Periodizing the Thought of Andre Gunder Frank: From Underdevelopment to the 19th Century Asian Age

Christopher Chase-Dunn

University of California-Riverside christopher.chase-dunn@ucr.edu

Andre Gunder Frank's legacy is wide and deep. He was one of the founders of dependency theory and the world-systems perspective. He took the idea of whole historical systems very seriously and his rereading of Adam Smith inspired Giovanni Arrighi's (2007) reevaluation of the comparison of, and relations between, China and the West. This paper reviews Frank's contributions to our understanding of the modern world-system, the long-term evolution of world-systems and some of the issues raised in his posthumous book about the Global Nineteenth Century (Frank 2014). I divide Frank's thought into three periods (early, middle and late) in order to explicate his ideas and to compare them with one another and with those of other scholars.

All intellectuals change their thinking as time passes. Some elaborate on their earlier ideas or pursue directions that had occurred to them in earlier projects. Some make radical changes that require retraining. Andre Gunder Frank was unusual in the extent to which he sought to correct mistakes in his own earlier work and was willing to rethink basic assumptions. There are continuities in his work to be sure. He was passionate about grand ideas as new ways of looking at the world. He had a strong commitment in favor of the underdogs. He was never afraid of confronting his own earlier ideas and he enjoyed challenging taken-for-granted assumptions and myths. His detractors called him a gadfly and said he "painted with broad strokes." Broad strokes are often a good start down paths that are hard to think.

The Early Frank

Gunder was an early adopter and important diffuser of the dependency perspective that emerged from Latin American social scientists in the 1950s. His 1966 article "The Development of Underdevelopment" (published in *Monthly Review*) was an important element in the Third Worldism that became an important element of Western independent socialism after the Cuban Revolution. Marxist economists Paul Baran and Paul Sweezy were significant contributors to this trend. The basic idea, which Frank held to the end, is that the nature of social institutions and class relations in poor and powerless countries are not primarily due to traditional local power structures; rather, these institutions and class structures have been shaped by hundreds of years of exposure to the powers of "the metropole" (Gunder's original term for the powerful core countries). Colonialism and neo-colonialism have left what we now call the Global South in a state of dependent underdevelopment. So the modernity/traditionalism contrast was seen as a global socially constructed and reproduced stratified power hierarchy.

This work is licensed under a Creative Commons Attribution 4.0 United States License. Journal of World-Systems Research, Volume 21, Number 1, Pages 203-214, ISSN 1076-156X

Gunder soon came into contact with other Third Worldists and, along with Samir Amin, Immanuel Wallerstein and Giovanni Arrighi (all Africanists) he helped to formulate the emerging world-system perspective. Frank's research (Frank 1967, 1969, 1979b) showed that Latin American societies were heavily shaped by colonialism and neo-colonialism and argued that these dependent social formations should be understood, not as feudalism, but as peripheral capitalism because they were a necessary part of the larger capitalist world-system. The conceptualization of capitalism as mode of accumulation that contained both wage labor (in the core) and coerced labor (in the noncore) was elaborated by Frank and by the other founders of the world-system perspective. Wallerstein (1974) realized that serfdom had played a somewhat similar part in the peripheralization of Poland. Frank helped to formulate the idea that the capitalist worldsystem was a single integrated whole and that it was a systemically stratified system in which global inequality was reproduced and the role of the non-core was an important and necessary part of the system. This was a challenge to Marx's definition of capitalism as necessarily requiring wage labor, and more orthodox Marxists accused Frank and the others of "circulationism" because they seemed to focus on the importance of trade between the core and the periphery rather than class relations within each country. But the world-systems formulators explicitly examined the global class structure as well as considering carefully the class structures within countries (e.g. Amin 1980b).

Frank's (1978) examination of world history from 1492 to 1789 provided an insightful account of the whole system and contributed to the reformulation of the study of systemic modes of production by recasting them as *modes of accumulation*, which included production, distribution and the different institutional ways in which wealth and power were appropriated.

The Middle Frank: Ancient Hyperglobalism

Gunder began to develop an interest in questions concerning the continuities and discontinuities between the modern system of the last five centuries and earlier periods. Other scholars were also doing this. Janet Abu-Lughod's (1989) influential study examined a multicore Eurasian system in the thirteenth century CE. Chase-Dunn and Hall published a collection entitled *Core/Periphery Relations in the Precapitalist Worlds* in 1991. Gunder began reading world historians such as Philip Curtin and William H. McNeill. He developed an important working partnership with Barry Gills in this period and together they published the collection entitled *The World System: Five Hundred Years or Five Thousand?* in 1993. Gills and Frank argued, following Kasja Ekholm and

¹ Albert Bergesen's (2015) essay in this review symposium suggests that modes of production must necessarily be based on class relations within national societies. He says, "Capitalist economic formations have to be within a social formation..." by which he apparently means within national societies, and so "there can be no world capitalism." This is similar to the charges made by the orthodox Marxists who attacked the world-systems perspective as being "circulationist" and ignoring class relations. Both Frank and the other founders exerted much effort to reconceptualize global class relations for the purpose of being able to comprehend how capitalism works in the system as a whole. This does not mean that Bergesen's focus on multilateral international trade is irrelevant, but rather that it should be understood in terms of its relevance for global class analysis. The most convincing recent work on this topic is that by William Robinson (2004, 2015) though he tends to assume that global class relations emerged in the last decades of the 20th century.

Jonathan Friedman (1982), that a "capital-imperialist" mode of accumulation had emerged during the Bronze Age, and that this system went through phases in which state power was more important interspersed by phases in which markets and private accumulation by wealthy families were more important. This mode of accumulation had been continuous since the Bronze Age and so there was no transition to capitalism in Europe. Already Gunder had staked out this position in his 1989 Review article "Transitions and modes: in imaginary Eurocentric Feudalism, Capitalism and Socialism, and the Real World System History." So capital imperialism had been continuous since the Bronze Age emergence of cities and states. The emergence of capital imperialism was never analyzed because it occurred before the emergence of cities and states in Mesopotamia, which was the beginning of the Frank-Gills study of capital imperialism. Frank and Gills also argued that there had been a single Afroeurasian world system since the Bronze Age because neighboring societies share surpluses through trade and tribute and so are systemically linked with one another, and if all indirect links are counted there would be a single network of interaction. This was a Afroeurasian network until 1492 CE, when it became a global network including the Americas.

Frank also implied that there will be no future transition to socialism.² The capital-imperialist system is a great wheel that has gone around since the Bronze Age and will continue into the future indefinitely.

Many of Frank's friends on the Left were very unhappy with this new analysis, but Gunder stuck to his guns, while continuing to critique neo-colonialism and exploitation of the downtrodden. The new emphasis was on the important continuities in the system. Frank also developed a fascination with Central Asia in this period because of its long importance as a link between the East and the West and the hybrid and innovative social formations that emerged from there. In this he was a progenitor of a new (or renewed) Central-Asia-Centrism that flourished after Frank's affections moved on to East Asia.

Janet Lippman Abu-Lughod's important 1989 study of the multicentric Eurasian world-systems of the 13th century CE was a very valuable and inspiring contribution. Abu-Lughod helped to clear the way forward in world-systems analysis by rejecting the idea of the ancient hyperglobalists that there has always been either a single global (Earth-wide) system (Modelski 2003 and Lenski 2005) or a single Afroeurasian system since the early Bronze Age (Frank and Gills 1993). Abu-Lughod agreed with Wallerstein (1974) that as we go back in time there were multiple regional whole systems that should be studied separately and compared.³ Things would be much simpler if it made sense to

² Barry Gills's (Gills 2001; Gills and Thompson 2006) subsequent studies of resistance to neoliberalism portray a possible future based on a cosmopolitan evolution of human consciousness towards greater self awareness of our unity as a species and our common history and common future-- and the tendency (projected into the future) to organize ourselves as a coherent global community.

³ Albert Bergesen's (2015) essay in this review symposium also defines "worlds" as necessarily involving interaction across large bodies of water. Large and small are relative in anthropological perspective. The largest settlements in precontact California were homes to around 1500 people (Chase-Dunn and Mann 1998). These were major centers in the "world" in which indigenous Californians lived, but would be seen as small towns in contemporary California. Frank's Afroeurasian system before 1492 CE did not involve much interaction across large bodies of water. Bergesen's oceanic definition of "world" excludes comparisons of large intercontinental world-systems with smaller regional interpolity systems. This makes invisible many (or most) of the qualitative transformations that constitute the evolution of complexity and

use the whole Earth as the unit of analysis far back in time. The ancient hyperglobalists are correct that there has been a either a single global network (or an Afroeurasian and American network) for millennia because all human groups interact with their neighbors and so they are indirectly connected with all others (though connections across the Bering Sea were probably non-existent for a period after the humans migrated from Central Asia to the Americas). David Christian (2004: 213) contends that there have been four "world zones" of information interaction (Afroeurasia, America, Australia/Papua New Guinea and the Pacific) over the past 4000 years. But all these claims about ancient macro-region interaction systems ignore the issue of the *fall-off of interaction effects* (Renfrew 1975). Information and surplus transfers are subject to the tyranny of distance, especially when transportation and communications occur in down-the-line exchanges (from group to group to group). The idea of systemness implies more than just indirect connection. It implies that something that happens here has consequences for what happens there. The notion that events in South Africa had important consequences for people in East Asia in the Bronze Age is not very plausible.⁴

The Late Frank: Sinocentrism

Gunder's (1998) provocative study of the global economy from 1400 to 1800 CE contended that China had been the center of the global system since the Iron Age. Marx, Weber and most other social scientist were hopelessly Eurocentric and this fatally distorted their concepts and explanations of what had happened in world history. The idea that capitalism arose in Europe is a myth. Capital imperialism had been the dominant mode of accumulation since the early Bronze Age. Gunder contended that the rise of European hegemony was a sudden and conjunctural development caused by the late emergence in China of a "high level equilibrium trap" and the success of Europeans in using bullion extracted from the Americas to buy their way into Chinese technological, financial and production networks. Frank contended that European hegemony was fragile from the start and will be short-lived with a predicted new rise of Chinese predominance in the near future. He also argued that the scholarly ignorance of the importance of China invalidates all the social science theories that have mistakenly construed the rise of the West and the differences between the East and the West. As I have said above, in Frank's view there never was a transition from feudalism to capitalism that distinguished Europe from other regions of the world. He argued that the basic dynamics of development were similar in the Afroeurasian system for 5000 years (Frank and Gills 1993).

In ReOrient Gunder forcefully argued that it is fundamental and necessary to study the whole system in order to look for continuities and transformations. He contended that the most important way to do this is to look at multilateral trade, investment and money flows. He argues correctly that very little quantitative research has been done on the whole global system. When he reviews what has been done he finds that the Rise of the West occurred much later than most thought and that it was due

hierarchy in human affairs - class formation, state formation and the emergence of core/periphery hierarchies.

⁴ Chase-Dunn and Hall (1997) have proposed a place-centric method for spatially bounding world-systems that uses the notion of fall-off of interaction effects (see Chase-Dunn and Jorgenson 2003).

mostly to the ability of the European states to extract resources from their colonies. In the Global 19th Century the gap that emerged between China and the West was smaller and shorter than most observers knew. He contends that the rise of the West was short and insubstantial and the global system is now returning to the China-centered structure that it has had for most of the history of the world system.

Gunder's model of development emphasizes a combination of state expansion and financial accumulation, although in *Reorient* he focused almost exclusively on financial centrality as the major important element. His study of global flows of specie, especially silver, importantly extends the work of Flynn (1996) and others to expand our understanding of what happened between 1400 and 1800 CE. Frank also used demographic weight, and especially population growth and the growth of cities, as indicators of relative importance and developmental success (see also Morris 2010, 2013).

Table 1: World Largest cities in 1400 CE

World Region	City	Population in thousands
East Asia	Nanjing	1000
South Asia	Vijayanagara	400
West Asia-Africa	Cairo	360
Europe	Paris	280
East Asia	Hangzhou	235
America	Tenochtitlán	200

Table 1 shows the sizes of the six largest cities on Earth in 1400 CE. Two of the six (Nanjing and Hangzhou) were in China and Nanjing was the largest and much larger than the second largest, which was Vijayanagara, the capital of a large empire that emerged in the southern part of South Asia to resist Moslem incursions. So, based on city sizes, Gunder is right that China was the center at the beginning of the period studied in *ReOrient*.

Figure 1 shows the percentage of the total population in the world's six largest cities held by cities in Europe and East Asia since 1500 BCE. Both regions rise and fall but the waves are not synchronous. Rather there is the sea-saw pattern noted by Morris and other observers. Europe had a rise that began during the late 3rd millennium and then crashed in the late 2nd millennium. East Asia had a rise that began in the late 2nd millennium BCE, crashed and then recovered and peaked in 500 BCE. East Asia has another rise in the middle of first millennium CE, a decline and then another rise during the first part of the 2nd millennium CE, a decline that ends in 1800 CE and then a recovery. Europe has a small recovery during the last centuries of the first millennium CE, a crash, and then a rise to a level higher than that of East Asia that peaks in 1850 and then a decline that is due to the rise of American cities as well as the recovery of cities in East Asia. Figure 1 indicates that in 1200CE Europe had no cities among the world's six largest but then it began a long rise. It passed East Asia between 1800 and 1900, and then underwent a rapid decline in importance as indicated by the relative size of its largest cities.

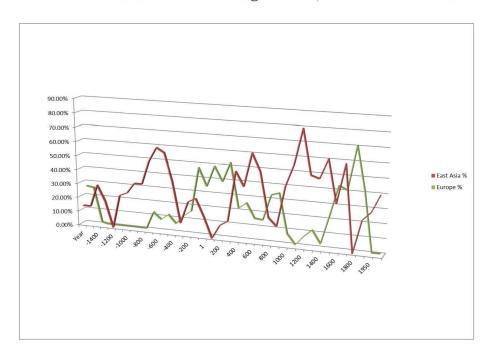


Figure 1: East Asian and European Urban Population as a % of the total population in the World's 6 Largest Cities, 1500 BCE to CE 2010

In Figure 1, we see for East Asia a rise to the highest peak of all (80%) in 1300 CE. Not until 1900 was East Asia bested by the European cities after a rapid decline after 1800. The European cities were bested again by the East Asian cities between 1950 and 2000 during the rapid decline of the European cities in terms of their size-importance among the world's largest cities. This most recent rise of the East Asian cities is a consequence of the upward mobility of Japan, China and the East Asian NICs in the global political economy.

The trajectory of Europe displayed in Figure 1 supports part of Gunder Frank's (1998) analysis, but contradicts another part. The small cities of Europe in the early period indicate its peripheral status vis a vis the core regions of West Asia/North Africa, South Asia and East Asia. As Frank argues in *ReOrient*, Europe did not best East Asia (as indicated by city sizes) until the beginning of the 19th century. But the long European rise, beginning in the thirteenth century, contradicts Frank's depiction of a sudden and conjunctural emergence of European hegemony. Based on relative city sizes it appears that the rise of Europe occurred over a period of 600 years. And Frank's contention that the European peak was relatively shallow is somewhat contradicted by the height of the peak in 1900, at which time European cities had 70% of the population of the world's six largest cities.

Frank's depiction in *ReOrient* of a sudden and radical decline of China that began in 1800 CE is supported in Figure 1. His analysis in *ReOrient*, which focuses on the period from 1400 to 1800 CE, does not examine the relative decline of East Asian predominance that began in 1300 CE.

This examination of the problem of the relative importance of regions relies exclusively on the population sizes of cities, a less than ideal indicator of power and relative centrality.⁵ Nevertheless, these results suggest some possible problems with Andre Gunder Frank's (1998) characterization of the relationship between Europe and China before and during the rise of European hegemony. Frank's contention that Europe was primarily a peripheral region relative to the core regions of the Afroeurasian world-system is supported by the city data, with some qualifications. Europe was, for millennia, a periphery of the large cities and powerful empires of ancient Western Asian and North Africa. The Greek and Roman cores were instances of semiperipheral marcher states that conquered important parts of the older West Asian/North African core. After the decline of the Western Roman Empire, the core shifted back toward the East and Europe was once again a peripheral region relative to the Middle Eastern core.

Counter to Frank's contention, however, the rise of European hegemony was not a sudden conjunctural event that was due solely to a late developmental crisis in China. The city population size data indicate that an important renewed core formation process had been emerging within Europe since at least the 13^h century. This was partly a consequence of European extraction of resources from its own expanded periphery. But it was also likely due to the unusually virulent forms of capitalist accumulation within Europe, and the effects of this on the nature and actions of states. The development of European capitalism began among the city-states of Italy and the Baltic. It spread to the European interstate system, eventually resulting in the first capitalist nation-state – the Dutch Republic of the seventeenth century as well as the later rise of the hegemony of the United Kingdom of Great Britain in the nineteenth century.

This process of regional core formation and its associated emphasis on capitalist commodity production further spread and institutionalized the logic of capitalist accumulation by defeating the efforts of territorial empires (Hapsburgs, Napoleonic France) to return the expanding European core to a more tributary mode of accumulation. Acknowledging some of the unique qualities of the emerging European hegemony does not require us to ignore the important continuities that also existed as well as the consequential ways in which European developments were linked with processes going on in the rest of the Afroeurasian (and then global) world-system. The recent reemergence of East Asian cities has occurred in a context that has been structurally and developmentally distinct from the multi-core system that still existed in 1800 CE. Now there is only one core because all core states are directly interacting with one another. While the multi-core system prior to the eighteenth century was undoubtedly systemically integrated to some extent by long-distance trade, it was not as interdependent as the global world-system has now become.

An emerging new round of East Asian hegemony is by no means a certainty, as both the United States and German-led Europe and India will be strong contenders in the coming period of hegemonic rivalry (Bornschier and Chase-Dunn 1999; Chase-Dunn et al. 2005). In this competition megacities may be more of a liability than an advantage because the costs of these huge human agglomerations have continued to increase, while the benefits have been somewhat diminished by the falling costs of transportation and communication and the emergence of automated military technologies. Nevertheless

⁵ For more discussion of this and more evidence about the rise of Europe, see Chase-Dunn and Manning (2002).

megacities will continue to be an indicator of predominance because societies that can afford them will have demonstrated the ability to mobilize huge resources.

The Last Frank: the Global 19th Century Asian Age

The posthumous publication of Gunder's last book would have never happened without the Herculean work of Robert A. Denemark in converting a massive corpus of notes and drafts into a coherent whole. The first chapter is a long list of debunked myths in which everything you have ever heard about the 19th century is declared to be bunk and alternative assertions are proclaimed. The bombastic tone is classic Gunder. There are too many issues to address here. Instead I will focus on what I see as the main contributions.

While Frank attacks some of what he himself said in *ReOrient* regarding the timing of the emergence of the gap between China and the West, the main thrust is the same. The rise of the West was more recent and less in magnitude than anyone thought. While there were some amazing technological developments, mainly the invention of the steam engine, the continuities were more important than the transformations. There were no Dutch or British hegemonies and the so-called "industrial revolution" was a minor sideshow that did not much change the structure of the global system. England was never the workshop of the world. The cotton textile industry was a brief blip that rapidly spread abroad. The point at which Britain eclipsed China was either 1850 or 1870.

In Frank and Gills (1993) it was asserted that the structure of the global system stands on a "three legged stool": ecological/economic, sociopolitical and cultural-religious. But, as in *ReOrient*, Frank mainly concerns himself with the structure of international trade. The newly ecological Gunder is more evident in his discussion of the ways in which the reproduction of the core/periphery hierarchy involved the export of social and physical entropy from the core to the periphery. At the same time he contends that the consequences of European imperialism in the 19th century were strongly resisted in many areas of the non-core. He once again affirms that the main cause of the rise of the West was based on its ability to exploit and dominate and derive resources from colonized areas, especially India.

Gunder's review of other scholars who claim to have analyzed the global system in the 19th rightly points out that most of them do not include China—more instances of Eurocentrism. The main exception is the research on multilateral trade by Folke Hilgerdt published in 1942 and 1945. Gunder rightly observes that the structure of the whole system cannot be well represented by focusing on bilateral connections—determining the interactions between two countries—because this leaves out their relations with other countries. This is the same insight that is correctly trumpeted by the advocates of formal network analyses of social structures. Gunder also denigrates the use of variable characteristics that indicate the relationships between a single country and the rest of the world, such as indicators of trade openness that show the ratio of the size of the national GDP to trade with the rest of world. Frank lumps these in with the idea of bilateral connections, but they are different. He is right to point out that a lot of information is lost in these calculations. Instead he prefers what he calls multilateral structures, and in practice he focuses on what he calls trade triangles that examine the exchange relations among three countries. This is an important methodological insight for studying the

structure of the world economy, and Frank makes good use of it to support his claims about the lateness and shallowness of the Rise of the West.

The Frank Project is part social science and part commitment to a more egalitarian world society. Several eminent scholars have stepped to the plate to carry the research that Gunder began in new directions. I have already mention Robert A. Denemark's huge effort to produce the last of Gunder's books. Barry Gills, Albert J. Bergesen, Sing Chew, Patrick Manning and now Peter Peregrine and Charles Lekson are taking Gunder's ideas in different important directions. Related work was done by George Modelski and Gerhard Lenski who share(d) Gunder's idea of a global human system extending back to the Bronze Age, and William R. Thompson did research and published with Frank on cycles in the Bronze Age. As for the emancipatory side, as Gunder would have said, *la luta continua* (the struggle continues).

References

- Abu-Lughod, Janet Lippman 1989. Before European Hegemony The World System A.D. 1250-1350. New York: Oxford University Press.
- Amin, Samir. 1980a. Class and Nation, Historically and in the Current Crisis. New York: Monthly Review Press.
- -----. 1980b. "The class structure of the contemporary imperialist system." *Monthly Review* 31(8): 9-26.
- Arrighi, Giovanni. 1994. The Long Twentieth Century. London: Verso.
- -----. 2006. "Spatial and other 'fixes' of historical capitalism" Pp. 201-212 in C., Chase-Dunn and Salvatore Babones, eds. *Global Social Change: Historical and Comparative Perspectives*. Baltimore, MD: Johns Hopkins University Press.
- -----. 2007. Adam Smith in Beijing. London: Verso
- Arrighi, Giovanni, Takeshi Hamashita, and Mark Selden. 2003. The Resurgence of East Asia: 500, 150 and 50 Year Perspectives. London: Routledge
- Beaujard, Philippe. 2010. "From Three possible Iron-Age World-Systems to a Single Afro-Eurasian World-System." *Journal of World History* 21(1):1-43.
- Bergesen, Albert J. 2013 "The new surgical imperialism: China, Africa and Oil" Pp. 300-318 in George Steinmetz, ed. *Sociology and Empire*. Durham, NC: Duke University Press.
- ----- 2015 "World-system theory after Andre Gunder Frank" Journal of World-Systems Research, XXXX
- Chase-Dunn, Christopher and Thomas D. Hall, eds. 1991. Core/Periphery Relations in the Precapitalist Worlds. Boulder: Westview Press.
- Chase-Dunn, Christopher and Bruce Lerro. 2014. Social Change: Globalization from the Stone Age to the Present. Boulder, CO: Paradigm Publishers
- Chase-Dunn, Christopher and Thomas D. Hall. 1997. Rise and Demise: Comparing World-Systems. Boulder, CO.: Westview.
- -----. 2011. "East and West in world-systems evolution" Pp. 97-119 in Patrick Manning and Barry K. Gills, eds. Andre Gunder Frank and Global Development. London: Routledge.

- Chase-Dunn, C. and Andrew K. Jorgenson. 2003. "Regions and Interaction Networks: an institutional materialist perspective." *International Journal of Comparative Sociology* 44(1): 433-450.
- Chase-Dunn, C. and Kelly M. Mann 1998. The Wintu and Their Neighbors: A Small World-System in Northern California. Tucson: University of Arizona Press.
- Chase-Dunn, Christopher and Susan Manning. 2002. "City systems and world-systems: four millennia of city growth and decline." *Cross-Cultural Research* 36(4): 379-398.
- Chew, Sing C. 2007. The Recurring Dark Ages: Ecological stress, climate changes, and system transformation. Walnut Creek, CA: Altamira Press.
- Christian, David. 2004. Maps of Time: An Introduction to Big History. Berkeley: University of California Press.
- Curtin, Philip. 1984. Crosscultural Trade in World History. Cambridge: Cambridge University Press.
- Ekholm, Kasja and Jonathan Friedman. 1982 "Capital' imperialism and exploitation in the ancient world-systems." *Review* 6(1): 87-110.
- Elvin, Mark. 1973. The Pattern of the Chinese Past. Stanford: Stanford University Press.
- Fitzpatrick, John. 1992. "The Middle Kingdom, the Middle Sea, and the Geographical Pivot of History." *Review* 15(3): 477-521.
- Flynn, Dennis O. 1996. World Silver and Monetary History in the 16th and 17th Centuries. Brookfield, VT: Variorum.
- Frank, Andre Gunder. 1966. "The Development of Underdevelopment." *Monthly Review* (September): 17-31.
- -----. 1967 Capitalism and underdevelopment in Latin America. New York: Monthly Review Press.
- -----. Latin America: Underdevelopment or revolution? New York: Monthly Review Press.
- -----. 1978. World Accumulation, 1492-1789 New York: Monthly Review Press.
- ----- 1979a: Dependent Accumulation and Underdevelopment New York: Monthly Review Press
- -----. 1979b Mexican Agriculture 1521-1630:transformation of the mode of production. Cambridge: Cambridge University Press
- -----. 1989. "Transitions and modes: in imaginary Eurocentric Feudalism, Capitalism and Socialism, and the Real World System History." *Review* 15(3): 335-72.
- -----. 1992. "The Centrality of Central Asia." Comparative Asian Studies No. 8. Amsterdam: Center for Asian Studies Amsterdam (CASA).
- -----. Reorient: Global Economy in the Asian Age. Berkeley, CA: University of California Press.
- -----. 2014. Reorienting the 19th Century: Global Economy in the Continuing Asian Age. Boulder, CO: Paradigm Publishers.
- Frank, Andre Gunder and Barry K. Gills, eds. 1993. *The World System: Five Hundred Years or Five Thousand?* London: Routledge.
- Gills, Barry K. 2001. Globalization and the Politics of Resistance. New York: Palgrave
- Gills, Barry K. and William R. Thompson. 2006. *Globalization and Global History*. London: Routledge.

- Hall, Thomas D. 2001. "Chiefdoms, States, Cycling, and World-Systems Evolution: A Review Essay." *Journal of World-Systems Research* 7(1): 91-100.
- ------. 2006. "[Re] Periphalization, [Re]Incorporation, Frontiers, and Nonstate Societies: Continuities and Discontinuities in Globalization Processes." Pp. 96-113 in Barry K. Gills and William R. Thompson, eds. *Globalization and Global History*. London: Routledge.
- Hall, Thomas D. and Christopher Chase-Dunn. 2006. "Global Social Change in the Long Run." Pp.33-58 in Christopher Chase-Dunn and Salvatore Babones, eds. Global Social Change: Comparative and Historical Perspectives. Baltimore: Johns Hopkins University Press.
- Hamashita, Takeshi 2003. "Tribute and treaties: maritime Asia and treat port networks in the era of negotiation, 1800-1900" Pp. 17-50 in Giovanni Arrighi, Takeshi Hamashita and Mark Selden, eds. *The Resurgence of East Asia: 500, 150 and 50 Year Perspectives.* London: Routledge.
- Inoue, Hiroko, Alexis Álvarez, Kirk Lawrence, Anthony Roberts, Eugene N. Anderson and Christopher Chase-Dunn. 2012. "Polity scale shifts in world-systems since the Bronze Age: A comparative inventory of upsweeps and collapses" *International Journal of Comparative Sociology* 53(3): 210-229.
- Inoue, Hiroko, Alexis Álvarez, Eugene N. Anderson, Andrew Owen, Rebecca Álvarez, Kirk Lawrence and Christopher Chase-Dunn. 2015. "Urban scale shifts since the Bronze Age: upsweeps, collapses and semiperipheral development." Social Science History 39(2), in press.
- Mann, Michael. 1986. The Sources of Social Power, Volume 1: A history of power from the beginning to A.D. 1760. Cambridge: Cambridge University Press.
- McNeill, William H. 1963. *The Rise of the West*. Chicago: University of Chicago Press McNeill, John R. and William H. McNeill. 2003. *The Human Web*. New York: Norton.
- Modelski, George, Tessaleno Devezas and William R. Thompson, eds. 2008. Globalization as Evolutionary Process: Modeling Global Change. London: Routledge.
- Modelski, George and William R. Thompson. 1996. Leading Sectors and World Powers: The Coevolution of Global Politics and Economics. Columbia, SC: University of South Carolina Press.
- Morris, Ian. 2010. Why the West Rules—For Now. New York: Farrer, Straus and Giroux
- -----. 2013. The Measure of Civilization. Princeton, NJ: Princeton University Press.
- Morris, Ian and Walter Scheidel, eds. The Dynamics of Ancient Empires: State Power from Assyria to Byzantium. New York: Oxford University Press.
- Pomeranz, Kenneth. 2000. The Great Divergence: Europe, China and the Making of the Modern World Economy. Princeton: Princeton University Press.
- Renfrew, Colin. 1975. "Trade as Action at a Distance: Questions of Integration and Communication." Pp. 3-59 in Jeremy A. Sabloff and C. C. Lamberg-Karlovsky, eds. *Ancient Civilization and Trade*. Albuquerque: University of New Mexico Press.
- Robinson, William I. 2004. A Theory of Global Capitalism. Baltimore: Johns Hopkins University Press.

- -----. 2015 "The transnational state and the BRICS: a global capitalism perspective" *Third World Quarterly* 36(1): 1-21.
- Scheidel, Walter. 2009. "From the "great convergence" to the "first great divergence":
- Roman and Qin-Han state formation." Pp. 11-23 in Walter Scheidel, ed. Rome and China: Comparative Perspectives on Ancient World Empires. New York: Oxford University Press.
- Sugihara, Kaoru. 2003. "The East Asian path of economic development: a long-term perspective." Pp. 78-123 in Giovanni Arrighi, Takeshi Hamashita and Mark Selden, eds. *The Resurgence of East Asia: 500, 150 and 50 Year Perspectives*. London: Routledge.
- Turchin, Peter 2011. "Strange Parallels: Patterns in Eurasian Social Evolution." *Journal of World Systems Research* 17(2): 538-552.
- Wallerstein, Immanuel. 2011 [1974]. *The Modern World-System*, Volume 1. Berkeley: University of California Press.
- Wilkinson, David. 1987. "Central civilization." Comparative Civilizations Review 17: 31-59.
- Wolf, Eric. 1997. Europe and the People Without History. Berkeley: University of California Press.
- Wong, R. Bin. 1997. China Transformed: Historical Change and the Limits of European Experience. Ithaca: Cornell University Press.