

A Plea for World System History

ANDRE GUNDER FRANK

University of Amsterdam

INTRODUCTION AND PROCEDURE

I plead for writing a world history that is as comprehensive and systematic as possible. It should offer a more humanocentric alternative to western Eurocentrism. This history should seek maximum “unity in the diversity” of human experience and development. Therefore, we should not only make comparisons over time and space, we should also seek more connections among distant and seemingly disparate events at each historical point in time. Moreover, we should systematically seek to systematize both the comparisons and the connections. Thus, our historical inquiry may well find more than comparative commonalities among parts of the whole. We may also discover common features and relations among historical events, which are derived from their common participation in a whole. For the long period before 1492, this “whole” world history should concentrate on the unity and historical interrelations within the Asio-Afro-European “old” “eastern” hemispheric ecumene, stretching from the Pacific to the Atlantic—before Columbus (again) crossed the latter.

The principal idea I advance is the principle, indeed the imperative, of doing a “macro” world *system* history. The main reason to do so is that, as the old adage goes, this historical whole is more than the sum of its parts. This holistic principle does not deny the necessary “micro” history of its parts. However, it is necessary to remember that all the parts are also shaped by—and can only be adequately understood in relation to—their participation in the whole and their relations with other parts. Such “comprehensive” macro attention to the whole and its essential structure and

dynamic must, of course, give short shrift to many "micro" details. However, these can be supplied by specialists, whose also necessary study will in turn help amend and reshape our vision of the whole.

For reasons of expository convenience (for me) and clarity of communication (with the reader). I proceed to pose selected (and numbered) either/or issues. Then, I give my own positions on these issues in the form of theses. Of course, I do not think that all historical reality is so simply reducible to such alternative choices. Nor do I claim to cover all possible or even all important such alternatives and issues. My selection of issues, and their phrasing below, is governed by my own positions, whose arguments I wish to pose for the reader.

Therefore for reasons of exposition and communication, I will frequently resort to brief citations or quotations of arguments of mine, which are elaborated more fully elsewhere. I will also "appeal to authority" (and anti-authority by my lights) by citing and quoting authors who have long-standing claim to authority (even if, to their credit, they would disclaim the same). Of course, I do not expect the reader to accept my arguments on the basis of appeals to any authority, least of all my own. On the contrary, my purpose in making these appeals is only to incite readers ever more to "seek truth from (the authority of) facts" and to appeal to "the authority" of their own (re)interpretations of them.

TWENTY ISSUES AND THESES

On Eurocentrism and its Alternatives

1. Should world history continue its recent western Eurocentric bend, or should it seek to liberate the world from it(self)—even in the west? *World* history should be a reflection and representation of the full diversity of human experience and development, which far exceeds the limited and limiting recent bounds of the "west." Indeed, the "west" does not exist, except by reference to the "east." Yet the historical existence of "east" and "west" is only a figment of "western" imagination.

A few generations ago, a different perspective was still counseled even by some western historians. For instance, in 1918 Frederick Teggart criticized "Eurocentric" history and pleaded for a single "Eurasian" history in which "the two parts of Eurasia are inextricably bound together. Mackinder has shown how much

light may be thrown on European history by regarding it as subordinate to Asiatic. . . . The oldest of historians (Herodotus) held the idea that epochs of European history were marked by alternating movements across the imaginary line that separates East from West" (Teggart 1977, 248).

Yet since Teggart's 1918 plea, western domination in power and technology has further extended the domain of its culture and Eurocentric western perspective through proselytizing religion, mass media, language, education, "world" history writing and teaching, and using the (in)famous Mercator projection maps. Nonetheless, homogenization has proceeded less far and fast than some hoped and others feared, and many people around the world are seeking renewed and diverse self-affirmation and self-determination.

2. Should and need western Eurocentric world history and its distortions be replaced by "equal time" for the history of all cultures? Or need we admit (a variety of competing) other centric histories, be they Islamo-, Nippo-, Sino- or whatever other centric? No, we can and should all aspire to a non-exclusivist *humanocentric* history. This world history can be more than a historical "entitlement program," which gives all (contemporary) cultures or nationalities their due separate but equal shares of the past. Instead, a humanocentric history can and must also recognize our historical and contemporary unity in and through diversity beyond our ideological affirmations of cultural self. The Unesco project on the *History of Mankind* (including its *Journal of World History*, published under the main title *Cahiers d'histoire mondiale*, begun in 1954!) and more recently the Unesco "Integral Study of the Silk Roads" project have made valiant efforts in this direction. Gilbert Allardyce (1990) has reviewed the trials and tribulations of some attempts by Unesco and others to move "toward world history" through both "entitlement" and "globaloney" programs, at least in the United States and its postwar cultural dependencies. The American leader of the Unesco project, Louis Gottschalk, finally gave up this "mission impossible." So should fools rush in the footsteps of the daring McNeill (1963, 1990) and Stavrianos (1970) where most angels fear to tread? Why not?

3. If we should not aspire to "equal time" in history of everybody in the world, should such a world history be limited to, or concentrate on, the addition of representative "non-western civilizations" and cultures to western ones? Should we limit our study to the comparative examination of their distinctive and common

features? This is the procedure of most (literally) so-called courses and textbooks. Some examples of these approaches and their internal contradictions and limitations are examined in Frank (1990a). Two well-known examples examined are the comparative studies of civilizations by Toynbee and Quigley. Another example is the approach to "Civilization as a Unit of World History" by Edward Farmer (1985) and Farmer et al. (1977).

I argue that our world history can and should also make efforts to *connect and relate* the diversity of histories and times to each other. It may be empirically possible, and in that case it is historically important, to uncover all sorts of historical connections among peoples and places, not only over time but especially at the same time. These connections would lend additional meaning to our comparisons. One cue among others to this kind of historiography is Philip Curtin's *Cross-Cultural Trade in World History* (1984). Another approach was used by Frederick Teggart in his *Rome and China: A Study of Correlations in Historical Events* (1939). Teggart correlated and connected diverse political and economic events (particularly wars, "barbarian" invasions, and interruption or resumption of trade) in these two geographical areas and others in between. Teggart made these *connections among contemporaneous events* "for the purpose of gaining verifiable knowledge concerning 'the way things work' in the world of human relations . . . in the spirit of modern scientific work, on the study of World History" (Teggart 1939, v, xii, and see below). Teggart also proposed a similar inquiry into the possible connections among the often observed almost simultaneous rise in the sixth century B.C. of the religious and other movements associated with Zoroaster, Confucius, Buddha, Ezekiel, and Pythagoras.

On World Historical Comparisons, Connections, Nexuses and System(s)

4. Need or should world historians then limit themselves to only connecting and comparing different peoples, places, and times as they appear to them at first sight? Or can and should a *one world* history also seek systematically to systematize these connections and relations, as well as comparisons, into an analysis of a *world system* history? This is now the opinion of our contemporary dean of world history writing, William McNeill (1990). In "The Rise of the West after Twenty-Five Years," he reflects and concludes that

the central methodological weakness of my book is that while it emphasizes interactions across civilizational boundaries, it pays inadequate attention to the emergence of the ecumenical world system within which we live today. . . . Being too much preoccupied by the notion of "civilization," I bungled by not giving the initial emergence of a trans-civilizational process the sustained emphasis it deserved. . . . Somehow an appreciation of the autonomy of separate civilizations (and of all the other less massive and less skilled cultures of the earth) across the past two thousand years needs to be combined with a portrait of an emerging world system, connecting greater and greater numbers of persons across civilizational boundaries.

To make this a feasible enterprise, one needs a clear and distinct idea of the emergent world system as manifested first in the ancient Middle East and a second time in the modern world, and one must reflect on how these intersected with the more local civilizational and cultural landscapes they impinged upon. . . . In the ancient Middle East, the resulting interactions among peoples living in different landscapes, with diverse languages and other outward signs of civilized diversity, led to the emergence of a cosmopolitan world system between 1700 and 500 B.C. . . . There is a sense, indeed, in which the rise of civilizations in the Aegean (later Mediterranean) coast lands and in India after 1500 B.C. were and remained part of the emergent world system centered on the Middle East. . . . All three regions and their peoples remained in close and uninterrupted contact throughout the classical era. . . . [Moreover] one may, perhaps, assume that a similar [to the modern] primacy for economic exchanges existed also in earlier times all the way back [to] the earliest beginnings of civilization in ancient Mesopotamia (McNeill 1990, 9–10, 12–14),

Thirty-five years earlier, Marshall Hodgson had already pleaded:

The point is that *from a world-historical* point of view, what is important is not European history in itself, however important that be for us all; but its role in interregional history. . . . The problem of reorienting ourselves to a more interregional viewpoint, then, is psychologically far-reaching, and must be solved along with that of organizing the historical material.

During the last three thousand years there has been one zone, possessing to some degree a common history, which has been so inclusive that its study must take a preponderant place in any possible world-historical investigation. . . . The various lands of urbanized, literate civilization in the Eastern Hemisphere, in a continuous zone from the Atlantic to the Pacific, have been in

commercial and commonly in intellectual contact with each other, mediately or immediately. Not only have the bulk of mankind lived in this zone, but its influence has emanated into much of the rest of the world.

[In] the following approach. . . events may be dealt with in their relation to the total constellation of historical forces of which they are a part—a method not limited to world history, but perhaps likely to be especially appropriate in this case. This means that we are to consider how events reflect interdependent interregional developments (Hodgson 1954, 716, 717–723).

A few years later, Hodgson would add that “few scholarly tasks are more urgent than that of learning to see the various historical backgrounds of our common world in relation to each other (1960, 879).

Allardyce (1990, 62, 67, 69) quotes others to the effect that what world history “needs is a simple, all-encompassing, elegant idea, which offers an adequate conceptual base for a world history.” I suggest that the basic elements of this idea may be found in the foregoing quotations from Hodgson and McNeill. The central concept of this all-encompassing idea is the world *system* and the historical *process* of its development. What we need is a world system history, please.

The attempt to help advance this “urgent task” is also the main intent of Frank (1990a, b, c, d) and Gills and Frank (1990), although they were largely written before reading these quotations from McNeill and Hodgson. However, the major works by both authors were important inputs. Frank (1990a) concentrates on a critique of many quoted and otherwise cited civilizationists, world and other historians, historical macro sociologists, economic historians, political economists, and others. These scholars mostly do not even consider such a world system history before 1500. Or they consider it, and then deny its practicability or even its utility. Even those few who would welcome a world system history in principle, in their own practice still neglect to pursue it themselves. In each case, I first examine their arguments and procedures. Then, I conclude that their objections or reservations to such a world system history are theoretically invalid and empirically unfounded. Among the authorities, anti-authorities, and others critiqued, and in some cases recommended as partial models, are Abu-Lughod (1989), Amin (1988), Anderson (1974), Chase-Dunn 1986, 1989), Childe (1942), Curtin (1984), Farmer (1985), Farmer et al.

(1977), Gernet (1982), Hodgson (1974), Lattimore (1962), Lombard (1975), McNeill (1963, 1982, 1990), Mann (1986), Needham (1961), Quigley (1961), Schneider (1977), Stavrianos (1970), Taylor (1987–88), Tilly (1984), Toynbee (1946), Wallerstein (1974, 1988), and Wilkinson (1987, 1988).

The conclusions of Frank (1990a) and Gills and Frank (1990) argue why and how such a world system history can and should be undertaken—even if “world history in world-system style is likely to appear. . . as downright subversive” (Allardyce 1990, 69). But then so have been all new systemic departures. The idea of a world system since 1500 has indeed gained ground in recent years. However, its principal protagonists and others resist the extension of this idea backwards before 1500 (for Immanuel Wallerstein 1974, 1989), or 1250 (for Janet Abu-Lughod 1989). However, the historical empirical evidence and especially its internally contradictory treatment by these authors vitiate their arguments of a systemic historical break around 1450 to 1500, as per Wallerstein, or around 1250 to 1350, as per Abu-Lughod. This is what I try to demonstrate in Frank (1990b and c) and below. The conclusions derived from my argument challenge the very idea of “transition,” especially from the supposed “modes” or “systems” of feudalism to capitalism and on to socialism. No wonder a world system history could appear downright subversive, if it rejects the adequacy of “to each his own” or “equal time to all” cultural histories. It may be even more subversive if it *also* challenges most people’s “scientific” ideologies, according to which their favorite eternal or transitional political economic “mode” or “system” has exceptional virtues, thanks to God.

5. Is world history limited to that of sedentary “civilizations” and their relations? Or must it also include “barbarian” nomads and others, and especially the multifarious relations among the former and the latter? Frank (1990a) follows Lattimore (1962) and others to make a strong plea for more study of central and inner Asian “nomadic” and other peoples, their continuous trade and political relations with their “civilized” neighbors, and the recurrent waves of migratory and invasory incursions from central and inner Asia into east, south, and west Asia, and Europe. Therefore, I argue for greater attention to the possible centrality of central and inner Asia and the dynamics and relations of its peoples with others in world history. Similarly, the nomadic tribes of the Arabian peninsula before the time of Muhammad merit more atten-

tion. Moreover, it is time to drop and take exception to the now pejorative term "barbarian." There is much reason to doubt the supposed difference between peoples who have been so labeled and those supposedly more "civilized." There is even reason to doubt the verity and utility of the supposed distinctions between "nomad" and "sedentary" peoples. However that may be, there can be little doubt about the central roles of central Asia in world (system) history (Frank 1990d).

Africa has also received less attention than it merits in world (system) history. Curtin has done pioneering work on trade and migration in Africa, but in his *Cross-Cultural Trade in World History* (1984), he has not sought to pursue the African connection in Afro-Asia as far back in history as it may deserve. The southeast Asian peoples and their history were intimately related to and also influential on those of China and India, yet southeast Asia is often largely omitted from even those world histories that give their due to China and India. Relations between the "eastern" and "western" hemispheres, across both the Atlantic and the Pacific, even if they may not have been "systematic," long predate those (re)initiated by Columbus.

Exceptional geographical, topological, ecological, natural, or human resources have lent a select few regions in the world very special strategic, military, political, economic, and cultural importance in the establishment and maintenance of the world system and relations within it. Gills and Frank argue that

three magnets of attraction for political economic expansion stand out. One is sources of human (labor) and/or material inputs (land, water, raw materials, precious metal, etc.) and technological inputs into the process of accumulation. The second is markets to dispose of one zone's surplus production to exchange for more inputs, and to capture stored value. The third, and perhaps most significant, are the most privileged nexuses or logistical corridors of inter-zonal trade. Bottle-neck control over the supply routes of raw materials, especially of metals and other strategic materials, plays a key role in attracting hegemonical powers to such areas, or in providing a basis upon which to make a bid for hegemony. Especially here, economic, political and military conflict and/or cultural, "civilizational," religious and ideological influence also offer special advantages for tapping into the accumulation and the system of exploitation of other zones in benefit of one's own accumulation (Gills and Frank 1990, 24).

Gills and Frank identify three such corridors and logistical nexuses between the Mediterranean and Asia:

1. The Nile-Red Sea corridor (with canal or overland connections between them and to the Mediterranean Sea, and open access to the Indian Ocean and beyond).
2. The Syria-Mesopotamia-Persian Gulf corridor (with overland routes linking the Mediterranean coast through Syria, on via the Omntes, Euphrates and Tigris rivers, to the Persian Gulf, which gives open access to the Indian Ocean and beyond). This nexus also offered connections to overland routes to Central Asia.
3. The Aegean-Black Sea-Central Asia corridor (connecting the Mediterranean via the Dardanelles and Bosphorus to the overland "Silk Roads" to and from Central Asia, from where connecting routes extended overland to India and China) (Gills and Frank 1990, 24).

However, there were other such logistical nexuses in various maritime straits, such as those of Ceylon, and overland portages such as Kra on the Malay Peninsula. Along the overland invasory and silk routes in inner Asia, and its connections to China, India, and Persia, other bottleneck and crossroad nexuses played strategic roles. Among these were the Gansu (Haxi) Corridor between China and Dunhuang at the desert's edge, and the Karakorum and other passes across the Pamirs southwestward from Kashgar to Taxila, and across the Tian Shan Mountains northwestward to Samarkand and Bukhara. All of these and other nexuses deserve special attention in the study of world (system) history. Have they been special bones of political and economic contention militating against their long-term control by any one power?

On World Historical Times and Timing

6. Should we treat historical diversity and comparisons as we often do, and as Anderson explicitly defends, by arguing that "there is no such thing as a uniform temporal medium: for the *times* of the major Absolutism . . . were precisely, enormously diverse . . . no single temporality covers it"? (Anderson 1974, 10). Or can and should the systematization of inter-regional world history also realize, as Hodgson argued, that "what is important is the recognition . . . that there has been some sort of developing pattern in which all these interregional developments can be

studied, as they are affected by and in turn affect its elements as constituted at any one time" (Hodgson 1954, 719).

In Frank (1978b) I argued that

Anderson's apparent attempt to make historiographic virtue out of empirical necessity when he argues that the historical times of events are different though their dates may be the same must be received with the greatest of care—and alarm. For however useful it may be [comparatively] to relate the same thing through different times, the essential (because it is the most necessary and the least accomplished) contribution of the historian to historical understanding is successively to relate different things and places at the same time in the historical process. The very *attempt* to examine and relate the simultaneity of different events in the whole historical process or in the transformation of the whole system—even if for want of empirical information or theoretical adequacy it may be full of holes in its factual coverage of space and time—is a significant step in the right direction (particularly at a time in which this generation must “rewrite history” to meet its need for historical perspective and understanding of the single world historical process in the world today) (Frank 1978a, 21–22).

Teggart, alas unbeknownst to me, had long since

establishe[d] (for the first time) the existence of [temporal] *correlations in historical events* . . . which exhibits the relationship between contemporaneous disturbances in several areas . . . [and] awareness of the concurrence of events in different regions. . . . The study of the past can become effective only when it is fully realized that all peoples have histories, that these histories run concurrently and in the same world, and that the act of comparing is the beginning of knowledge. . . . It at once sets a new problem for investigation by raising the question of how the correspondences in events are to be accounted for (Teggart 1939, 239, 243, 245).

7. Did world history discontinuously jump from one place and time to another? The usual western Eurocentric rendition jumps from ancient Mesopotamia to Egypt, to “classical” Greece and then Rome, to medieval western Europe, and then on to the Atlantic west, with scattered hackflashes to China, India, et cetera. Meanwhile, all other history drops out of the story. Or peoples and places never even appear in history, unless they are useful as

supposedly direct descendants of development in the west. Instead, any *world* history should try to trace and establish the historical *continuity* of developments between then and now in the world systemic whole and all its parts. Hodgson and McNeill already emphasized this continuity. David Wilkinson (1987) supports Hodgson's early suggestion, which Wilkinson probably did not know. Wilkinson demonstrates convincingly (to me) that "Central Civilization" has a continuous and expanding (I would say world system) history since Mesopotamia and Egypt established relations in about 1500 B.C.

Gills and Frank (1990) argue that these relations extend even farther out and further back. During another millennium from 2500 B.C. or earlier already, peoples established relations with each other around and from the Mediterranean to the Levant, Anatolia, Mesopotamia, the Persian highlands, and the Indus Valley, as well as with many central Asian "nomads" and others. Gordon Childe (1942) already argued for the recognition and analysis of these and even earlier and more widespread relations.

Some two millennia later, China, Manchuria, Korea, and Japan in the northeast, and southeast Asian peoples developed (systematic?) relations with each other and with other peoples across and around Asia. Systemic relations around the beginning of the Christian era among Han China, Kushan Pakistan/India, Parthian Iran, the Roman empire, and parts of Africa are well documented and analyzed by among others Hudson (1931), Teggart (1939), and with regard to technological diffusion more recently again by Needham (1961). Several recent authors quote Pliny's lament about the fiscal crisis in his native Rome, which was due to its balance of trade deficit with Parthia and through it with China. Teggart went further. He quoted Cicero to the effect that "the credit of the Roman money-market is intimately bound up with the prosperity of Asia; a disaster cannot occur there without shaking our credit to its foundations" (Teggart 1939, 74). Odani (1990) suggests that, since Roman and Asian coins were of exactly the same weight and therefore interchangeable, a single international monetary system may have existed.

Teggart also correlated and compared the timing of wars and barbarian invasions in Rome and China to demonstrate that for the period 58 B.C. to A.D. 107 alone, "even in briefest summary it must be pointed out that, of the wars in the Roman East, eighteen followed wars in Chinese Turkt'stan, so that of the forty occasions

on which outbreaks took place in Europe, twenty-seven were traceable to the policy, or rather changes of policy, of the Han government [in China]" (Teggart 1939, viii).

Teggart pioneered this analysis and suggested that

it is to be seen that peoples in no way concerned with the silk route might yet be connected with the interruptions of trade on that route through the hostilities which the interruptions precipitated between Parthia and Rome.

Thus the effects of wars which arose out of interruptions of the great "silk route" through Persia are plainly visible in the internal history of Rome. . . . Seemingly there could be no better illustration of interdependence of nations than the consideration that a decision of the Chinese government should have been responsible for a financial panic in the capital of the Roman empire. . . .

It follows, therefore, that knowledge which is indispensable for an historical account of Roman affairs . . . can be obtained in no other way than by the comparison of events throughout Eurasia. Thus, apart from any wider interest, the comparisons of histories is necessary for a comprehension of what has actually happened within the borders of any national state (Teggart 1939, x, 241, 243).

Actually, Teggart himself did not limit his inquiry to correlations and comparisons. He also inquired into what he called their "connections" and knowledge concerning "the way things work" in what we might call "the world system." Moreover, Brooks Adams (1939) long ago pleaded for the recognition of this world historical unity and continuity.

8. However, since when can we accurately refer to "China," "India," "Persia," "central Asia," or elsewhere as particular peoples or civilizations? Alternatively, how long were (or still are?) these only geographical loci in and through which different peoples came and went, mixed, and developed cultural, social, political, and economic institutions and relations, which also came and went? Most civilizations, empires, ethnicities, "races," and of course nations only *temporarily developed here and there out of a mixture of peoples*. Some peoples among them took or gained enough of a temporary upper hand to put their temporary imprint and name on the civilization, dynasty, or empire, et cetera. Perhaps the longest still living civilization is that of the Chinese. Yet for half of "China's" history, it has been ruled by non-"Chinese."

Historians conventionally study the “dynastic” history of China. Civilizationists generally focus on this and other (supposedly self-contained) “civilizations.” Thereby, both have detracted attention from the more important, but often changing, ecological or economic units, empires, states, and (inter)state systems, and their *relations* with each other over much of the world. Moreover, the fact that peoples and their institutions have come and gone over the world stage of history does not mean that there was no systemic rhyme or reason to their coming and going. On the contrary, the very coming and going of different peoples, their institutions, and their relations with each other may systematically, and not only exceptionally, have obeyed some systemic “laws” of world system development and history. We should inquire into these.

9. Should we then start our world historical (system) inquiry at some arbitrarily or conveniently selected date? Or should we instead permit the historical evidence *to take us back as far as we can go*? Should we move forwards or backwards in our historical inquiry? Both! John King Fairbank, the contemporary dean of American historians of China, wrote from his experience that “the rule seems to be, if you want to study the mid-period of a century, begin at the end of it and let the problems lead you back. *Never* try to begin at the beginning. Historical research progresses backward, not forward” (Fairbank 1969, ix).

This has been my experience as well, and I recommend Fairbank’s rule to others with two reservations. One is that real historical development, of course, moved forward in time, and our scientific rendition of it must respect this fact. The other is that however heuristically useful it may be for us to inquire backward, we can still turn around to relate and present our findings and history itself forward in time.

On Cumulation of Accumulation and Ecology in World System History

10. Is world (system) history only continuous (since when?), or is it also cumulative? Has there been, is there still, a *cumulative historical development*? Civilizationists and cultural historians have long since presented much of human knowledge and culture as cumulative. Childe (1942) and others have also presented technology as substantially cumulative (little re-invention of the wheel). If that is so, can we not theoretically argue and empirically demonstrate that world (system) history includes a long pro-

cess of economic accumulation, including skills and technology, but also infrastructural, productive, and financial accumulation? That is the argument of Gills and Frank (1990) under the title "The Cumulation of Accumulation."

11. Is this process of accumulation, and the associated production, trade, finance, and their political organization independent of ecological possibilities and limitations? Just posing this question seems to answer it, especially in this age of heightened ecological degradation and awareness. Human social, economic, and political history have always been *adaptations to ecological circumstances and changes*. Ecological possibilities and limitations helped determine the development of alluvial valley agricultural civilizations like ancient Sumer and Egypt. Their ecology also affected their needs for commerce and political influence over highland sources of metals and other mineral raw materials and wood. Similarly, ecological realities and their changes also impacted on grassland nomadic and other peoples and their trading, migratory, and invasory relations with sedentary civilizations. Of course, hunting, migration, agriculture, industry, political and military institutions and activities, and many cultural ones have also in turn impinged on and altered the physical environment. Today, but also at some times and places in the past, this human ecological impact has been damaging to the physical environment and to human welfare. A world history must devote more attention to human and social ecology, especially now.

12. Are these ecological and social adaptations and transformations often renewed independent inventions (as of the wheel) at different times and places in the world? Or are many of them also the result of migratory, invasory, trade, political, and cultural *relations and diffusion around the world*? Or both? The easy answer would seem to be both by simple addition of renewed invention here and there and diffusion from here to there. However "necessity is the mother of invention." Therefore, much of the renewed "(in)dependent" invention and innovation there was also "diffused" from here. That is, invention was stimulated there by the necessity of competition with here, where its use offered a competitive advantage. Moreover, this process of diffusion and emulation of invention and innovation was not limited to things (bronze) or technology (smelting) but extended to social institutions and cultural forms.

Philip Curtin and William McNeill are among those who subscribe to and offer empirical evidence for the diffusionist thesis,

both simple and competitive. Every day, archaeologists uncover, and reinterpret, additional evidence for maritime and overland diffusion over the longest distances, and at earlier and earlier times. Diffusion spread, among other things, foodstuffs; agricultural, industrial, transport, and military technology; culture and religion; language and writing: mathematics and astronomy; disease, first plague deaths and then resistance to the same, and medicine; and, of course, genes. See, for instance, McNeill's *Plagues and Peoples*. The more we look for diffusion, the more we find. The place of diffusion in a truly world-embracing history is assured, if we would only admit more of it.

13. A particularly important open question is whether the all too widespread socio-cultural institution of *patriarchy* was indigenously invented by many societies or diffused from a few to many. Feminist archaeologists and historians (thank Goddess for them!) have begun to dig up or reinterpret a paleolithic and neolithic past supposedly governed by non-patriarchal "partnership" relations. However, these relations were found to be "indigenous" particularly in Catal Huyuk and Hacilar in Anatolia, the site of Jericho in the Levant, later in Minoan Crete, and in the Balkans (Eisler 1987). Figurines that suggest non-patriarchal goddess worship have also been found farther eastward into India. The feminist scholars argue that these societies, and by extension western Judeo-Christian society, only switched to patriarchy later after armed invaders from inner and central Asia brought warfare, military technology, oppression, and therewith the "diffusion" of patriarchy. Thus, these feminist scholars suggest that western patriarchy is the result of its (unwelcome) diffusion from farther east in inner Asia.

(Re)writing history from a more gender-balanced or feminist perspective is very welcome. We particularly need more "feminist historical materialist" analysis of different and changing gender and family relations, accumulation, politics, and culture/ideology. Much of history has been dominated by men in their own interest and written by them from their own perspective. However, the above-cited feminist version of history seems less than satisfactory. It focuses rather selectively on some circum-Mediterranean societies with supposedly indigenous partnership societies and sees patriarchy as having been only belatedly diffused there from inner Asia. These primarily Euro-Mediterranean centered feminist historians would do well to expand their scope to that of the world, if not also to the world system, as a whole.

James DeMeo (1987, 1990), for instance, claims that "matrist" (but not matriarchal), democratic, egalitarian, sex-positive, pleasure-oriented, gentle, and non-violent society was "original" in much more of the world while it was wetter and greener until six thousand years ago. Then, Arabia and central Asia dried up about 4000 to 3500 B.C.; desertification expanded through what he calls the thousand-mile-wide Saharasian belt stretching eight thousand miles from Africa through inner Asia to China. As a result, many of its inhabitants suffered famines and were obliged to become pastoralist nomads. The harsh and competitive realities of this *new* lifestyle then fostered "patrism," including patriarchy, which DeMeo characterizes through at least thirty-five socio-cultural variables. These include harsh child rearing and especially infant swaddling and induced cranial deformation to enhance parents' mobility, sexual repression, patrilocal residence, patrilineal descent and inheritance, various forms of subordination of women, organized and specialized priesthood, high class stratification, high bellicosity, and frequent warfare. DeMeo finds these and other characteristics of patrism auto-correlated among each other and correlated with Saharasian and neighboring regions, as well as in some similar regions in the western hemisphere.

Thus, like the above-cited feminists, DeMeo also sees the subsequent *diffusion* of patrism by migrants and invaders escaping from dry regions to other wetter ones with previously matrist societies. However, he also tries to account for patrism as a prior widespread adaptation to changing environmental-economic conditions in the Saharasian belt. Moreover, DeMeo tries to demonstrate how, once it is introduced anywhere, patrism is reproduced, reenforced, and perpetuated inter-generationally, irrespective of subsequent patterns of climate, food supply, or settlement. Perhaps this approach offers additional scope and method for the study of endogenous invention/diffusion of patriarchy and other socio-cultural characteristics. On the other hand, like Eisler, DeMeo seems to disregard evidence and theory in support of indigenous development of patriarchy in agriculturally based ancient states and civilizations. Moreover, all those students of Asian nomads whom I have questioned say that on the evidence available to them, the status of women was higher and gender relations were more equal among nomadic than among sedentary peoples. Thus, the question remains open and calls for much more research.

On World System Characteristics and Transitions Before and After 1500 A.D.

14. Are systematic and systemic relations of trade, not to mention migration and invasion or military conflict over the same, only recent developments in world (system) history, which bear study merely since the twentieth century, or the nineteenth, or the sixteenth? Or must we more systematically trace all of these political economic relations, no less and maybe even more than cultural ones, back farther and farther in a wider world (system)? I propose the latter and offer some indications on how to proceed in Frank (1990a, b, c, d) and Gills and Frank (1990). For millennia already, these systemic relations of peoples and localities combined a mixture of systematic trade relations and recurrent migrations far beyond the confines of any state or empire. Diplomatic expeditions, military excursions, and shifting alliances among states and empires were expressions of systematic and systemic relations. So were the diffusion and invention or adaptation of technological advances, social institutions, and cultural forms in response to changing ecological, economic, political, and often competitive necessities and opportunities in the wider world system.

15. Can the principal systemic features of the “modern world system” also be identified earlier than 1500 or not? Wallerstein (1988) and Modelski (1987) argue that the *differentiae specificae* of our world system are new since 1500 and essentially different from previous times and places. Christopher Chase-Dunn (1986) and others find parallels in “other” and prior world systems. Wilkinson (1987) discovers at least some of these features in his “Central Civilization” and elsewhere. However, he sees historical continuity, but no world system. Abu-Lughod (1989) sees a “thirteenth-century world system,” but she regards it as different from the world system since 1500 or before 1250. Moreover, she is not so interested in comparing systemic features or characteristics. Gills (1989) and Gills and Frank (1990) combine all of the above into an analysis, or at least an identification, of the principal features of *this* world system over several thousand years of its history and development, which are detailed below.

16. According to Wallerstein (1988, 1989, and elsewhere) and many students of world capitalism, the *differentia specifica* of the modern world system is the accumulation of capital: “it is this ceaseless accumulation of capital that may be said to be its most

central activity and to constitute its *differentia specifica*. No previous historical system seems to have had any comparable *mot d'ordre*" (Wallerstein 1989, 9).

But was capital accumulation absent or minor or irrelevant elsewhere and earlier? Or, on the contrary, did capital accumulation exist and even define this (or another?) world system before, indeed long before, 1500? Gills and Frank (1990) emphatically argue for this latter position and point to considerable empirical evidence to back up the argument. For millennia and throughout the world (system), there has been capital accumulation through infrastructural investment in agriculture (e.g., clearing and irrigating land) and livestock (cattle, sheep, horses, camels, and pasturage for them); industry (plant and equipment as well as new technology for the same); transport (more and better ports, ships, roads, way stations, camels, and carts); commerce (money capital, resident and itinerant foreign traders, and institutions for their promotion and protection); military (fortifications, weapons, warships, horses, and standing armies to man them); legitimacy (temples and luxuries); and of course the education, training, and cultural development of "human capital."

The drive to produce, accumulate, distribute, and consume capital provided much of the economic, social, political, and cultural motor force in history. This was the case, for instance, of the development of Song and earlier Tang China, Byzantium, the expansion of Islam, Gupta India, and other regions in "medieval" times. However, the same may be said equally of the earlier "classical" Rome, Parthian Persia, Kushan India, and Han China; of the still earlier Hellenistic world and Persia; and so on back through world history. The mere mention of these "political" entities, not to mention their many peripheries, hinterlands, and countless nomadic migrants and invaders, should suggest that the same drive to accumulate was instrumental, if not largely determinant, for the competitive economic, political, and military rivalry and occasional opportunist alliances among and within contemporaneous political entities. That is, the quest for achievement and subsequent renewed loss of *competitive advantage* (and *disadvantage*) *within the process and pressures of competitive accumulation* have marked the economic, political, social, and cultural development of human and world system history through the ages.

17. Are other characteristics, in particular a *core-periphery structure*, of the modern world system also unique to it since

1500? Or are they also identifiable elsewhere and earlier? In a short list of three main characteristics of his modern world system, Wallerstein (1988) argues that “this descriptive trinity (core-periphery, A/B [cycle phases], hegemony-rivalry) as a pattern maintained over centuries is unique to the modern world-system. Its origin was precisely in the late fifteenth century” (Wallerstein 1988, 108).

Wallerstein (1989) also makes a list of twelve characteristics of his modern world capitalist system since 1500. Frank (1990c) argues why all of them also apply earlier. Frank (1990a) and Gills and Frank (1990) argued the same even before seeing Wallerstein’s lists of characteristics. To avoid tiring the reader here, however, we limit the present review to Wallerstein’s holy trinity alone.

The first characteristic is the core-periphery structure. Christopher Chase-Dunn and Tom Hall (1990 forthcoming) are editing a book on *Precapitalist Core/Periphery Relations*. Chase-Dunn (1986) himself has found many examples and so has Gills (1989). Wilkinson (1987) surveys core-periphery relations over five thousand years of world system history, which Ekholm and Friedman (1982) argued earlier. Therefore, Gills and Frank (1990) contend that core-periphery structures and relations have been prevalent throughout geographical space and historical time. Conceptually, however, they also need to be extended to hinterlands and a center-periphery-hinterlands (CPH) complex.

The hinterland is not directly penetrated by the extracting classes of the center, but nevertheless it has systemic links with the center-periphery zone and its processes of accumulation. Wallerstein’s use of the term hinterland to mean external to the world system is insufficient, because it neglects the structural and systemic significance of zones, which are “outside” of, but nonetheless related to, the center-periphery complex. These CPH relationships have been insufficiently analyzed. The CPH complex does not refer to mere geographical position, nor only to unequal levels of development. CPH also refers to the relations among the classes, peoples and “societies” that constitute the mode of accumulation. The CPH complex is the basic social complex upon which hegemony is constructed in a larger systemic context (Gills and Frank 1990).

18. Another of the three world system characteristics mentioned by Wallerstein is *hegemony-rivalry*. But is this feature limited to the world since 1500? Or did it also exist elsewhere and ear-

lier? Or, indeed, does it also characterize the same world system earlier? Wallerstein himself discusses the rise and fall of mostly economically based hegemony only since 1500. Modelski (1987) and Thompson (1989) analyze largely politically based and exercised hegemony since 1494. Paul Kennedy (1987) wrote a best seller about the Rise and Fall of the Great Powers but without connecting them in any systematic way. The decline in the hegemony of a great power gives way to an interregnum of competitive economic, political, and military rivalry among others to take its place.

Gills and Frank (1990) argue that hegemony-rivalry has also characterized the world system for thousands of years. As suggested above, hegemony is not only political. It is also based on center-periphery relations, which permit the hegemonic center to further its accumulation of capital at the expense of its periphery, hinterland, and its rivals. After a time, not the least through the economic-military overextension signalled by Kennedy, the hegemonic empire loses this power again. After an interregnum of rivalry with other claimants, the previous hegemonical power is replaced by another one. Shifting systems of economic, political, and military alliances, reminiscent of those featured by George Orwell in his 1984, are instrumental in first creating, then maintaining, and finally losing hegemonical imperial power.

Gills and Frank (1990) not only argue that there have been numerous and repeated instances of hegemony and rivalry at imperial regional levels. They also suggest that we may be able to recognize some instances of overarching "super-hegemony" and centralizing "super-accumulation" at the world system level before 1500. The Mongol empire certainly, and Song China perhaps, had a claim to super-hegemony. Thus, very significantly, the later rise to super-hegemony in and of western Europe, Great Britain, and the United States after 1500 were not unique first instances in the creation of a hegemonic world system. Instead, as Abu-Lughod persuasively argues, "'the fall of the East' preceded the 'Rise of the West'" (Abu-Lughod 1989, 338) and resulted in an hegemonical shift from east to west. This shift came at a time—and perhaps as a result—of over-extension and political economic decline in various parts of the east, which suffered a period of cyclical economic decline so common to them all as to have been world system wide. Thus the "Rise of the West," including European hegemony and its expansion and later transfer to the "new world across the Atlantic, did not just constitute a new Modern

World Capitalist System. This development also-and even more so-represented a new but continued development and hegemonic shift *within an old world system*.

19. The third characteristic of Wallerstein's world system after 1500 is *long economic cycles of capital accumulation*. Their upward "A" and downward "B" phases generate changes of hegemony and of position in the center-periphery-hinterland structure. These cycles, and especially the Kondratieffs, play important roles in the real development of the world system and in its analysis by Wallerstein (1974), Frank (1978a), Modelski (1987), Goldstein (1988), and Thompson (1989). All emphasize the relations among cycles in the economy, hegemony, and war. However, are these cycles limited to modern times, or do they extend farther back? Frank (1990) tries to demonstrate that this same cyclical pattern definitely extends back through the eleventh century and that it could be traced further back as well. Gills and Frank (1990) go on to argue that these long cycles extend much farther back in world system history. Even Wallerstein notes that

it is the long swing that was crucial. . . . The feudal system in western Europe seems quite clearly to have operated by a pattern of cycles of expansion and contraction of two lengths: circa 50 years [which seem to resemble the so-called Kondratieff cycles found in the capitalist world economy] and circa 200-300 years. . . . The patterns of the expansions and contractions are clearly laid out and widely accepted among those writing about the late Middle Ages and early modern times in Europe. . . . It is the long swing that was crucial. Thus 1050-1250+ was a time of the expansion of Europe (the Crusades, the colonizations). . . . The "crisis" or great contractions of 1250-1450+ included the Black Plague (Wallerstein 1989, 33, 34).

Thus, even according to Wallerstein, there was systematic *cyclical continuity* across his 1500 divide-in Europe. But Abu-Lughod (1989), McNeill (1982) and others offer and analyze substantial evidence that this same cycle was in fact world system wide. Again, even Wallerstein perceives some of the evidence:

The collapse of the Mongols [was a] crucial non-event. . . . The eleventh-century economic upsurge in the West that we have discussed was matched by a new market articulation in China. . . . Both linked up to a Moslem trading ecumene across the Middle East. China's commercialization reinforced this model [why not

system?]. . . .The Mongol link completed the picture. What disrupted this vast trading *world-system* was the pandemic Black Death, itself quite probably a consequence of that very trading network. It hurt everywhere, but it completely eliminated the Mongol link (Wallerstein 1989, 57, 58, my emphasis).

Moreover, all these developments were driven by the motor force of capital accumulation. The "crucial long swing" was a cycle of capital accumulation. It seems likely, however, that the rise and decline of different empires in medieval, "classical" Roman-Parthian-Kushan-Han, and even ancient times can and should be fit into such cyclical patterns of their own. Moreover, these regional cycles may in turn fit into, or indeed be partially derivative from, a single world system wide cycle of capital accumulation, hegemony, and development.

20. So do these characteristic similarities with the "modern-world-capitalist-system" extend only to "other" earlier empires, state systems, regional economies, or different "world systems"? Or do *similar characteristics extend backwards through time in the same world system*, which itself also extends much farther back in time? I believe the historical evidence supports, and our analytical categories should promote, this second interpretation.

How can we extend the essential features of the "modern-world-capitalist-system" of Wallerstein (1974), Frank (1978a), Modelski (1987), Goldstein (1988), Thompson (1989), and others, and of the "other" world systems and civilizations of Chase-Dunn (1986, 1989), Wilkinson (1987, 1989), and others *back in time through the same world system*?

The argument in Frank (1990a) and Gills and Frank (1990) is, in its essence, that this same world system was born at least five thousand years ago out of the confluent relations of several "civilizations" and other peoples. As mentioned above, these included at least peoples in Egypt, the Levant, Anatolia, Mesopotamia, Persia, India, and central Asia. They and other peoples have ever since been continuously and cumulatively related through center-periphery-hinterland structures, relations of hegemony and rivalry, and cycles. These have been regional and probably world system wide. Since Wallerstein's differentia specificis is not specific only to modern times, we can and should extend the identification of his single most important defining characteristic of this world system back through time: *Capital accumulation and interpenetrating transfer of surplus* have long characterized and related different parts of the same world system.

Gills and Frank (1990) schematically define this criterion of world system identification and bounding as follows:

The capture by elite A here (with or without its redistribution here) of part of the economic surplus extracted by elite B there means that there is "inter-penetrating accumulation" between A and B. This transfer or exchange of surplus connects not only the two elites, but also their "societies" economic, social, political, and ideological organization. That is, the transfer, exchange or "sharing" of surplus connects the elite A here not only to the elite B there. Surplus transfer also links the "societies" respective processes of surplus management, their structures of exploitation and oppression by class and gender, and their institutions of the state and the economy. Thus, the transfer or exchange of surplus is not a socially "neutral" relationship, but rather a profoundly systemic one. Through sharing sources of surplus, the elite A here and the classes it exploits are systemically inter-linked to the "mode of production," and even more important, to the mode of accumulation in B there. By extension, if part of the surplus of elite B here is also traded, whether through equal or more usually unequal exchange, for part of the surplus accumulated by elite C there, then not only B and C but also A and C are systemically linked through the intermediary B. Then A, B and C are systemically connected in the same over-arching system of accumulation. This means that surplus extraction and accumulation are "shared" or "inter-penetrating" across otherwise discrete political boundaries (Gills and Frank 1990, 27).

The argument is that these system-defining relations have persisted continuously and grown cumulatively albeit cyclically on a system wide basis throughout much of the world for thousands of years. For instance, such systemic relations not only characterized, but probably motivated, many Akkadian and Sumerian Mesopotamian economic ties, political institutions, and military excursions into Anatolia and Persia from the time of Sargon in the 2300s B.C. Lattimore (1962), Eberhard (1977), Gernet (1982), and many others have documented and analyzed the later recurrently continuous, systematic, and systemic exchanges of surplus and other relations among sedentary "civilized" people in China and nomadic "barbarian" peoples from central Asia (and with those who were intermittently one or the other in between). Similar, if perhaps more tenuous or at least less researched, overland and maritime relations developed among Chinese and southeast Asian peoples. Farther west, the near simultaneous birth and spread of major religions after 600 B.C. and later Persian-Hellenic rivalry

probably responded not only to contemporary similar, but to perhaps also *related* conditions in different “parts” of the world. As noted above, the birth of Christ, expanding systemic relations, and interpenetrating exchange of surplus characterized and *helped shape* all of Han China and its military conquests and economic dependencies through central Asia, Kushan and then Gupta south Asia, Parthian Persia, imperial Rome, and its African and European outposts. Indeed, the subsequent near simultaneous and coordinated imperial declines from Han China to western Rome and the renewed “barbarian” incursions ultimately emanating out of central Asia should be analyzed as the interconnected expressions of a single dynamic in a single world system.

CONCLUSIONS

To Reject Fashionable Transitions and Modes

Given this argument and the historical evidence to sustain it, is it still possible or sensible to argue that there was a qualitatively different “transition” to and creation of a “modern-world-capitalist-system” around 1500? Or that this “transition” arose essentially out of the “transition from feudalism to capitalism” in Europe? No! and No again! It is time to relegate the latter debate to the parochial European history to which it rightly belongs. We may still wish to debate whether there was a significant “transition” in the world as a whole around 1500, and whether this transition was more “significant” than earlier or subsequent ones. However, in this debate it would be useful and clarifying for all participants to understand that the real world (system) essence of a transition is a transition from a transition to a transition! Then we can see which transitions, if any, are more equal than others, for instance in the light of the dramatic supposedly “world shaking” transitions taking place, as I write, in eastern Europe.

Then, is it still sensible to hold on for dear life to the supposedly scientific historical categories of, and ideological preferences for, feudalism, capitalism, socialism—or indeed any such “scientifically” defined “modes of production” or ideologically defined “systems” and “isms”? I believe NOT! (and so argue in Frank 1990a, c). However, the beliefs in either the virtues or the vices, or both, of “*capitalism*” and also of “*socialism*” are still very irrationally cherished, strongly held, and widely shared (literally) right and left all around the world. Therefore, scarcely anyone is

yet ready to abandon them, no matter how strong the historical evidence nor how logical the argument. Even readers who have followed and may accept my argument through the first twenty points may resist these conclusions. Nonetheless, the historical and contemporary evidence strongly suggests—and may increasingly persuade more people—that these virtues and vices are systematically ingrained in the world system itself, and not in any of its transitionally varying or variably transitional mixed up “modes.”

Those who still cannot liberate themselves from their “modal” and “modish” thinking should at least examine the historical evidence that *all* “modes” share virtues *and* sins, even if the shares of some may be more equal than others. Moreover, the absolute and relative virtues and sins vary over historical time and perhaps over the “life cycles” of “modes” and their implementation or application in (different parts of) the world system. Indeed, it might be said that it is through the virtues and sins of its various and varying “modes” that the system expresses its own structural and dynamic characteristics, operation (“function”), and development (evolution). In that case however, the insistent reification of “modes” is a case of “misplaced concreteness.” If we want to reify anything, we would do better (less badly) to reify the world system itself (like me?). Yet even then, we should regard the system like a three-legged stool, supported equally by its ecological/economic, political/military, and cultural/religious/ideological legs.

World system history is long (and cyclical!), and I can wait for this idea’s time to come (again!). In the meantime, as throughout world system history in the past, people—today (again) actively including many more women—will unite in a myriad of ever changing social movements to continue their ever-lasting struggle for their just demands and rights. More power to them! A Luta Continua!

Author’s Note: After co-authoring our above-cited joint article, Barry K. Gills also helped me improve this one.

WORKS CITED

- Abu-Lughod, Janet. 1989. *Before European hegemony. The world system a.d. 1250–1350*. New York: Oxford University Press.
- Adams, Brooks. [1903] 1939. *The law of civilization and decay: An essay on history*. Reprint. Berkeley: University of California Press.
- Allardyce, Gilbert. 1990. *Toward world history: American historians and*

- the coming of the world history course. *Journal of World History* 1:23-76.
- Arllin, Samir. 1988. *L'eurocentrisme. Critique d'une ideologic*. Paris: Anthropos.
- . 1989. Le systeme mondial contemporain et les systemes anterieurs. Unpublished manuscript.
- Anderson, Perry. 1974. *Lineages of the absolutist state*. London: New Left Books.
- Braudel, Fernand. 1981-84. *Civilization and capitalism*. 3 vols. New York: Harper and Row.
- Chase-Dunn, Christopher. 1986. Rise and demise: World-systems and modes of production. Unpublished manuscript.
- . 1989. Core/periphery hierarchies in the development of intersocietal networks. Unpublished manuscript.
- Chase-Dunn, Christopher, and T. Hall, eds. 1990. *Precapitalist core/periphery systems*. Boulder: Westview Press.
- Childe, V. Gordon. 1942. *What happened in history*. London: Pelican Books.
- Curtin, Philip D. 1984. *Cross-cultural trade in world history*. New York: Cambridge University Press.
- DeMeo, James. 1987. Desertification and the origins of armoring: The Saharasia connection. *Journal of Organomy*, vols. 21-13.
- . 1990. Origins and diffusion of patrisism in Saharasia: Evidence for worldwide, climate-linked geographical pattern in human behavior. *Kyoto Review*, no. 23.
- Eherhard, Wolfram. 1977. *A history of China*. Rev. ed. London: Routledge and Kegan Paul.
- Eisler, Riane. 1987. *The chalice and the blade: Our history, our future*. San Francisco: Harper and Row.
- Ekholm, Kajsa, and John Friedman. 1982. "Capital" imperialism and exploitation in ancient world-systems. *Review*, vol. 4.
- Fairbank, John King. 1969. *Trade and diplomacy on the China coast*. Stanford: Stanford University Press.
- Farmer, Edward L. 1985. Civilization as a unit of world history: Eurasia and Europe's place in it. *The History Teacher* 18:347-63.
- Farmer, Edward L., et al. 1977. *Comparative history of civilizations in Asia*. Reading, Mass.: Addison-Wesley.
- Frank, Andre Gunder. 1978a. *World accumulation 1492-1789*. New York: Monthly Review Press; London: Macmillan Press.
- . 1978b. *Dependent accumulation and underdevelopment*. New York: Monthly Review Press; London: Macmillan Press.
- . 1990a. A theoretical introduction to five thousand years of world system history. *Review*, vol. 13.
- . 1990b. De quelles transitions et de quels modes de production s'agit-il dans le systeme-monde reel? Commentaire sur l'article de

- Wallerstein. *Sociologie et Sociétés*, vol. 22. English version: What transitions and modes in the real world system? A comment on Wallerstein. *Review*, forthcoming in 1991.
- . 1990c. The thirteenth-century world system: A review essay. *Journal of World History* 1:249–56.
- . 1990d. Eurasian world system history: The centrality of central/inner Asia. Paper presented at the Unesco Seminar on Land Routes of the Silk Roads, Urumqi, Sinkiang, 19–21 August.
- Gernet, Jacques. 1982. *A history of China*. Cambridge: Cambridge University Press.
- Gills, Barry K. 1989. Hegemonic transition in east Asia: A historical materialist perspective. Unpublished manuscript.
- Gills, Barry K., and Andre Gunder Frank. 1990. The cumulation of accumulation. Theses and research agenda for 5,000 years of world system history. *Dialectical Anthropology*, vol. 15; and in Christopher Chase-Dunn and Tom Hall, eds. *Precapitalist core/periphery systems*. Boulder: Westview Press.
- Goldstein, Joshua S. 1988. *Long cycles: Prosperity and war in the modern age*. New Haven: Yale University Press.
- Hodgson, Marshall G. S. 1954. Hemispheric interregional history as an approach to world history. *Cahiers d'histoire mondiale* 1:715–723.
- . 1960. The unity of later Islamic history. *Cahiers d'histoire mondiale* 5:879–914.
- . 1974. *The venture of Islam*. 3 vols. Chicago: University of Chicago Press.
- Hudson, G. F. 1931. *Europe and China*. Boston: Beacon Press.
- Kennedy, Paul. 1987. *The rise and fall of the great powers*. New York: Random House.
- Lattimore, Owen. 1962. *Inner Asian frontiers of China*. Boston: Beacon Press.
- Lombard, Maurice. 1975. *The golden age of Islam*. Amsterdam: North Holland.
- Mann, Michael. 1986. *The sources of social power*. Vol. 1. Cambridge: Cambridge University Press.
- McNeill, William. 1963. *The rise of the west. A history of the human community*. Chicago: University of Chicago Press.
- . 1976. *Plagues and Peoples*. Garden City, N.Y.: Doubleday.
- . 1982. *The pursuit of power: Technology, armed force and society since A.D. 1000*. Oxford: Blackwell.
- . 1990. *The rise of the west after twenty-five years*. *Journal of World History* 1:1–22.
- Modelski, George. 1987. *Long cycles in world politics*. London: Macmillan Press.
- Needham, Joseph. 1987. *Science and civilisation in China*. 7 vols. to date. Cambridge: Cambridge University Press.

- Odani, Nakae. 1990. Some remarks on the Kushan coins found in the western Chinese regions. Paper presented at the Unesco Seminar on Land Routes of the Silk Roads, Urumqi, Sinkiang, 19–21 August.
- Quigley, Carroll. 1961. *The evolution of civilizations. An introduction to historical analysis*. New York: Macmillan.
- Schneider, Jane. 1977. Was there a pre-capitalist world system? *Peasant Studies* 620–29.
- Stavrianos, L. S. 1970. *The world to 1500. A global history*. Englewood Cliffs, N.J.: Prentice-Hall.
- Taylor, Alistair M. 1987–88. Comment on the shape of the world system in the thirteenth century by Janet Abu-Lughod. *Studies in Comparative International Development* 22:–53.
- Teggart, Frederick. 1939. *Rome and China: A study of correlations in historical events*. Berkeley: University of California Press.
- . [1918] 1977. *Theory and process of history*. Reprint. Berkeley: University of California Press.
- Thompson, William. 1989. *On global war: Historical-structural approaches to world politics*. Columbia: University of South Carolina Press.
- Tilly, Charles. 1984. *Big structures, large processes, huge comparisons*. New York: Russell Sage Foundation.
- Toynbee, Arnold. 1946. *A study of history*. 2 vols. Abridged by D. C. Somervell. Oxford: Oxford University Press.
- Wallerstein, Immanuel. 1974. *The modern world-system*. Vol. 1. New York: Academic Books.
- . 1984. *The politics of the world-economy*. Cambridge: Cambridge University Press.
- . 1988. *The modern world-system*. Vol. 3. New York: Academic Books.
- . 1989. The west, capitalism, and the modern world-system. In *Science and civilisation in China*. Vol. 7, *The social background*, part 2, sect. 48, edited by Joseph Needham. Cambridge: Cambridge University Press.
- Wilkinson, David. 1987. Central civilization. *Comparative Civilizations Review* 17:31–59.
- . 1988. World-economic theories and problems: Quigley vs. Wallerstein vs. central civilization. Paper delivered at Annual Meetings of the International Society for the Comparative Study of Civilizations, May 26–29, at the University of California, Berkeley.