

Reading Notes on David Christian, *Maps of Time*, Chapter 13, "Birth of the Modern World"

To begin with terminology: Christian refers to the "Modern Revolution" that has transformed the world in the last 250 years. How is the Modern Revolution a more encompassing concept than what is usually called the Industrial Revolution? What other types of changes does it include besides economic ones? (See p. 437, as well as the overall organization of this chapter.) According to Christian, is industrialization the material "substructure" of the other elements of the Modern Revolution? (409)

Why does Christian believe that the economic changes associated with industrialization deserve to be called revolutionary? (410-411; also tables on pp. 407-09)

Take some time to look at the tables on pp. 407-409. What are some things you notice about them? How is this a different way of representing history in symbolic form than the "chart of civilizations" we studied in our first class meeting?

What is the geography of industrialization and modernity: are they regional (Western European) or global or both? (409-410) What are some examples of the "soft power" of now-global modernity? (410) Why does Christian turn to Britain to trace the early stages on industrialization? (411) What economic factors besides industrialization were involved in the British economic revolution? (411-412)

What does Christian mean by Britain's "pre-adaption" as a commercial society? Do you consider this a sufficient explanation of the role of cultural history in the British Industrial Revolution? Is it compatible with Margaret Jacobs' analysis of the scientific roots of industrialization? (412-13)

How was British agriculture transformed by commercial capitalism in the centuries preceding the Industrial Revolution? We recently discussed "the tragedy of the commons" in connection with the challenges of managing commonly-owned land and other resources. How were commonly held lands dealt with in Britain in the years preceding and during the Industrial Revolution? (414-415)

Note that Christian typically describes social inequalities with the metaphor of "gradient" rather than in the concept of class. What do you think of this metaphor as he uses it to describe the new inequalities that came with the Modern Revolution in agriculture? (415; see also 428-29 for his discussion of the role of the state in maintaining social inequality) You might look back to his description of the much earlier "gradient of wealth and power in large agrarian communities" for purposes of comparison/contrast. (264-267)

What are some ways that British agriculturists raised productivity significantly without striking innovations in machinery or chemistry? (416-17)

What changes in the marketing of agricultural goods intensified the changes in land ownership and management? How does Christian summarize four social and commercial changes that "pre-adapted" Britain for a leading role in industrialization? (417-18)

In these industrial changes, trace the intertwining roles of new energy sources, mechanization of production, and new management techniques (419-21)

On pp. 422-23 Christian presents a traditional account of the technical core of the Industrial Revolution (especially the figures, showing Watt's crucial inventions). On pp. 423-26 he presents a less traditional account of the wave of innovation, which emphasizes the role of anonymous artisanal skills and also the general shaping forces of global capitalism. Do you find these accounts compatible or conflicting? Does the discussion of the relationship between what we now call "science" and "technology" in early industrialization seem compatible with what we learned about the French Encyclopedie edited by Diderot and d'Alembert? (424)

What is the relationship between political and economic revolutions? More specifically, what new roles for the state, and sources of power for the state, emerged in the 18th and 19th centuries? How does the modern state try to balance regulation and support of its citizens? Of economic activity in general? (426-30)

What is the role of warfare in the transformation of state power? (426-29) Note in particular references to the American Civil War as the first "industrialized" war (429, 434), as this will be the topic of Prof. Smith's presentation in our next class.

Christian returns to the theme of the relationship between "science" and "technology" in his discussion of the cultural revolution associated with industrialization. How does he describe and explain "Science's grip on modern culture"? (432) Does he assume this means a decline in the "grip" of religious faith? What other cultural changes does he emphasize? (430-32; also 438)

What are some limitations and reservations what Christian acknowledges regarding the term "revolution"? (432) Despite them, how did the Modern Revolution sweep around the globe from its origins in Western Europe? What are some of the major waves in this process? (433-35)

What were the overall effects of this global transformation on other parts of the world? When and how did the so-called Third World appear? How does its appearance modify prevailing concepts of historical progress? How does the "gradient" of inequality within states become played out as a gradient among them?(435-36; 438)

What are some new forms of industrial organization emerging in the 19th century? How do they suggest a possible blurring of the roles of economic and political powers? (434) What is the paradox of economic development when it is undertaken by a "traditional" tributary state? (436-37)

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