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palgrave advances in world histories

edited by
marnie hughes-warrington

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3
methods and materials

patrick manning

Studies of world history overlap substantially in their content and analysis with studies set at national, local and other levels. World history is more, however, than the accumulation of local and national knowledge, for it addresses patterns at a larger scale that may not be observable or explicable at more localized levels, and it addresses the linkages among localized and broader scales. As a result, certain of the methods and materials of world historians are common to historical studies in general, while others are distinctive and characteristic of global studies. This chapter presents an effort at identifying the distinctive methodological characteristics of world history: the range of its scope and scale, the balance of its various materials and methods, and the attention to how best to combine these elements of historical analysis.

models for historical research

World historical writing has coexisted with several other styles and forms of historical research and writing. National history is the most fully developed genre in historical studies, having been dominant in academic historical studies for over a century. But other genres of historical writing, each with its characteristic rhetoric, materials and audience, have long traditions and continue to reproduce themselves and in some cases to thrive. Thus dynastic history is distinct from national history in its biographic focus, though the two fields overlap in political and diplomatic analysis. Military history, while generally written within national or imperial traditions, gives particular emphasis to the tension between the contingency of events on battlefield and the influence of underlying social and economic structures. Ecclesiastical history focuses on religious doctrine and institutions. Philosophic histories, attempting to make sense

of the world and its transformations, have been largely speculative, but their authors have maintained a continuity of discourse by linking their interpretations to those of earlier writers. Historical geography has been an eclectic field, sometimes empirical and sometimes speculative, organizing evidence more by place than by time. Area-studies history expanded dramatically in the late twentieth century: it consisted partly of multidisciplinary social science, but was also partly an extension of national history beyond the limits of Europe and North America. Other significant fields of historical study include family history, local history, institutional history, and the long-established tradition of assembling chronologies.

Each of these genres of historical writing entails a characteristic model of research and writing. For each genre, the model recommends its subject matter, its documents, the logic of its analysis, the boundaries of its purview, the style of its writing and its audience. These varying models for historical research and writing overlap significantly with each other. Medieval history, for instance, is a broad category of historical study, encompassing work in economic, social, political and intellectual history. Yet medievalists working on Europe share a common exposure to Latin texts and a tradition of encompassing a wide region within their purview.[1] Similarly, medievalists working on the Islamic world, on China and on Japan share skills in a major literary language and a tradition of working across the wide region in which that language was dominant among the elite.

World history, now formalizing itself as a field, is visibly proceeding through a review of the various other models for historical research, drawing on their various approaches, and developing new approaches where necessary. Already we can see that, in this initial organization of the field, there will be several directions and not just one. As was made clear in the previous chapter, the differences have already shown up in the terminology: world history, global history, universal history, contemporary history and big history.[2]

Certain distinctive patterns in world-historical interpretation appeared in the earliest stages of historical writing, and have continued to the present. World history in early times, as now, reflected an effort to link knowledge over the widest range in time and space. Such broad exploration of the past, pressing on the frontiers of knowledge, tended to be dominated by historical philosophy. Commonly the writers were in the service of a state or religious institutions. Herodotus collected historical information through his travels and interviews, and wrote for a Greek public. Sima Qian similarly relied on travels and interviews but also on

the written record of the Han state, and wrote for an audience of state officials in the first century BCE. In the early centuries of Christianity, Eusebius sought to show the unity of the world and its Christian destiny through a chronological history that included an estimate of the date of creation. By the tenth century, the Arab historians al-Tabari and al-Mas'udi had created more extensive universal histories, relying on the growing volume of available records and written speculations. Otto of Freysing, the twelfth-century German bishop and chronicler, wrote *The Two Cities*, a multivolume history of the world from creation to 1146 that attempted a comprehensive history fitting with Christian revelation.[3] In the seventeenth century a French bishop, Bossuet, wrote a more concise universal history that conveyed many of the same messages as Otto but reached a far wider public. The difference was that Bossuet, along with Ottoman universal historians of the same era such as Mustafa Ali and Evliya Celebi, had to account in their interpretations for the discovery of the Americas and new religious and social conflicts at home.

Works of such eighteenth-century writers as Vico and Voltaire relied more on their reading of other published works than on original research.[4] Yet for each of them, the expansion of scientific and geographical knowledge provided additional issues to address. Some of the great historical works of the eighteenth century were works of primary scholarship, including Gibbon's history of Rome. Others, such as Raynal's *History of the Two Indies*, were collective works of synthesis. When the philosophers Kant, Herder and Hegel wrote of the past, they drew on a new framework that emphasized categorization of all elements of the world, and a sense of change that began to be called 'progress'.[5]

One distinction among world-historical writers, of earlier and later times, separates those primarily presenting a narrative conveying a broad social vision (often with an underlying moral or social message) and those primarily presenting an argument centring on selected conclusions (with narrative for illustration). In the eighteenth century, Voltaire and Gibbon wrote narratives, while Vico's writings in world history were intended to sustain an argument about the place of language in human development. Authors of both these categories of world histories, as indeed the authors of most studies, drew heavily on the writings of earlier authors, and refocused their interpretations to address the concerns and questions of their own era. In some cases they used direct evidence or interviews as sources. In the nineteenth century Hegel and Marx each invoked world history to expound their analytical visions, and Lewis Henry Morgan drew upon world history to convey his vision of the succession of savage, barbarian and civilized stages. Leopold von Ranke's final project was a

multivolume history of the Western world, based on secondary sources, of which the eighth and final volume led into the fifteenth century. Perhaps the case of H. G. Wells makes clearest the strengths and weaknesses of this long tradition of amateur work in world history. Wells, a journalist and novelist, took on the task of outlining world history. He read widely and consulted systematically with leaders of English scholarly life, and reproduced their prejudices as well as their breadth of vision. His volume was original in its assembly of materials from many sources, and the maps and figures illustrating it were equally original.

The professionalization of national history set new standards for evaluating world history, and influenced the boundaries of world history.[6] The professional practice of national history in European languages developed in what can be thought of as two waves. First, beginning in the mid-nineteenth century, a few individuals wrote synthetic statements for a popular audience, linking reviews of national history with implications of national destiny. These authors – Bancroft in the US, Michelet in France, and equivalents elsewhere – developed historical writing to a level sufficient to inform and inspire the national consciousness.[7] Their work addressed a range of diplomatic, political and social issues. Second, toward the end of the century a university-based guild of professional historians developed, to explore the specifics of the national past. Leopold von Ranke has become the culture hero for this sort of historical analysis. Such analysis focused on assembly of primary textual sources, particularly from the archives of foreign ministries in the conduct of diplomacy, but also from parliamentary debates and personal correspondence.[8] As a result, the preferred publication became the historical monograph, providing an apparently exhaustive analysis of a given topic, usually in national political history. The broad, synthetic work aimed at a general audience came to be thought of as amateur history, while the detailed monograph aimed at an audience of historians came to be seen as professional history. The way to gain admission to the guild of professional historians was through completion of a doctoral dissertation: a first monograph, in which the new scholar demonstrated her (or generally his) skill in documenting the past within a selected set of evidence.

The materials of professional, national historians were manuscript and print documents, generally from coherent archives. Guides to archives grew to assist in their analysis. The authority of the written text became such that other sorts of documents were seen as inferior: oral evidence, material and expressive culture. The scholarship of national historians followed an artisanal approach, emphasizing keeping track of numerous factors, balancing continuity and change over time, and constructing

an edifying narrative. The materials were organized and analysed with attention to chronology, and relying on the historian's intuitive and empirical sense of the links within them. Theories played little role in the work of national historians. The framework was that of the national community. Studies might be written of a given city or community or region, but the objective was generally to throw light on the nature and evolution of the nation.

After being organized on the above principles, the practice of national history experienced a century of growth and transformation.[9] For instance, studies of social history began to grow in importance among national historians as the twentieth century proceeded. Such studies responded to a need for public discussion of how contending groups within the nation accommodate and make their place. But the expansion of social history changed the practice of historical study: the range of sources became wider, the limits on archival holdings were less precise, and principles of social theory began to creep in.[10] And then area-studies history arose as an effort to extend the model of national history to regions beyond Europe and North America.[11]

Yet even in the century during which the model of national history held unmistakable primacy in historical studies, historians pursued studies based on other models, and maintained a vision of historical studies that was more general than national history. One clear indication of this more general vision of historical studies appeared in the occasional introductory manuals for history written by prominent historians. The best-known of these manuals, written by such scholars as Karl Lamprecht, R. G. Collingwood, Marc Bloch and J. H. Hexter, were the work of innovative rather than conventional historians, so they escape a mechanical concentration on studies of national destiny.[12] Nevertheless, their terms of reference reflect the primacy of the national framework in historical studies of their time.

professionalization of world history

In recent years the study of world history has been undergoing a professionalization that is parallel (if on a more modest scale) to the earlier professionalization of national history. (The present volume, indeed, plays a part in the process of professionalizing world history through its critical review of major aspects of the field.) Some obvious indications of this process are such institutional changes as the formation of professional associations, the publication of scholarly periodicals, the holding of annual conferences and, with the advances in technology, the formation of electronic discussion groups. It is possible that world history may develop a set of subfields, organized by temporal, spatial, topical or methodological divisions.

More substantial than institutional changes are the accompanying expansion and deepening in the materials, methods, and frameworks of analysis with which world historians analyse the past. Analysis of these issues is made complex by their breadth and inclusiveness, a result of the fact that world history has not yet broken itself down into subfields. This discussion addresses the emerging patterns, materials, methods and frameworks in professional study of world history, and then goes on to address the institutions of world history and the intersection of professional and amateur (or general-audience) presentations of world history.

The materials for world history include, first, the materials shared with local and national studies of history. Much of world history for recent times is comparative in its organization, and relies on the national archives and data collections used within the units under comparison. These include governmental text documents, oral documents, social statistics and economic data. In addition, world historians draw on materials from a growing range of disciplines that are creating and analysing historical data. These include medicine, environmental and climatological studies, and cultural studies. For instance, the field of ethnomusicology has expanded dramatically, combining data on musical performance with analysis of its social context in comparative studies of many regions of the world. While the materials used by world historians are much the same as those used by national historians, the world historian faces the additional complexity of using multiple archives, data collected under different conditions in multiple regions, and linking them into a coherent empirical picture.[13]

While historical studies generally concentrate on the nineteenth and twentieth centuries, and world historians follow this trend in large measure, their interest in large-scale and long-term analysis leads them inexorably to consideration of earlier times. Thus, data on birth and death rates over time, on climatic change, on volcanism and the implications of volcanism for climate, and the results of archaeological studies commonly gain attention from world historians.

It remains the case that world historians largely rely on secondary sources rather than on their own primary research. This lack of direct engagement with source materials may be seen partly as a deficiency. But the review and interpretation of published historical works also provides a service: the historical literature is now enormous, and the

review and assessment of this literature is for professional historians, not just for textbooks. (Indeed, national and local historians put a great deal of their energy into reviewing and interpreting published works, in addition to their work on primary documents.) The massive work of John Richards on the environmental history of the early modern world relies largely on print materials, especially secondary works. Similarly, the even larger volume by Dirk Hoerder on global migration in the past millennium draws overwhelmingly on published works.[14] Both studies combine published sources and traditional historical methods, but open substantially new interpretations at a global level.

Beyond that, however, world historians cannot rely simply on secondary materials, because world history is more than an exercise in global overview: it is also the linkage of global and local. Philip Curtin published an early world-historical monograph focusing on trade diasporas, relying largely on secondary works but also on his original research. Years later Claude Markovits completed a parallel study for merchants from Sind, based on primary sources, and entered into discourse with Curtin.[15]

The methods of world historians have expanded in range at least as much as the materials. By methods I mean at least three categories of method, which may be called the technology of historical research, artisanal methods and analytical methods. The category of technology encompasses everything from pencil and paper to computers. Computers have changed significantly the work of the historian. They enable preservation and display of documents, rapid copying and entry of data, storage and searching of data, quantitative and qualitative analysis, easy retrieval of secondary works, and improved communication among historians. Work at a world-historical scale is much easier to envision with the assistance of computers.[16] The artisanal methods of historians include the eclectic techniques of data recovery and interpretive analysis long associated with the historical profession. At the level of research these include the techniques of archival and library study, involving recovering, storing and analysing data. At the level of interpretation they involve the reflective work of assembling all the methods and materials into a coherent interpretation.

The analytical methods of history include those associated with disciplinary fields of study ranging from economics to law to music history. The topical strength of world history has been in political, military and commercial history, and in the conflict of religious communities. Social history – including analysis of class, race, gender, ethnicity and family – has been slow to develop in studies of world history, in large part because these structures are generally understood to operate at local

and national rather than transnational levels. Environmental history and medical history, in contrast, have been readily understood to involve phenomena that cross national and other borders, and world historians have contributed major works in these fields. While cultural phenomena are commonly thought to operate within social communities, the importance of cross-cultural interaction in recent times has been widely noted, and historical studies have responded in particular with analysis of cultural encounters of distinct social groups.[17] Other new topics and frameworks gaining attention from world historians include game theory, evolutionary psychology, migration theory, and evolutionary studies of human nature including gender relations and violence.

This panoply of methods entering the discourse of world history suggests another sort of artisanal task for world historians: the devising of techniques for assembling and linking multiple methods. Historians in other fields have chosen either to specialize in a single method or, more commonly, to learn to adopt the language and some simplified versions of the methods in various fields without learning them in detail. For world history, it seems that many practitioners will have to learn how to balance and connect several methodologies within a single study.

The frameworks for professional study of world history range widely. There is far more to the choice of frameworks than the difference between nations and localities. In spatial frameworks, one may also consider empires, oceanic basins, links of local to global, and comparisons of these. In analytical frameworks, various world historians work with civilizations, world systems, the ecumene, big history, notions of social evolution and historical materialism. This range of possible frameworks demonstrates that there are many sorts of subfields in world history, even though it remains a small field.

Given the range of possible frameworks, and the impact of the chosen framework on the resulting interpretation, it is advisable for authors and readers to be explicit about their choice of framework. In addition, it is not sufficient for an analyst to adopt a given framework and stick with it, since it rapidly becomes clear that any process appears differently when seen from a range of standpoints. No framework is so obvious as to be unproblematic.

In past years world historians have primarily been self-trained deviants from national history or visitors from fields of study outside history. Thus it is that even those who are considered leading researchers and teachers in world history are often reluctant to identify themselves as world historians.[18] On the other hand, even in this amateur era, the

institutions of associations, conferences and journals developed, and some manuals for world history have begun to appear.[19]

The materials, methods and frameworks of professional world history are created and propagated by a developing set of institutions. The demand for publications and teaching in world history has now grown to the point where it is clear that the future will bring expansion of programmes of graduate study. In these programmes it is becoming necessary to determine the appropriate courses of study for world historians, and the appropriate first major research project for new world historians. That is, the doctoral dissertation in world history and the monograph in world history must be recognized in some sort of professional consensus. The delineation of the institutions of graduate study is made difficult in part because of the difference, among graduate students, of those making the study of global processes their top priority, those wishing to study world history as a secondary field (perhaps for teaching rather than research), and those wishing only an introductory acquaintance with world history.

The professional study of world history cannot, however, safely be considered in isolation either from other fields of professional history or from the study of world history by those who are not professionals in the field.[20] World historians, who specialize in phenomena that cross boundaries, need to give particular attention to the boundaries of professionalism in their field. To begin with, it is necessary to distinguish at least two types of non-specialists who participate in world-historical studies. First are those who are specialists in other fields of study, and whose studies have led them into exploration of their specialty over a long time period and a wide region. These amateurs are generally strong in the methodology of their chosen field, but inexperienced in the practice of history. Examples of distinguished amateur world historians of this sort include the physiologist Jared Diamond and the sociologist Immanuel Wallerstein; less well-known but intriguing examples include authors of a global history of physical education and a history of domestic animals.[21] A second sort of amateur includes those who are non-specialist writers focusing on narrating world-historical issues for a general audience. H. G. Wells was such an amateur world historian (in contrast to his professional contemporary, Oswald Spengler). More recently, the journalist Mark Kurlansky has produced works of global historical interest on the cod, salt, the Basques and the year 1968.[22] A third category of amateur world historian is that described above: non-specialists who are appropriating world historical material in the service of advancing an argument that goes beyond the interpretation of history. Included in this category is the

game-theoretical approach of Robert Wright in *Nonzero*. He has used a review of human history and biological evolution to convey the point that a non-zero-sum side of life is always present, pointing toward growth and complexity.[23] Fourth, however, given that the overlap of fields of study is unavoidable in world history, it is important to avoid setting arbitrary limits to distinguish professional from non-specialist involvement in world history. The point is to recognize that these different tendencies exist, and to use them so as to best advance the understanding and appreciation of world history.

Another important issue at the boundaries of professional world history – one that will be examined in more depth in Chapter 12 – is the practice of teaching world history. While some teachers of world history at both secondary and post-secondary levels are best seen as professionals in the field, most teachers are and will remain non-specialists, though hopefully well-prepared non-specialists. Teaching is partly professional and partly so much for a general audience that it cannot become professional. Many of the people teaching world history have no training in the field, and this will remain the case for a long time. The demand for the teaching of national history is different from that for national history: world history is less likely to be sustained by (and deformed by) patriotic impulses than world history. There exists no clear constituency relying on world history as there is for various sorts of national history or community history. On the other hand, it can also be shown that levels of global consciousness fluctuate with time and events, so that the teaching of world history does depend on public perceptions.[24]

The question of audience for the work of world history poses problems analogous to those for national history. That is, the professional world historian will doubtless begin with an audience of other world history professionals and, if ambitious, seek to extend that audience to include professional historians outside of world history and beyond that to an audience of the general public, which is subdivided by national and other outlooks. This complexity provides a reminder that there is no reason for world history to become fully professionalized, as an important element of its contribution lies in opening discussion for general audiences.[25]

world history and theory

The expansion of studies in world history provides an opportunity for historians to become more deeply involved in theory. This opportunity comes partly because historians are widening their interests and exploring new issues in the past. It is also because scholars in other fields, as they

encounter temporal dimensions of work in their discipline, are writing up the results as history. As these scholars enter historical discourse, they bring their theories with them. World historians, because their work addresses so many topics, thereby encounter theory in the natural sciences, social sciences and humanities.[26]

Historians have tended to draw minimally on theory. History is most basically an empirical field, concentrating on locating and assembling data into narrative form. Some historians write of the exceptions rather than the rules, while others write decisive analyses: both groups tend to present interpretations through interplay of a large number of factors. Theorists, in contrast, categorize distinctive factors and focus on formalizing systematic relationships among them, using the minimum number of variables for efficiency of explanation. Yet the two types of explanation rely heavily on each other.

'Knowledge' is both empirical evidence and relationship among analytical categories into which we place the evidence. Patterns in the past help project future trends. Current issues undergoing a mix of historical and theoretical investigation include global warming, economic growth, technological change, political centralization, patterns of disease, language change, kinship systems, and the changes and exchanges in cultural production. The theories in each of these areas developed in response to empirically identified problems.[27] The theories, in turn, led to identification of new evidence.

Historians often think of information about the past as being held in a literal or figurative archive. The notion of the fixed archive is, however, misleading in certain senses. All of the evidence we have from the past exists in the present: we are unable to go directly to the past to experience it, and are limited to exploring remnants of the past that have survived to the present. But depending on the skill of our analysis, we may be able to identify evidence that was not previously recognized or valued. Thus, while the physical remnants from the past may be fixed and declining, our work of analysis creates new evidence of the past. The quantity and variety of historical evidence has expanded in interaction with the technology and theory of analysis.[28]

The work of world historians, from the most descriptive level to the most fully theorized level, thus interacts with theory. Here are brief characterizations of the relationship between theory and history at several levels. The most common and best established link of history and theory is the historical background to a theoretical discussion. Such background, which sets the theoretical analysis in context, also shows the significance of the issue under analysis.

A more theoretically engaged type of work by historians is that of applying a theory to the past. In this case, the historian assumes the validity of the theory, and explores its implications in a historical situation. For instance, the application of price theory to Indian Ocean trade or the application of world-system theory to the economy of the South Atlantic will yield theoretically informed interpretations. A more simplified version of this approach is for the historian simply to appropriate the results of an economist or world-system analyst, without any further analysis of evidence.

Historians may also analyse the theories, rather than simply adopt them. One aspect of analysing theory is the logical critique and perhaps refutation of a theory. One famous such example is E. P. Thompson's critique of the theory of class conflict proposed by Louis Althusser, in which Thompson argued that 'the logic of history' refuted Althusser's analysis.[29] Another aspect of analysing theory is empirically testing a theory, often against an alternative theory, to see whether the theory is affirmed or refuted.

Two further theoretical activities of historians, even more proactive than those above, are the creation of new theories and the linking of existing theories. Of these, the world historian is most likely to be involved in linking existing theories. For instance, analysts of cultural encounter may draw upon theories in anthropology, sociology and literature, and may link aspects of them to provide a theory relevant to world historical problems.[30] Similarly, studies of migration will lead the historian to economic, sociological and demographic theories of migration. There is an opportunity to link these theories to each other, to provide a more comprehensive analysis of migration.

The development and application of modernization theory was an effort at worldwide political and social analysis that was influential from the 1950s into the 1980s. As theory, it was ultimately revealed to be mainly an ideological restatement of the hierarchy of the colonial world. In practice, however, modernization studies facilitated the expansion of area studies generally, and thereby contributed to growth in world historical studies.[31] Notions of co-evolution, as these developed in biology and anthropology, were soon applied to early stages of human history.[32] Genetics and linguistics came to have great importance in the study of human evolution and early human migration. Oceanography and geology combined to develop explanations of the El Niño phenomenon and its climatic implications.[33] Studies in medical history, facilitated partly by the increasing availability of computers and spreadsheets for analysis but also by epidemic disease, expanded sharply in the late

twentieth century. And, over the long term, debates over the philosophy and theories of historical materialism – in economics, politics, popular culture and sociology – have informed a great deal of historical work.[34]

Theory, despite the benefits brought by its increasing prominence in world historical studies, also has its disadvantages. Theories develop most fully for situations in which there are large quantities of data, so that theories and theorists tend to neglect situations where data are scarce. A clear example of this phenomenon is in the areas of economics and economic history, where the wealthy regions of the world are analysed in most detail, and the economic patterns of other regions are treated implicitly as insignificant. Such imbalances, however, may be adjusted with time. Thus the field of demography, which focused for a long time on the data-rich regions of Europe and North America, then found the problems lacking in interest, and turned to study of the rest of the world, where problems were more interesting and the challenges of developing good data were also interesting.[35]

Expansion of theory makes it harder to pin down the distinction between primary and secondary sources, in that much of the data historians use will have been processed by other analysts. But the distinction will not go away: it will be reformulated into those areas where the historian knows the data well as opposed to those where the historian adopts the conclusions of previous analysis, rather than working significantly with the data.

general methods in world history

The specific methods of a world historian embarking on a study of the past depend on the subject matter, the question under study, the available data, the discipline and the investigator's analytical strategy. No single formula can prepare the analyst for the specifics of a world-historical investigation. There may be advanced, however, some general principles for conceptualization and execution of a study in world history. These principles are distinct from historical practices generally in that world historians work on extensive and highly interactive topics. The following is a brief statement of such principles as I envision them, in seven steps.[36]

The first step is the articulation of a research agenda. This task involves selecting a topic and an objective for analysis. A research agenda is a response to two sorts of questions: questions by historians about gaps or contradictions in the historical record, and questions of contemporary society, seeking background and explication for the unfolding of

contemporary global processes. The historical questions may address, with varying priority, the origins, timing, dynamics and legacy of past processes. The formal statement of the research question should set the limits of the study in space, time, and in topical coverage.

Next is a step I call exploratory comparison. Once a topic and its context are selected, but before settling on the details of the research, the analyst should identify comparisons of the selected topic and other historical situations. The point here is to break out of stereotypical and unimaginative analysis by seeking out possible patterns and relationships that might not first have been envisioned. For instance, in a study of the interaction of empires in the eighth century CE, the analyst should explore comparisons with systems of large political units in earlier times and up to the present day, and should also consider interactions among small political units, to gain a broader sense of which patterns in imperial interaction are quite general, and which were specific to the eighth century. After this stage of brainstorming, the design of the actual research should be strengthened considerably.

The step of formulating and implementing the research design focuses especially on developing an appropriate model for the dynamics of the historical situation under study. To create a model, one must select a discipline or disciplines on which to draw. For instance, the fields of economics, politics, anthropology, genetics and art history all have well-established analytical models. The model articulates statements of the historical dynamics under study: the types of interactions and changes that are to be investigated or hypothesized. The historical dynamics, thus modelled, are analysed within a framework with several dimensions. It restates the limits of analysis in space, time, and topics. It identifies the units of study (the cases and networks to be explored) and the procedures for study (the comparisons and linkages among the units). The model and its framework are used to implement the strategy for solving the historical problem. With these structures, the historian locates and organizes historical data, and links the data to the model. In an orderly analysis, the data and the model appear to be consistent.

But following this detailed linkage of data and model, the world historian should seek to connect the subsystems of the historical situation under study. That is, in addition to confirming the details, the historian should look for larger relationships in the material.

The step of verifying the conclusions of an analysis is too often explored only at an implicit and informal level. The reader of a world-historical analysis should have a clear statement from the author on whether the

analysis has simply been proposed as a plausible argument, or whether it has been verified at some level. While it will be difficult indeed to have 'proof' of the validity of interpretations of world history, it is possible for historians to identify and implement several sorts of procedure that give varying types of indication on whether and how the analysis has been verified.[37]

Even after all the above work is completed, the analytical work of the world historian is not complete. Because situations in world history entail so many different perspectives (perspectives of analysis, perspectives of historical figures), it is best for the historian to adopt another set of perspectives, different from those used in the analysis to this point, and replicate the analysis from these alternative perspectives.[38] Presumably the results of the analysis will vary measurably in this replication. The degree of interpretive difference brought by shifting perspective itself becomes a part of the interpretation. A further replication from still different perspectives may be advisable.

The last stage, of course, is presenting the results. The main point here is that the presentation of the results should convey the complexity of the analysis, but also convey the simplest and strongest interpretation that is consistent with the evidence and the framework. It may be noted that the succeeding steps in my summary of world-historical method alternate in breadth: one making the analysis more specific, and the next making the analysis broader. This set of points in world-historical method is quite general, and it can be helpful in clarifying a strategy of research and its implementation. Similarly, reviewing the same list of points will assist readers and reviewers in assessing the studies they evaluate.

conclusion: priorities for professional study of world history

Just as professionalized national history requires extensive formal training and practice, so will professionalized world history require extensive formal preparation. Necessarily, the training in world history will be more varied for world history today, as the extent of our knowledge and the range of techniques has broadened so greatly in the last century. But some set of common techniques and practices is central to keeping world historians in touch with each other, to build a general discourse on world history. Thus, world historians should specialize in order to get to the depths of specific types of evidence and theory, but should maintain systems of exchange and connection to avoid extremes in specialization.

notes

1. R. J. Barendse, 'The Feudal Mutation: Military and Economic Transformations of the Ethnosphere in the Tenth to Thirteenth Centuries', *Journal of World History*, 14 (2003) 503–29; S. Morillo, 'A "Feudal Mutation"? Conceptual Tools and Historical Patterns in World History', *Journal of World History*, 14 (2003) 531–50.
2. W. H. McNeill, *The Rise of the West: A History of the Human Community* (Chicago, IL: University of Chicago Press, 1963); B. Mazlish, 'An Introduction to Global History', in B. Mazlish and R. Buultjens (eds),*Conceptualizing Global History* (Boulder, CO: Westview, 1993); G. Barraclough, *An Introduction to Contemporary History* (Harmondsworth: Penguin, 1967); D. Christian, *Maps of Time: An Introduction to Big History* (Berkeley, CA: University of California Press, 2004).
3. Otto, Bishop of Freysing, *The Two Cities: A Chronicle of Universal History to the Year 1146 AD*, trans. C. Christopher Mierow (New York: Columbia University Press, 2002). This work draws on precedents of Augustine and Orosius. The last of eight books projects the Second Coming, the Last Judgement, and the beginning of the Divine state.
4. For reviews of early work in world history, see P. Manning, *Navigating World History: Historians Create a Global Past* (New York: Palgrave Macmillan/St. Martin's Press, 2003); E. Breisach, *Historiography: Ancient, Medieval, and Modern* (Chicago, IL: University of Chicago Press, 1983); and J. B. Bury, *The Idea of Progress: An Inquiry into its Growth and Origin* (New York: Dover, 1932).
5. G. Vico, *The New Science of Giambattista Vico*, trans. T. G. Bergin and M. H. Fisch (Ithaca, NY: Cornell University Press, 1984); Voltaire, *The Philosophy of History* (London: Vision, 1965); E. Gibbon, *The Decline and Fall of the Roman Empire*, 6 vols (London: Everyman, 1993 [1776–78]); G.-T.-F. Raynal, *Histoire philosophique et politique des etablissemens et du commerce des Europeens dans les deux Indes*, 3rd edn (Amsterdam, 1781); J. G. Herder, *On World History*, trans. E. A. Menze and M. Palma (Armonk, NY: Augsburg Fortress, 1997); G. W. F. Hegel, *Lectures on the Philosophy of World History*, trans. H. B. Nisbet (Cambridge: Cambridge University Press, 1975).
6. For general reviews of historiography, see Breisach, *Historiography*; and G. G. Iggers, *Historiography in the Twentieth Century: From Scientific Objectivity to the Postmodern Challenge* (Hanover, NH: Wesleyan University Press, 1997).
7. G. Bancroft, *History of the United States of America from the Discovery of the Continent*, 10 vols (Boston, MA: Little, Brown, and Co., 1873–74); J. Michelet, *History of the French Revolution*, trans. C. Cocks (Chicago, IL: University of Chicago Press, 1967). See the review of nineteenth-century historical writers by H. White, with emphasis on rhetoric and philosophy rather than historical reconstruction, in his *Metahistory: The Historical Imagination in Nineteenth-Century Europe* (Baltimore, MD: Johns Hopkins University Press, 1973).
8. L. von Ranke, *The Secret of World History: Selected Writings on the Art and Science of History*, trans. and ed. R. Wines (New York: Fordham University Press, 1981); P. Novick, *That Noble Dream: The 'Objectivity Question' and the American Historical Profession* (Cambridge: Cambridge University Press, 1988).
9. For examples of the review of national history in the United States, see Novick, *That Noble Dream*, and D. W. Noble, *Death of a Nation: American Culture and*

the End of Exceptionalism (Minneapolis, MN: University of Minnesota Press, 2002).

10. P. Burke, *History and Social Theory* (Ithaca, NY: Cornell University Press, 1992).
11. As an example of the strength of reference materials developed for area-studies fields, the *Handbook of Latin American Studies,* long a print publication, is now published online by the US Library of Congress at <http://lcweb2.loc.gov/hlas/>.
12. K. Lamprecht, *What is History? Five Lectures on the Modern Science of History* trans. E. A. Andrews, (New York, 1905); R. G. Collingwood, *The Idea of History,* ed. W. J. Van der Dussen, rev. edn (Oxford: Oxford University Press, 1993); M. Bloch, *The Historian's Craft,* trans. Peter Putnam (Manchester: Manchester University Press, 1992); and J. H. Hexter, *The History Primer* (New York: Basic, 1971).
13. For a work relying on archives in Portugal, the Netherlands, Britain, India and Indonesia, see R. J. Barendse, *The Arabian Seas: The Indian Ocean World of the Seventeenth Century* (Armonk, NY: M. E. Sharpe, 2002).
14. J. F. Richards, *The Unending Frontier: An Environmental History of the Early Modern World* (Berkeley, CA: University of California Press, 2003); D. Hoerder, *Cultures in Contact: World Migrations in the Second Millennium* (Durham, NC: Duke University Press, 2003).
15. P. D. Curtin, *Cross-Cultural Trade in World History* (Cambridge: Cambridge University Press, 1984); C. Markovits, *The Global World of Indian Merchants, 1750–1947: Traders of Sind from Bukhara to Panama* (Cambridge: Cambridge University Press, 2000).
16. Two examples of studies of world-historical research that involve substantial reliance on computers in analysis are A. Maddison, *The World Economy: A Millennial Perspective* (Paris: OECD, 2001); and P. Manning, *Slavery and African Life: Occidental, Oriental, and African Slave Trades* (Cambridge: Cambridge University Press, 1990).
17. I. C. Campbell, 'The Culture of Culture Contact: Refractions from Polynesia', *Journal of World History* 14 (2003) 63–86.
18. Deborah Smith Johnston conducted interviews of 70 scholars and teachers associated with world history, of whom a majority, including several well-known scholars, declined to label themselves as world historians. Johnston, *Rethinking World History: Conceptual Frameworks for the World History Survey* (PhD dissertation, Northeastern University, 2003).
19. World history manuals include F. Spier, *The Structure of Big History: From the Big Bang until Today* (Amsterdam: University of Amsterdam Press, 1996); Manning, *Navigating World History*; and Christian, *Maps of Time.*
20. As an heuristic exercise, one can imagine creating a bibliography of works relevant to world history with subcategories distinguishing the contributions of professional world historians from those of scholars in area-studies history, national history, topical analysis in history (e.g. a focus on gender), and other disciplines (e.g. medicine or anthropology). Review of such a list might yield suggestions on how better to organize professional study of world history.
21. J. Diamond, *Guns, Germs, and Steel: The Fates of Human Societies* (New York: Vintage, 1997); I. Wallerstein, *The Modern World-System: Capitalist Agriculture and the Origins of the European World-Economy in the Sixteenth Century* (New York: Academic Press, 1974); R. A. Caras, *A Perfect Harmony: The Intertwining Lives of Animals and Humans throughout History* (New York: Basic, 1996).
22. H. G. Wells, *The Outline of History, Being a Plain History of Life and Mankind* (London: George Newnes, 1920); O. Spengler, *The Decline of the West,* trans. C. F. Atkinson, 2 vols (New York: Alfred A. Knopf); M. Kurlansky, *The Cod: A Biography of the Fish that Changed the World* (Harmondsworth: Penguin, 1997); M. Kurlansky, *Salt: A World History* (New York: Walker and Co., 2002).
23. R. Wright, *Nonzero: The Logic of Human Destiny* (New York: Vintage, 2001). In an earlier study, the same author made the case for evolutionary psychology: *The Moral Animal. Why We Are the Way We Are: The New Science of Evolutionary Psychology* (New York: Vintage, 1994).
24. Johnston, *Rethinking World History*; S. Wineburg, *Historical Thinking and Other Unnatural Acts: Charting the Future of Teaching the Past* (Philadelphia, PA: Temple University Press, 2001).
25. C. Ponting, *A Green History of the World: The Environment and the Collapse of Great Civilizations* (Harmondsworth: Penguin, 1989); Felipe Fernandez-Armesto, *Civilizations: Culture, Ambition, and the Transformation of Nature* (New York: Free Press, 2001).
26. Diamond, *Guns, Germs, and Steel*; K. Pomeranz, *The Great Divergence: China, Europe, and the Making of the Modern World Economy* (Princeton, NJ: Princeton University Press, 2000); L. Benton, *Law and Colonial Cultures: Legal Regimes in World History, 1400–1900* (Cambridge: Cambridge University Press, 2002).
27. In addition to the existing theories being brought into historical analysis (economic theory, literary theory, evolutionary biological theory, plate tectonic theory), new theories are being developed, especially in fields of cultural study. Film theory, new developments in anthropological theory, linguistic theory, notions of creolization in visual art and language, and other sorts of formalized conceptions are also being applied to issues in world history.
28. William S. Atwell, 'Volcanism and Short-Term Climatic Change in East Asian and World History, c. 1200–1699', *Journal of World History,* 12 (2001) 29–98.
29. E. P. Thompson, *The Poverty of Theory and Other Essays* (London: Merlin, 1978). The main essay in this collection was a critique of Louis Althusser, *Pour Marx* (Paris: Maspero, 1965); see also Louis Althusser and Etienne Balibar (eds), *Lire 'Le Capital'*, 2 vols (Paris: Maspero, 1965).
30. I. C. Campbell, 'The Culture of Culture Contact'.
31. Works based on modernization theory that encouraged the expansion of area-studies history included David E. Apter, *The Political Kingdom in Uganda: A Survey of Bureaucratic Nationalism* (Princeton, NJ: Princeton University Press, 1961); and Manfred Halpern, *The Politics of Social Change in the Middle East and North Africa* (Princeton, NJ: Princeton University Press, 1963).
32. W. Durham, *Coevolution: Genes, Culture, and Human Diversity* (Stanford, CA: Stanford University Press, 1991).
33. B. M. Fagan, *Floods, Famines, and Emperors: El Niño and the Fate of Civilizations* (New York, 2000); Mike Davis, *Late Victorian Holocausts: El Niño Famines and the Making of the Third World* (London: Verso, 2001).
34. C. Chase-Dunn and T. D. Hall, *Rise and Demise: Comparing World Systems* (Boulder, CO: Westview Press, 1997); E. O. Wright, *Classes* (London: Verso, 1985).

35. J. Z. Lee and W. Feng, *One Quarter of Humanity: Malthusian Mythology and Chinese Realities, 1700–2000* (Cambridge, MA: Harvard University Press, 1999).
36. Manning, *Navigating World History*, pp. 313–21.
37. The terms I have used for these procedures of verification are plausibility, inspection, debate, hypothesis-testing and feedback-testing. Manning, *Navigating World History*, pp. 301–6.
38. For instance, Kenneth Pomeranz, in his analysis of early modern economies, adopts a series of regional perspectives to yield a more nuanced overall conclusion: the perspectives of the industrial centres of Britain and China, the perspectives of Europe generally and China generally, and the perspective of the world economy as a whole. Pomeranz, *Great Divergence.*

recommended resources

Barendse, R. J., *The Arabian Seas: The Indian Ocean World of the Seventeenth Century* (Armonk, NY: M. E. Sharpe, 2002).

Benton, L., *Law and Colonial Cultures: Legal Regimes in World History, 1400–1900* (Cambridge: Cambridge University Press, 2002).

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Christian, D., *Maps of Time: An Introduction to Big History* (Berkeley, CA: University of California Press, 2004).

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Davis, M., *Late Victorian Holocausts: El Niño Famines and the Making of the Third World* (London: Verso, 2001).

Diamond, J., *Guns, Germs, and Steel: The Fates of Human Societies* (New York: Vintage, 1997).

Fernandez-Armesto, F., *Civilizations: Culture, Ambition, and the Transformation of Nature* (New York: Free Press, 2001).

Hegel, G. W. F., *Lectures on the Philosophy of World History*, trans. H. B. Nisbet (Cambridge: Cambridge University Press, 1975).

Herder, J. G., *On World History* , trans. E. A. Menze and M. Palma (Armonk, NY: Augsburg Fortress, 1997).

Hoerder, D., *Cultures in Contact: World Migrations in the Second Millennium* (Durham, NC: Duke University Press, 2003).

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Novick, P., *That Noble Dream: The 'Objectivity Question' and the American Historical Profession* (Cambridge: Cambridge University Press, 1988).

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