing in the shadow of World War II, argues that European history over five centuries has been structured by the recurrent drives of Continental powers (Spain, then France twice, then Germany) for world domination. Each drive was eventually defeated by island nations that controlled the seas (Insular nations).³⁶ Unlike Wright, Dehio relies on interpretive history rather than quantitative data and does not explicitly refer to the recurrence of hegemonic challenges as "cyclical." But Dehio's instances match Wright's "more severe" war concentrations closely:

Wright's "more severe" war concentrations	Dehio's drives for world domination
Spanish Succession (1701–14) Napoleonic wars (1795–1815) World War (1914–18; 1939–45?)	Spain (Charles, Philip) France (Louis XIV) France (Napoleon) Germany (WWI and WWII)

Venice for Dehio ([1948] 1962:37) was the prototype of an insular power. He dates the rise of the modern system of states from the beginning of the struggle among the great powers over Italy in 1494. Only Venice "preserved its freedom," and that success derived from its insular position as an "island empire."

Portugal, Dehio argues (pp. 51–52), was the first nation in the European state system to develop long-distance trade to Asia by sailing ship and hence capture Venice's role as "the intermediary . . . between two worlds"—Europe and Asia. But Portugal lacked the "insular" security of Venice, especially against Spain's armies, and so "Portugal's legendary glory was as fleeting as a meteor." In 1494 Portugal had to concede half the globe to its Spanish rival, and "in 1580 she lost her

^{35.} This usage contrasts with those referring to "hegemony" as the (unsuccessful) drives for military conquest of Europe.

^{36.} Continental powers, militarily strong on land but weak at sea, tend to be "totalitarian," while Insular (naval) powers are militarily invincible at sea but weak on land, and are associated with the "free spirit of humanity" protected by the "shield of insularity" over the centuries ([1948] 1962:272).

independence, together with all her overseas possessions, to Spain, not to regain it for two generations."

Under Charles V and Philip II Spain mounted the first big push for domination of the European state system, according to Dehio. Charles V came of age in 1515, inheriting both the Spanish and Hapsburg empires, including the Netherlands, and battled France throughout the middle sixteenth century with considerable success before abdicating in favor of his son, Philip II. After conquering Portugal (which had in turn taken much of the Asian trade from Venice) in 1580, "Philip held both the Spanish and the Portuguese colonial empires in his mighty hand. Did not this colonial monopoly appear to be the harbinger of Spanish supremacy in Europe? Was not the end of the European system of states in sight? . . . To understand how it was saved, we must take stock of England" (p. 53). Since France was unable to contain the Hapsburgs, England emerged as Spain's adversary: "Thus, the supreme Continental power, seemingly at the peak of its strength, [faced] the small and untested island power Now, for the first time in the European setting, two ways of life confronted each other. Their derivatives have remained face to face right down to our own times" (p. 55). The decisive showdown came in 1588, when the Spanish armada, "like a tract of continent on the high seas" (p. 56), was decimated by the longer-range artillery and experienced seamanship of the British under Sir Francis Drake.³⁷ The decades after 1588 saw Spain's gradual downfall, which culminated in Spain's big land defeat in 1643 at Rocroi.38

The defeat of Spain, according to Dehio, laid the foundations for the second great drive for world domination, under Louis XIV of France.

The defeat of the Armada dried out the veins of the Spanish lands while it swelled those of the opposing countries. However, the political and economic decline was so gentle that . . . not until the Peace of the Pyrenees in 1659 and Louis XIV's assumption of power in 1661 did the wave of France gather majestically, to attain its proud crest a century after the defeat of the Armada.

The broad trough between these two waves is packed with incident in many forms and ramifications. But they lack paramount significance (p. 66).

Louis XIV, like Philip II, found England in his way, and the English defeat of the French fleet in 1692 repeated the experience of the Spanish armada 104 years earlier. After this defeat, according to Dehio, France had "passed her zenith," but her decline, "like that of Spain before, ensued by degrees." Eight years after the defeat of the French fleet, the dying king of Spain left all of Spain's dominions to Louis's grandson, and France fought to claim them in the War of the Spanish Succession,

^{37. &}quot;The Armada shared the fate of the Persian fleet at Salamis [in Ancient Greece] and foreshadowed that of the Russian fleet at Tsushima [in the 1905 Russo–Japanese War]: in each case, the squadrons of a giant continental power with long voyages behind them were sent to the bottom in the home waters of the small opposing naval power" (p. 56).

^{38.} Sweden having defeated the Hapsburgs the previous year, the Treaty of Westphalia in 1648 saw Sweden and France the big winners, Spain and the Hapsburgs the losers.

1701–13. France was defeated by a coalition again led by England, and France signed peace treaties in 1713 and $1714.^{39}$

The next drive, at the end of the century, again came from France under Napoleon and again ran up against Britain. The British declared war in 1803, and the French attempt to invade England resulted in yet another French naval defeat, in 1805. The French fleet regrouped in the Mediterranean and was decisively beaten by Adm. Horatio Nelson at Cape Trafalgar, near Gibraltar.⁴⁰ It had been just over a century since the French fleet was decimated under Louis XIV.

Shortly after Trafalgar, "Napoleon was destroyed on land, and this defeat, in turn, was an effect of his inability to master Britain at sea, for otherwise he never would have had to march on Moscow" (p. 164). The invasion of Russia in 1812 was a disaster for Napoleon, and his defeat was ratified at the Congress of Vienna in 1815, which shifted borders westward to France's disadvantage.

The next drive for domination came from Germany. With the defeat of France, Germany moved into the vacuum and began to grow and evolve in new ways:

The economic strength which the early stages of industrialization had brought to this agricultural country made it vulnerable as industrialization advanced; self-sufficiency was transformed into dependence on foreign raw materials and markets . . . This sense of constriction also became increasingly tangible in foreign affairs (p. 225–26).

Dehio argues that as Germany industrialized and expanded into the world scene, it found itself competing with Britain everywhere (p. 231).

[T]he building of the German battle fleet, designed for decisive operations in British coastal waters . . . constituted a direct threat to Britain's insular strength. The prosperity of Germany enabled her to embark on a breathtaking armaments race. Moreover, Germany's lunge into the Near East pressed the more disturbingly on the [British] Empire's major artery since the Reich had no need, as France had had under Napoleon I, to make claims on the sea route (p. 236).

The German challenge was, however, like those of Spain and France, defeated in World War I by a coalition led by Britain (with the addition of the United States and Japan, which in Dehio's terms increased the insular strength of the coalition). But Britain's costly "victory" in World War I "sucked at the vitals of her world position" (p. 240). The power of America thus emerged as the crucial new insular factor in the world.

Tragically, "America, unprepared in spirit for the global role suddenly proferred her, rejected it, and withdrew into the 'splendid isolation' of her giant island"

39. Austria emerged the big winner. Twenty years later, however, in 1733, France, Spain, and Savoy declared war on a growing Austria and won; the Turks also defeated Austria in 1737–39. By 1755 France again faced England at sea and lost, and by 1763 the end of the Seven Years' War left Austria whittled back down to size. These 1733–63 wars centering on France, Austria, and England correspond with Quincy Wright's ''less severe'' cluster of wars.

40. According to Dehio, though, the critical moment had come seven years earlier, when a British fleet under Nelson destroyed a French fleet of equal size in the Mediterranean (at Aboukir in 1798), ruining Napoleon's Egyptian expedition. "At the cost of only 900 dead, Britain was able to thwart the grand-scale sortie of a dominant Continental power into the world outside" (p. 153).

(p. 244). The "withdrawal of Russia and the United States from the world scene" destabilized the shaky peace of Versailles, allowing some in Germany to "misread the situation" (p. 256). Thus Germany mounted another full-blown attempt at world domination in World War II—but Dehio argues that, although "still vigorous and vital, [Germany] was in fact engaged in a death struggle" (p. 259).

Dehio notes that the world wars transformed the European balance-of-power system into a bipolar world order, raising the possibility "that the great game of the modern era . . . has been played to a finish" (p. 263). But in fact the new "global order," which is "going through its birth pangs," has recreated the pattern of an insular power (the United States) trying to contain a Continental power (the Soviet Union) (p. 266). "Once again, the continental and insular principles are face to face, stripped down to their essence and at the same time magnified to global proportions" (p. 267).

Dehio closes hopefully, in 1948, since the new world order faces different dangers than the "peculiar mechanism of European history" (p. 268). But in a 1960 epilogue, Dehio argues that Soviet technological development after World War II aims ultimately at supporting a drive for "communist world domination" (p. 275). Furthermore, the insular principle is "gravely menaced" by new technology, since naval power can no longer protect an island from rockets and aircraft (p. 281). Dehio suggests that "a broad and deep current in world politics has begun to favor the continental principle" and threatens to bring about the "decline of the West" (p. 286). But, although the Western powers have lost their trump cards, "they have by no means lost the game" (p. 287). What is required is renewed strength and vigilance:

Is not the nightmare that weighs upon us—a third world war—the product of experience in an earlier epoch unthinkingly applied to the present? To answer this question in the affirmative, and to ignore the need to prepare for the worst, would be a dangerous error. God grant that the world of Western culture may not suffer the fate of the ancient world when the cry of "panem et circenses" could still be heard even as the barbarians, thirsting for plunder, burst into the limes (p. 287–88).

This quote, which ends Dehio's book, conveys the deeply conservative flavor of his approach.

Arnold Toynbee

Toynbee (1954 9:322) structures the past five centuries around the same timing that Wright and Dehio followed. He builds from Wright's "more severe" war concentrations (every other long wave)⁴¹ a roughly 115-year cycle of war and peace (table 5.2). The three regular modern cycles are dated 1568–1672, 1672–1792, and 1792–

^{41.} Toynbee describes long waves in war as having an average span of 57.66 years. (He really does state their periodicity to two decimal points, which is to say within four days!) By comparison, Toynbee finds war-and-peace intervals in combined Hellenic, Western, and Chinese history averaging 44.76 years in length (p. 287).

	Phase	Overture (1494-1568)	First Regular Cycle (1568-1672)	Second Regular Cycle (1672-1792)	Third Regular Cycle (1792-1914)	Fourth Cycle (1914 -)
(i)	Premonitory Wars (the Prelude)			1667-8 ¹		1911-12 ²
(ii)	The General War	1494-1525 ³	1568-1609 ⁴	1672-1713 ⁵	1792-1815 ⁶	1914-18
(iii)	The Breathing-space	1525-36	1609-18	1713-33	1815-48	1918- 3 9
(iv)	Supplementary Wars (the Epilogue)	1536-59 ⁷	1618-48	1733-63 ⁸	1848-71 ⁹	1939-45 ¹⁰
(v)	The General Peace	1559-68	1648-72	1763-92	1871-1914	

Table 5.2. Toynbee's War-and-Peace Cycle

Louis XIV's attack on the Spanish Netherlands.
 The Turco-Italian War of 1911-12; The Turco-Balkan Wars of 1912-13.

3 1494-1503, 1510-16, and 1521-25.

4 1568-1609 in the Spanish Hapsburg Monarchy; 1562-98 in France.

- 5 1672-78, 1688-97, and 1702-13.
- 6 1792-1802, 1803-14, and 1815.

7 1536-38, 1542-44, [1544-46 and 1549-50, England v. France], [1546-52, Schmalkald League of

Protestant Princes in the Holy Roman Empire v. Charles VJ, 1552-59.

8 1733-35, 1740-48, and 1756-63.

9 1848-49, 1853-56, 1859 [1861-65, civil war in the United States; 1862-67, French occupation of Mexico], 1864, 1866, and 1870-71.

10 This recrudescent general war of 1939-45 was heralded by a splutter of premonitory wars: the Japanese attack on China, launched in Manchuria in 1931; the Italo-Abyssinian War of 1935-36; the War of 1936-39 in Spain; and the fateful one-day campaign in the Rhineland on March 7, 1936, which was to pay for its bloodlessness at compound interest in the holocausts of the years 1939-45. Source: Toynbee (1954: 255). Copyright Oxford University Press.

1914 (p. 255). Each cycle begins with a general war and is followed by a "breathing space", "supplementary wars," and, finally, a general peace.

Toynbee's (p. 255) dating of "general war" periods corresponds with Dehio's "drives for world domination": the first of these, in 1568-1609, corresponds with Philip II's wars and the defeat of the Spanish armada by Britain.⁴² Toynbee's second cycle begins with general war in 1672–1713, corresponding with Louis XIV's drive for supremacy.⁴³ His third general war period, 1792–1815, corresponds with the Napoleonic challenge.⁴⁴ And the fourth cycle begins with general war in 1914–18.⁴⁵

Toynbee sees similar patterns in each of the four cycles. In each, a centrally located Continental power, "with sally-ports opening into the back-yards of the countries that were . . . the stakes of contention," strives aggressively to break out of encirclement. This role, corresponding with Dehio's Continental powers, was played successively by the Spanish Hapsburg monarchy, by France (twice), and by Germany. Like Dehio, Toynbee suggests that by 1952 the Soviet Union had inherited the role (p. 258).

^{42.} After a breathing space (1609-18), Toynbee's "supplementary war" period consisted of the Thirty Years' War (1618–48), followed by a general peace from 1648 to 1672.

^{43.} The supplementary war period (1733-63) contained the Seven Years' War, followed by general peace (1763-92).

^{44.} With a supplementary war period in 1848–71 (German, Italian, Crimean wars).

^{45.} The supplementary war period, 1939–45, is considered anomalous by Toynbee.

Toynbee notes the correspondence of his war-and-peace cycle with the long wave (pp. 254, 287). Whereas Kondratieff claimed that long waves cause the cyclical recurrence of war, Toynbee takes the opposite position:

The apparitions of economic 'long waves' might not be hallucinations but might be economic reflections of political realities that had already been 'a going concern' in the Modern Western World for some three hundred years before the outbreak of the Industrial Revolution in Great Britain (p. 235).

This argument resembles that of the war school of the long wave debate.⁴⁶

Toynbee explains the war-and-peace cycle as a result of a "Generation Cycle in the transmission of a social heritage":

The survivors of a generation that has been of military age during a bout of war will be shy, for the rest of their lives, of bringing a repetition of this tragic experience either upon themselves or upon their children, and . . . therefore the psychological resistance of any move towards the breaking of a peace . . . is likely to be prohibitively strong until a new generation . . . has had time to grow up and to come into power. On the same showing, a bout of war, once precipitated, is likely to persist until the peace-bred generation that has light-heartedly run into war has been replaced, in its turn, by a war-worn generation.

Thus Toynbee explains the alternation of war and peace periods along the long wave "as effects of the periodic breach that is made in the continuity of a social tradition every time that an experience has to be transmitted by the generation that has experienced it in its own life to a generation that has merely learnt of it at second hand" (p. 322).

This generation cycle theory⁴⁷ derives from that of Wright (see above), but whereas it explains Wright's 50-year war cycle plausibly, it does not account for the 115-year cycle that Toynbee builds out of the "more severe" war periods. The longer cycle, Toynbee argues, could arise from a "concatenation of four generations" needed to erase the memory of general war sufficiently for a new generation to "have the heart to re-perform the tragedy on a grand scale"—even though two generations would suffice to "give the next generation the nerve to embark on supplementary wars of limited scope" (p. 326).

If this explanation is accepted, however, the case of World War II, which Toynbee includes with "supplementary wars," becomes particularly problematical. "The structural novelty of the fourth cycle was . . . the portentous one of capping one general war with another one of still greater severity, atrocity, and inconclusiveness, instead of following it up with a burst of milder, but nevertheless more conclusive, supplementary wars" (p. 254). This irregularity undermines the generation cycle theory of war fluctuations: "If it normally requires two or three inter-generational caesuras to nerve a society to plunge into a general war again, the reduplication of a

^{46.} But Toynbee does not cite the war school proponents.

^{47.} On generation cycles, see also Beck (1974) and Huntington (1977).

general war after a single caesura is manifestly something contrary to Human Nature'' (p. 326). At least it is contrary to Toynbee's theory.⁴⁸

Two other "peace researchers" following in Wright's tradition in this period are relevant to Toynbee's generation cycle theory. The first is Pitirim Sorokin. The theme that grandchildren reflect values of their grandparents runs "like a red thread" through Sorokin's writings, Mensch (1979:5) observes. Sorokin (1957:561), however, does not find the evidence of war cycles convincing. "No regular periodicity is noticeable" in war and peace periods. "Instead, we find an enormous variety of rhythms. After prolonged wars several times there occur long periods of peace, but not always." Sorokin dismisses Quincy Wright's 50-year war cycles as unproven and unprovable and likewise refutes the possibility of war cycles in a study of 2150 years of Chinese history (pp. 561–63).⁴⁹ The generation cycle, according to Sorokin, would not give rise to a war cycle because, in fact, "periods of peace as long as one quarter of a century have been exceedingly rare," so that "almost every generation (25 to 30 years) in the past, with very few exceptions, has been a witness of, or an actor in, war phenomena" (p. 559).⁵⁰

The work of Lewis F. Richardson (1960b) would seem to be more supportive of Toynbee's approach. Richardson finds that the frequency of retaliatory wars drops off in the years following a war (as "forgiving and forgetting" takes place) but picks up again after thirty years. Richardson speculates that "the generation who had not fought in the earlier war, but who were brought up on tales about its romance, heroism, and about the wickedness of the enemy, became influential from 30 to 60 years after the war ended and so delayed the process of forgetting and forgiving" (p. 200). Richardson himself does not, however, subscribe to a cyclical (or a secular trend) theory of war, finding war distributions to be more of a "random scatter" (p. 136).

A. F. K. Organski's Power Transition

While Toynbee's generation cycle embodies the psychological elements in Quincy Wright's approach, other scholars have been more interested in the material or economic elements that might lead to a regular recurrence of war. These approaches have drawn on the "power transition" theory of A. F. K. Organski in which the relative growth of national economic capabilities is seen to affect the conditions for war. While Organski's theory is not explicitly cyclical, it becomes integral to later cyclical theories.⁵¹

The power transition theory is an offshoot from the general approach of "realism" in the study of international politics, of which Hans Morgenthau became the preemi-

48. Colby wrote in 1926: "As wounded men may limp through life, so our war minds may not regain the balance of their thoughts for decades" (p. 15). Nonetheless, little more than a decade later those "war minds" were again returning to war.

^{49.} See also Lee (1931) on periodic Chinese wars.

^{50.} Sorokin (1957:564) also rejects "linear theories of war evolution."

^{51.} Beginning with Farrar's synthesis of the power transition approach with Wright's "cost of wars" approach and Toynbee's 100-year cycle (see below).

nent spokesperson after World War II. Realism "maintains the autonomy of the political sphere" from economics (Morgenthau [1948] 1967:14). The purpose of realism is to contribute to the development of the study of politics in terms of its own standards, based on interests and power and not on either economic or moral standards (p. 14). Power, according to Morgenthau, derives from three psychological influences of one actor over another: expectation of benefits, fear of disadvantages, and respect or love for people or institutions (p. 27). Elements of national power include such economic factors as resources, industrial capacity, and population ([1948] 1967:chap. 9). Thus, as in classical mercantilism, national wealth and economic strength serve politics.⁵² A nation's wealth directly affects its ability to wage war as well as to give or respond to other incentives and threats short of war.

Organski (1958)⁵³ follows on Morgenthau and the realist tradition in emphasizing *power:* "Shifts in the international distribution of power . . . create the conditions likely to lead to at least the most important wars, and power is the most important determinant of whether a war will be won or lost. And power, again, is the resource that leaders hope to preserve or to increase by resorting to armed conflict (Organski and Kugler 1980:4). And like other realists, Organski sees economic factors as crucial in building national power.⁵⁴

But Organski parts company with the traditional realist balance of power theory. Balance of power theory assumes a set of roughly equal nations that form alliances based on power considerations and that maintain peace by maintaining the "balance" and preventing predominance by one nation. Organski, however, finds this to be historically inaccurate. "Balance" is unusual; it is more common for one country to dominate the international system.⁵⁵ Thus Organski assumes a *hierarchical* world order in which there is a "most powerful nation" at the "very apex of the pyramid" (Organski and Kugler 1980:19). Just below are other great powers that have less ability to influence other nations and that receive fewer benefits from the international order.

Organski argues that differentials in national economic growth affect the rise or fall of different countries' *relative capabilities* in this international hierarchy and that these changes underlie major wars:

The manner and speed of national growth and development change the pools of resources available to nations . . . If one nation gains significantly in power, its improved position relative to that of other nations frightens them and induces them to try to reverse this gain by war. Or, vice versa, a nation gaining on an adversary will try to make its advantage permanent by reducing its opponent by force of arms. Either way, changes in power are considered causae belli (Organski and Kugler 1980:8, 13).

52. Current neorealists such as Gilpin (see below) and Krasner are thus sometimes called neomercantilists.

53. The core ideas put forth by Organski (1958) are elaborated in Organski and Kugler (1980).

54. Organski (and Organski and Kugler) in fact use national income as an index of national power or capabilities.

55. Britain did not act as a "balancer" in European politics but acted to maintain her own dominant position, according to Organski.

According to Organski, *challenges* to the world order arise from changes in relative national power:

The powerful and dissatisfied nations are usually those that have grown to full power after the existing international order was fully established and the benefits already allocated . . . The challengers, for their part, are seeking to establish a new place for themselves in international society . . . They have reason to believe that they can rival or surpass in power the dominant nation, and they are unwilling to accept a subordinate position in international affairs when dominance would give them much greater benefits and privileges.⁵⁶

Thus, Organski argues, the greatest danger of war lies not in the preponderance of one nation but in a balance of power, since equally distributed power encourages challenges to the status quo. War is most likely when challengers catch up to or surpass the dominant power, and peace is most likely when one nation or coalition predominates so clearly as to make a challenge to the status quo impractical.

It is not hard to put together Organski's theoretical "challengers" with Dehio's historical "challenges," which, as discussed above, correspond roughly with Toynbee's war cycles. Organski and Dehio represent conservative approaches in terms of the prescriptions flowing out of their theories. Protection of the status quo is the best guarantee of peace; erosion of American predominance should be resisted.

L. L. Farrar, Jr.

Farrar (1977) combines Organski's power transition with Toynbee's one-hundredyear war cycle. Farrar adopts Toynbee's dating of hegemonic wars every hundred years with smaller war periods in between.

Farrar finds a repeating sequence in historical data of "hegemonic wars" alternating with "adjusting wars," with "probing wars" scattered in between. These categorizations are shown in figure 5.3 superimposed on Quincy Wright's graph of battle frequencies. Farrar's war phases coincide with those of Wright and Toynbee but have a different terminology:

Wright	Toynbee	Farrar
Major wars	General war	Hegemonic wars
(peace)	Breathing-space	Probing wars
Minor wars	Supplementary wars	Adjusting wars
(peace)	General peace	Probing wars

Farrar lists several possible causes of the existence of this cyclical pattern and of its length (94 to 130 years in all). Among these causes are such psychological explanations as Toynbee's generation cycle, which he finds unsatisfying. Farrar prefers two explanations based on economic factors—Wright's cost of war argument and Organski's power transition argument.

56. Organski ([1958] 1968:364-67) quoted in Organski and Kugler (1980:19-20).



Figure 5.3. Farrar's Modern Battles by Type of War

The cost of war argument holds that countries tend to store up a surplus for war purposes, then fight a major war until it is concluded or money runs out, then begin saving up again. "War can be seen to require a surplus of material-human resources," argues Farrar, and hence "can continue only as long as the surplus exists and must be discontinued when the surplus is either actually exhausted or seen to be exhausted" (p. 171). The rapid augmentation of Europe's economic surplus-generating capability over the past five centuries did not shorten the war cycle's length, according to Farrar, because war itself incorporated the new technology. "The time required to expend surplus [on war] consequently remained relatively constant" (p. 171). This cost of war argument, however, applies to fifty-year rather than onehundred-year war cycles. In the latter area, Farrar draws on the power transition theory.

Farrar follows Organski in focusing on the dynamic nature of power-seeking in the European state system (pp. 166–67). Like Organski, he argues that economic factors help determine a nation's "power" in the international system. National capabilities change at different rates, leading to shifts in the relative power of different nations that underlie the recurrence of hegemonic war. Farrar interprets the duration of the one-hundred-year cycle as the time required for shifts in relative power to occur in the international system. Periods of probing wars (low violence) alternate first with adjusting wars (middle violence) and then with hegemonic wars (high violence), taking about 94 to 130 years for a complete sequence.

Probing wars test the existing status quo and indicate that it is sound in the sense of reflecting the distribution of power But internal change meanwhile continues and makes that status quo less realistic. These pressures for change of the status quo eventually precipitate new adjusting wars which alter the status quo to conform more closely with the new distribution of power. This new status quo is then tested again in probing wars . . . Hegemonic wars follow . . . when new adjustments in the status quo coincide with the attempt of a great power . . . to dominate the system [They are] the most extreme form of an adjusting war (p. 167).

Farrar thus casts the power transition theory in a cyclical model, explaining the cycle of hegemonic war in terms of long-term changes in international power distribution.

Farrar's approach, then, sees the hegemony cycle as a roughly one-hundred-year process in which a country emerges from a period of hegemonic war as the dominant nation but is eventually overtaken in economic strength by a rising "challenger." The century-long period between bouts of hegemonic war represents the time required for major changes to occur in the relative capabilities of the leading nation and the "catch up" nation or nations.

Farrar's synthesis pulls together the main elements around which the current debate on long cycles of war and hegemony has coalesced. That debate is the subject of the next chapter.