Big Histories, Human Lives

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From Moments to Millennia

Theorizing Scale and Change in Human History

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We may be due an Ice Age any day now as the earth wobbles through its complex long-term cycles of axial tilt, precession, and eccentricity. However, before we all run out and buy new home insulation and mammoth-proof fencing, it is worth putting this in perspective. Not only are these cycles on the scale of hundreds of thousands of years—poorly understood, but also they intersect with trends that could have an equally massive effect upon earth-bound humans. It does not take an Ice Age to change our life: we are so habituated to our world that shorter-term, relatively small wiggles may discommode us just as much. Global warming—a wave yet to crest may lead to minor adjustments such as the desertification of a few million square kilometers of sub-Saharan Africa or the loss of some marginal real estate such as Venice, New York, or coastal Bangladesh.

This volume, of course, is not directly about either the Ice Age or global warming, although, indirectly, it is about both. Both must be understood at scales of analysis similar to the ones we contemplate here for human history generally. That is, this book is a re-theorizing of scale and change in human history as they are related to the big picture—the relationships between time, the environment, and all of human experience on earth. Specifically, this book considers something that archaeologists seldom think about—the intersection of microscale human experience with histories as large-scale and long-term phenomena. This book's ten subsequent chapters seek to

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reconnect with some of the most profound questions answerable through archaeology: Did history unfold in different ways for different peoples? What were the central historical processes behind such unfoldings? How are we to understand them and their relevance to us today?

In this first chapter, we review how anthropologists and archaeologists have dealt with scale and change over the past century. We then propose some possible ways forward. These ways are taken up in each of the chapters that follow.

TALKING WHILE THE ICE MELTS

Climate change is far from the only long-term pattern in human history. The human colonization of Europe, Asia, and the Americas, the origins of farming and regional cultures, the rise and decline of centers and cities, and innumerable other long-term, big-scale changes are the very fabric of human history. By the same token, long-term continuity, such as the supposed thirty-thousand-year stability of Upper Paleolithic huntergatherer social life, has also been said to typify some periods of human history. Of course, as topics of research, such big changes or apparent continuities have been critiqued as reflecting contemporary obsessions more than past realities (Patterson 1995). But such metanarratives (of, say, colonialism, technological progressivism, civilization, or primitivism) are unlikely to go away until we come up with some other ways of making sense of the past five thousand years' global-demographic trends, technological developments, and sociopolitical complexities.

We archaeologists used to consider ourselves the specialists in human deep time. The theme still turns up as a generic justification for our field something special that neither cultural anthropologists nor historians can claim—in grant applications and introductory textbooks. But for the past generation, this has felt increasingly like paying lip service to a goal that many archaeologists have abandoned. The reason is not hard to find; it has to do with the scale of our narratives. Traditional approaches such as 1960s-style social evolutionism described big changes, but the explanation was often deterministic in some way. A changing environment or population growth was said to change history. When change was not forced by such conditions, it was said to have been driven by top-down political reasons. These postulated universal human motivations as prime movers or attributed a teleological agency to the political organizations of chiefdoms, states, empires, or civilizations.

These black-box approaches, though fruitful in many ways, never brought explanation back down to people in a way that made sense on the

human scale, in terms of agency rather than systems. But, oddly, their failure coincided with a movement in the opposite sense in cultural anthropology. With the decline of Victorian social evolution and the development of the participant-observation method, anthropology became dominated by the short-term. As Wobst (1978) complained, studies were traditionally situated ahistorically in the "ethnographic present" of a few years or a decade at most. The generation of "posts"—poststructuralism, postmodernism, and, in archaeology, postprocessualism—has only accentuated this trend, with its suspicion of grand narratives as politically motivated and its focus upon small worlds of agency and meaning understandable at strictly local scales.

This generation of "posts" has been remarkably successful in one respect. Over the past two decades, it has redefined all the big questions of the past to be little questions. In effect, we have assumed the position of seeing human history as "just one damn thing after another" (Rescher 1997:203). Although this generation-since-Wobst-threw-down-the-gaunt-let has contributed much to archaeological thought in other areas, it has missed the boat on long-term change. The fear of simple determinist answers has resulted in an out-of-hand dismissal of other scales and tempos of historical change, particularly of linking ethnographic time to archaeological time. We have yet to break the scale barrier.

There are real stakes here. Large-scale patterning in history may teach us important things. For example, global warming seems unique to the past century or two, but one of the greatest surprises in polar ice core data is how quickly major changes such as postglacial sea-level rise can happen; humans have had to cope with change this rapid before. Indeed, the present may not be the first time we have inhabited a human-made environment. More generally, it is important for us to know how large-scale patterning intersects (causes? results from? reproduces at different scales?) all the myriad ways of being human.

The other big stake involves society's collective thinking. To put the matter as simply as possible: large-scale, long-term patterns exist, and if we do not deal with them well, others will deal with them badly. It is not enough to decry self-serving metanarratives of colonialism, technological progressivism, civilization, or primitivism from the safety of the ivory tower; we need to give the public other histories to think with and about. The same is true for those large-scale changes that form the basis of narratives legitimating modern identities everywhere, from the "Celts," "Anglo-Saxons," and "Indo-Europeans" in Europe to similar phenomena in Asia, Africa, and the Americas.

Climate change is another example currently on everybody's mind.

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Polar ice core data in particular have provided a new environmental record of unmatched detail. Anthropologists know that how people respond to new environmental conditions is complex, culturally specific, and often counterintuitive; it is mediated by social and cultural factors to the point that, in human terms, it is difficult to speak of an external "environment" (Ingold 2000). But it is not enough simply to reject facile determinism on theoretical grounds; if we do not provide a convincing, theoretically informed reading of deep-time history, we concede the past to people both inside and outside academia who inevitably step in with simplistic wiggle-matching and attention-grabbing stories. Hence, headlines tell us that drought caused the Ancestral Pueblo abandonment of the northern Southwest; rapid climate change brought down the Akkadians, the Mycenaeans, the Moche, and the Maya; flooding of the Black Sea or the "8200 BP event" caused agriculture to begin in Europe... Maybe so, but we are skeptical; there is always a wiggle available to match with any "event" in the archaeological record, and such "explanations" always bypass the agency that gives human societies flexibility and resilience. They project our hopes and fears upon the past in simplest form.

The past is important in the present, and the public deserves more than immediately digestible sound bites. People should be given intellectual nourishment. As the experts upon deep time in the human past, the ball is in our court.

THE HISTORY OF HISTORY (IN ANTHROPOLOGY)

Long-term, large-scale change lay at the heart of anthropology from the very beginning. Early anthropologists were split between history and evolution. Frazer, for instance, imagined history as a causal force: one explained why something is the way it is by tracing the historical origin of its component bits through what is basically a philological method, a model still common in historical linguistics and classics. This form of explanation ultimately provided little real rationality for culture other than historical accident. By contrast, in America and Britain, figures such as Lewis Henry Morgan, Edward Tylor, and John Lubbock formulated social evolutionary interpretations. In these models, which owed more to Enlightenment thinkers such as Jean-Jacques Rousseau and Adam Smith than to Charles Darwin, the large-scale movement from primitive societies to civilization was patent and inevitable; the mechanism was the obvious technological and intellectual superiority of the latter over the former and an inherent drive to progress. Both views were superseded in scholarly if not popular discourse in the 1920s and 1930s by functionalism and

structural-functionalism. These provided a rationality for culture that was much more local. Other people's customs made sense in terms of the needs and internal patterning of their world, without reference to large-scale historical or evolutionary narratives.

Indeed, functionalism and structural-functionalism were anti-historical, perhaps in part because they felt they needed to document authentic or original elements of societies that were rapidly changing under external influence. Hence, the careful fiction of the "ethnographic present," a strategic denial of history that usefully allowed anthropologists to see the coherence of traditional societies. Structuralism, developed in the midcentury by Claude Lévi-Strauss and his followers, similarly focused upon the internal logic of symbolic systems. When structuralist anthropologists undertook wide-ranging comparative analysis, they did so in a universalizing rather than historically contextualized way, and a common critique was that structuralism's rigid portrayal of cultural logic allowed little room for historical contingency and change.

The 1960s: Neo-evolution and Decolonialization

The essential ancestral figures not mentioned above were Marx and Engels, of course. Marx and Engels were unique among nineteenth-century thinkers in paying attention not only to grand historical narratives but also to the microscale of human experience. Even more impressive, in their conception of an economic base, a political structure, and an ideological superstructure, they specified the linkage between scales of analysis such as historical process and agency. Their model was ultimately deterministic, but not in a simple way: humans acted using a historically conditioned consciousness in a historically inherited landscape of action. Although Marxism developed many conflicting variants and is not without problems, the original Marxist model still remains conceptually more sophisticated than many models used by non-Marxist archaeologists today.

The anthropological rediscovery of history dates to the 1950s and 1960s and involves two quite divergent directions, each owing a different intellectual debt to Marxism. One may be loosely characterized as the anthropology of the decolonializing world. The journal *Comparative Studies in Society and History*, for example, was founded in 1958; mixed works by anthropologists, sociologists, and historians; and, in reaction to structuralfunctionalism, emphatically put the emphasis upon historical context. Its early issues were graced by authors such as Eric Wolf, Janet Abu-Lughod, Edward Shils, Lawrence Krader, Sidney Mintz, and Marshall Sahlins, and authors such as Edmund Leach and Clifford Geertz used it to discuss the

political context of their work; themes included colonialism, power relations, development, and urban societies. Although many of these themes are now being rediscovered belatedly as archaeology discovers postcolonialism, at the time, this work bypassed archaeology completely.

The second direction was neo-evolutionism, which, while marginal to anthropology generally, is far more familiar to archaeologists. The patron saint here was Leslie White, who resurrected the Victorian model of history as a unilinear increase in humans' social complexity and technological ability. White was a committed Marxist, but he kept his politics secret and rigidly separated from his academic writing; it was the era of McCarthyism, and the president of White's university (Michigan), Harlan Hatcher, was an especially avid Red hunter. We will never know what White might have written in a more tolerant political climate; American archaeology could have been dramatically different. What he did in fact write, in The Evolution of Culture (White 1959), poses the question of long-term change in studiously neutral technological and scientific terms: history is a process of thermodynamic progress by which humans are able to capture and use increasing amounts of energy. In Evolution and Culture (Sahlins and Service 1960), White's students Marshall Sahlins and Elman Service point out that over the past 10,000 years, human history has displayed an overall directionality (which they called "general evolution") at the same time as any particular local historical trajectory, which can go in any and all directions (this is "specific evolution" in their terms).

Sahlins and Service posed the problem with unsurpassed clarity, but they utterly failed to answer it. Sahlins went on to reinvent himself as a Marxist and then a poststructuralist (see below). Service, in contrast, wrote two ethnographically based syntheses that sketched out the general stages human society went through, but he did not provide convincing general explanations for them. American archaeologists, therefore, spent two decades trying to fill in the gaps, the transitions needed to get from bands to tribes, chiefdoms, and, finally, states. Hence, the trinity of Big Questions that dominated American archaeology's agenda in the 1970s and 1980s: the origins of agriculture, inequality, and the state (Carneiro 1970; Earle 1989; Flannery 1973; Fried 1967; Peebles and Kus 1977; Service 1962, 1975; Wright 1977).

This agenda led to two decades of highly productive research. For many places around the world, it resulted in the first well-understood sequences of historical change spanning these transitions. It also foregrounded largescale change in a stimulating way. At the same time, as archaeologists have paid attention to the details, the comparative evolutionary agenda has vanished in favor of specific, socially contextualized historical trajectories, and much of the theoretical framework itself has been deconstructed (particularly for studies of early inequality). Most relevant for this book, under the influence of ethnography and poststructuralism (see below), the time frame has contracted. For example, studies of elite political strategies have framed discussion of emerging inequalities within a generation-togeneration timescale. Many have lost sight of the forest of long-term change among the trees of local change.

THE PAST TWO DECADES

The problem really is how archaeological time relates to ethnographic time or how the large scale of historical patterning relates to the small scale of human action. If we survey anthropology and archaeology over the past two decades, there are basically three principal approaches to this problem—functionalist/determinist, multiscalar, and historical-processual —with other approaches including those that have simply ignored the question. All theoretical frameworks are formulated to address particular problems, of course, and most of these approaches were formulated to address problems other than long-term change; in reviewing what they contribute or imply about our theme here, we do not wish to take them to task for not dealing with a problem that may not originally have been on their radar.

The Dominance of the Big Scale: Functionalism and Determinism

Taking a cue from White's definition of culture as a means of ecological adaptation, Lewis Binford (1962) reasoned that widespread general changes should be explained by showing how they represented solutions for ecological or social problems. For example, agriculture developed in the Old World in response to post-Pleistocene environmental changes that created both population pressure and the ecological preconditions for farming (Binford 1968). Functionalist interpretations treated culture as a system that responded transparently to external stimuli. As with bacteria in a Petri dish reacting to varying levels of sugar, internal thoughts and social relations were epiphenomenal: climate change goes into the system, farming comes out.

However, research quickly demonstrated the variability around the world in early agricultural origins, disproved Service's ecological explanation for chiefdoms, and showed that ecological approaches to state formation (Carneiro 1970; Wittfogel 1957) worked only in narrowly defined contexts. Population pressure, the other great universal prime mover, was also debunked (Cowgill 1975). Within processual archaeology, systems

theory (Flannery 1973) tended to diffuse emphasis upon single causes and develop explanations that encompassed continuity, gradual change, and sudden transformation; it was relatively straightforward to incorporate social factors into such models, as indeed Flannery did. Interestingly, systems theory prefigured in its own way themes later touched upon by approaches such as Actor Network Theory.

Postprocessualism raised a different level of theoretical critique, including a range of concerns now generally acknowledged as valid. As poststructuralists, symbolic anthropologists, feminists within the processual tradition, and others pointed out in the late 1970s and 1980s, humans live in a world of meanings that shape their actions in fundamental ways. It was problematic to assume, as processualists such as David Clarke did, that we can divide up the world earlier people lived in into separate "spheres" such as "economy," "ritual," and so on, some of which would be subjective and internal ("culture") and others objective and external ("environment"). In a critique most recently formulated by Ingold (2000), humans do not inhabit an objectively existing environment; they live in a world they understand and are able to act in culturally. Similarly, in a world in which fertility, mortality, and group size and composition are directly and indirectly shaped by social practices, it is hard to see how adaptationist models could take demography to be a primordial, extracultural force.

Beginning in the 1980s, American archaeologists moved increasingly towards political and multiscalar approaches. For instance, processual studies of early inequality sought to resolve how aspiring leaders pursued power and prestige (Blanton et al. 1996; Earle 1997; Hayden 1995). Like postprocessualists (see below), they viewed social change in an ethnographic framework in which personal intention and individual action were the focus. (Flannery and Marcus's "action theory" [Marcus and Flannery 1996] is an example.) Even when archaeologists analyze long historical trajectories, they tend to break them down into chronologies as fine-grained as possible, to try to identify specific moments of change. Effectively, as in postprocessualism, this insists upon the human scale of analysis rather than looking at longer-term structural histories or multiple scales. By the 1990s, some archaeologists shifted towards multiscalar approaches, adapting aspects of the Annales approach (see below) using concepts such as "cycling" (Anderson 1994) and punctuated eventful change (cf. also Beck et al. 2007). Others returned to (or never left) a "direct historical" tradition, in which interpretations of ancient societies are informed by analogies to their historic-period descendants (Flannery and Marcus 1983; Marcus and Flannery 1996). Most recently, some are joining a resurgence in simple environmental determinism, including scholars attempting (in our view, glibly) to correlate deep-time climatic evidence with the archaeological record.

Multiscalar Views: Braudel and Time Perspectivism

The best-known attempt to create a multiscalar theory of history is Braudel's *Annales* approach. The *Annales* school was the leading school of historical analysis in France between the 1930s and the 1970s, centered on such figures as Marc Bloch, Fernand Braudel, Jacques Le Goff, Georges Duby, Philippe Ariès, and Emanuel Le Roy Ladurie. Its focus in social, economic, and religious history was broad and changed substantially over three academic generations; generally, *Annales* historians played down the traditional emphasis upon top-down political and intellectual history and emphasized the importance of a bottom-up history of daily life and ordinary people. *Annales* historians differed from contemporary Marxists, the other model for multiscalar theory, in according equal weight to economic and cultural factors rather than favoring determination by the economic and material. Braudel, the central figure in the 1950s and 1960s, was known for his magisterial histories of the early modern period (Braudel 1973, 1992).

Archaeologists using *Annales* ideas emphasize one particular strand of Braudel's work, that of distinct levels of time (Bailey 1983; Bintliff 1991; Knapp 1992). The key idea is that time and history can be interpreted as happening upon three distinct levels at three different speeds. In individual time, events are the specific momentary episodes that make up the bulk of conventional political histories; these are treated rather dismissively as superficial workings-out of underlying structure. In social time, conjunctures are a middle level of social groupings and institutions that represent collective efforts that coalesce and disintegrate over decades or centuries. Over the *longue durée*, processes happen in geographical time, a deep time of slow, often invisible change; key factors include geography, climate, and demography. Factors may also include *mentalités*, or deeply embedded structures of belief and practice (see Ariès' [1981] studies of death and Le Roy Ladurie's [1978] ethnography of the medieval heretics of Montaillou; it is not clear how mentalités relate conceptually to Braudel's longue durée).

With an emphasis upon deep time and daily life, the *Annales* school has proven attractive to archaeologists, particularly those working in the Mediterranean who may see direct, long-term geographic and economic continuities between the prehistoric, classical, medieval, and modern periods (Bailey 1983; Barker 1995; Bintliff 1991; Knapp 1992); whether archaeologists have been reading Braudel correctly is another matter

(Olivier 2006). In a distinct line of interpretation, Bailey has used Braudel as a platform for "time perspectivism," which contrasts two levels, a longterm time based upon geography, economy, environment, and demography and a shorter-term historical time (Bailey 1983; see below for discussion of Bailey's recent work).

Despite highlighting the importance of analyzing history at different scales of time, these attempts have not resulted in major advances in understanding time, scale, and change in archaeology. This seems due mostly to a phobic reaction in British archaeology to some of the concepts involved and the adoption in American archaeology of historical-processual models in the 1990s (see below). In addition, the Annales approach relies upon a series of simplistic and unscrutinized dichotomies. The natural world is equated with long-term factors outside human control, and this is divided from the cultural world, which is equated with human factors on a shorter timescale. The nature/culture split has been sufficiently critiqued in archaeology that we can no longer see environment, demography, and geography as extracultural prime movers. Certainly, Braudel never really theorized the linkages between levels well, which means that they become black boxes that, themselves, go unexplained. As such, it is easy for Braudelian-style analyses to slide into top-down reductionism and geographical or environmental determinism.

Historical-Processual Approaches

In this section, we review a spectrum of loosely related approaches that share some important points but are far from identical. The story starts in the 1970s with the development of practice theory by theorists such as Bourdieu (1977), Ortner (1984), and Sahlins (1976) and structuration theory by Giddens (1979). Most of them have their roots ultimately in Marx and Engels, whose position is largely summed up in their much quoted statement in *The Eighteenth Brumaire of Louis Napoleon* (1963): humans make their own history but in circumstances inherited from the past. Moreover, since human consciousness is created within preexisting economic and social conditions, people themselves are the products of history. History is thus created through the interplay of long-standing structures and shorterterm intentions and actions.

The historical turn in anthropology, from the 1970s onwards, was facilitated by the application of practice theory—seeing how agents acted in particular historical circumstances (Ortner 1984). The most programmatic statement upon these lines was that of Sahlins (1981, 1985) (cf. similar work by Sewell [1980, 1992]). Sahlins used the chain of changes triggered by

Captain James Cook's arrival in the Hawaiian Islands in 1778 as a general example of how history happens. In summary, native Hawaiians saw the world through a complex inherited set of cosmological, political, and ceremonial beliefs; when Cook arrived, they first tried to make sense of his arrival in terms of traditional beliefs. Then, when these beliefs were contradicted by events, they were forced to reevaluate their cosmology. The historical conjuncture in which their beliefs were put to the test resulted in an unscripted and out-of-control series of events and change to the underlying structures of belief, such as the collapse of the traditional Hawaiian system of divine kingship.

Sahlins's work is best understood as a kind of historical structuralism. In it he attempted to show how historical events both result from the collision of structure and agency and can reciprocally change structures of belief. It and analogous works of historical anthropology are valuable, but they have three related weaknesses. Firstly, they often have a modernist and historicist bias. When they deal with nontextual societies, they are generally based upon either short-term ethnographic fieldwork of, at most, a few decades or upon historical records from the colonial era giving a time depth of perhaps a century or two. The best attempt to transcend this difficulty is Wiessner and Tumu's (1998) remarkable landmark history of the Enga of the New Guinea Central Highlands; by carefully collating oral histories, they reconstructed a precontact history of up to ten generations (between 250 and 400 years) spanning major social transitions such as the introduction of the sweet potato, the development of the tee cycle of ceremonial exchange, and cycles of ceremonial warfare. This lack of really long-term studies reflects not only the nature of the available historical sources but also the conception of structure and agency involved that remains rooted in short-term ethnographic studies. It is easy to wind up with a picture polarized between static "traditional" societies that float unchangingly in time and dynamic Western societies that catalyze them upon contact. Furthermore, when change comes in this view, it tends to be a traumatic rupture; the model does not really help to understand less dramatic, more gradual change, which is far more common. Secondly, the actual way in which change occurs is difficult to theorize. Basically, the more one assumes that "structures" are fixed, immaterial, and hence unchangeable subjectivities, the more rigid they become and the harder it is to see how or why they can actually change, to the point that the most fundamental structures of belief are impervious to any force of change short of a direct meteor strike. Interestingly, this difficulty characterizes Bourdieu's work on habitus as well, even though both Bourdieu and Sahlins were explicitly

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writing to overturn an ahistorical view of structure by showing how it related to practice. Thirdly, environment, economy. and demography have been ignored, even rejected, except in rare instances (e.g., Kelly 1985).

Historical-processual or practice-based models in archaeology have been most clearly developed by Pauketat (2001) and Joyce and Lopiparo (2005). Following Sahlins and Bourdieu, these also assume that cultural traditions or the practices thereof have a basis in the dispositions or subjectivities of people. Unlike Sahlins, these dispositions are more fluid (and less structural). Unlike Bourdieu, such practices are grounded in the materiality and spatiality of experience, making them less fixed and mental than those constrained by Bourdieu's habitus. Such an emphasis on material and spatial contingencies also means that these models articulate better with large-scale, landscape-based approaches and long-term studies of technology. For example, monumental construction in eastern North America and Mesoamerica may be seen as consisting of practices that disable certain collective futures (Joyce 2004; Pauketat 2000). Likewise, depositional practices in the Southwest are understood as an active sort of memory loss or tradition building (Mills 2008). Thus, historical practice models parallel and merge with more recent work on the dimensionality of experience and structured deposition (Miller 2005; Pollard 2008). But perhaps more than these, or other agency approaches, the emphasis in such practice-based approaches is on relationships rather than on agents. This also distinguishes them from certain Marxist approaches to agency and social relations, which emphasize the intentionality of agents in power relations.

Other Approaches: Marxism, Evolutionary Anthropology, and Complexity Theory

Marxist approaches are among at least three other types that have some potential to change the way archaeology deals with the long-term and large-scale. Marxist archaeologies range from big-picture versions viewing history as a rigid succession of economic modes of production to microhistories of power relations and resistance (McGuire 1992). In recent Anglo-American work, Marxist analyses have proved both narrow and stimulating for the study of long-term change: narrow in that they tend to deal with relatively brief moments within the modern world (such as patterns of consumption, leisure activity, or resistance in nineteenth-century America) (Leone and Potter 1999) but stimulating in that they often relate history on the personal level (how somebody used a pot, why people decided to conform or resist at one moment in history) to larger structures in a sensitive and nondeterministic way.

A similar productive tension is evident in postcolonial archaeology as it has emerged in the past decade. Postcolonial archaeologies provide a dual focus. On one hand, as in Wolf's (1982) seminal *Europe and the People without History*, these relate local stories to a historical process spanning the globe and taking place over centuries. On the other hand, by looking at how people caught up in this encounter made their own lives in a great range of large and small ways, these do not reduce the colonial encounter to a simple dominance of the global over the local (Gosden 2004; Hicks and Beaudry 2006; van Dommelen 2006). As Woolf (1997) points out, we cannot understand what happened in Roman Britain or Gaul by ignoring the existence of the Roman Empire, nor can we understand it only in dichotomized terms of "Romans versus natives." Even for situations in which colonialism per se is not relevant, postcolonial theory may develop into a useful model for relating global and local scales of analysis.

Allied in many ways to postcolonial theory is world history. World history emerged as a self-identified field focusing upon phenomena that spanned large regions of the world; such phenomena ranged from ecological events and plagues to long-distance trade networks, wars, colonial empires, and center-periphery world systems. It stood in conscious contradistinction to microhistory and social history, which tended to operate in a locally defined "ethnographic past" (Moore 1997). Interestingly, over the past two decades, the divergence between large-scale world history and local-scale social history has been problematized, and scholars are exploring ways of reconciling analyses at these different scales in a way very reminiscent of debates in anthropological archaeology (Pomeranz 2007; Stearns 2007).

Evolutionary approaches, which provide another route to understanding past change, are extremely varied, incorporating dual transmission approaches, Darwinian selectionist approaches, and other views (Shennan 2003, 2008). The most nuanced version is found in the work of Schiffer and colleagues exploring the historical development of technology (Majewski and Schiffer 2006; Schiffer 2001), which in many ways converges with material culture studies originating in other theoretical neighborhoods.

Complexity theorists start from a mathematical metaphor; in chaos theory, complex large-scale patterns can emerge from simple algorithms. Doing this provides a basis for linking individual decision-making and overall patterns of social order. But doing so also means that complexity theory deals more with large-scale rather than long-term sorts of change, specifically violating a tenet of some evolutionary approaches that posits natural selection as the "source of order" in the world (Lansing 2003). With links to chaos and game theory, complexity approaches rest on some notion that

"systems" have properties as gestalts that transcend localized events and individual agents (Bentley and Maschner 2000). Complexity approaches, according to Lansing (2003:185), are "purchased at a cost: The observer must usually give up the hope of understanding the workings of causation at the level of individual elements." The key idea here is that of emergent properties, of complex, large-scale forms of order emerging from simple causes. Are certain social forms recurrent because they are stable attractors? Are there patterns of fractal self-similarity between individual decision-makers and the political order emerging from their decisions? We yet await the answers, and it remains to be seen whether complexity theory will provide a genuinely implementable basis for studying long-term change or is simply an interesting metaphor.

The most intriguing recent development in this line is macroevolutionary theory, which specifically places long-term change at center stage (Prentiss et al. 2009; Zeder 2009). While using language borrowed from evolutionary theory, in many ways it parallels the approach we sketch below, particularly in analyzing long-term threads of historical practice and in arguing that patterns and causation may be emergent at multiple scales of analysis.

Ignoring the Question: Postprocessualism

Postprocessualism raised a different level of theoretical critique, including a range of concerns incorporated into historical-processual approaches and now widely acknowledged as valid. As with poststructuralists and symbolic anthropologists in the late 1970s and 1980s, postprocessualists have argued that humans live in a world of meanings that shape their actions in fundamental ways. But while introducing important aspects of dialectical poststructuralist models, postprocessualists have generally refused to work at scales larger than the immediate, experiential, and local. In this, postprocessualism was defined to a great extent by what it rejected: environmental determinism, scientific approaches, systems theory, explanation. Instead, the focus was upon human worlds of lived meanings and how we interpret those worlds.

The principal exception to the postprocessual avoidance of long-term processes was Ian Hodder, who attempted to develop a historical analysis parallel in some ways to Sahlins's historical structuralism in *Archaeology as Long-Term History* (Hodder 1987), followed up by *The Domestication of Europe* (Hodder 1990) and a somewhat parallel discussion of the Ice Man (Hodder 2000). The poststructuralist project, as outlined in *The Domestication of Europe*, was, ironically, criticized by processualists for being too postmodern

and by postprocessualists for being too structuralist. As an influence on postprocessualism, it effectively got derailed by the development of phenomenology at about the same time. Phenomenology's focus in particular dictated an exclusively close-up ethnographic scale of analysis. In postprocessualism as a whole, big-picture studies of the past were dismissed as politically legitimating metanarratives, and, in a classic baby-and-bathwater scenario, fear of determinism meant that demographic and environmental change were completely left out of theoretical interpretation for two decades. Instead of a truly regional analysis, postprocessualism tended to present parallel, separate local studies; instead of long-term accounts of change, it presented snapshots of curiously timeless ethnographic worlds that succeed one another without real discussion of the reasons and mechanisms for change.

Perhaps the most telling example is how postprocessualists have dealt with time. Originally, Shanks and Tilley (1987) argued that archaeologists should think in terms of cultural time as the natives experienced it rather than chronometric, linear time as imposed by scientific culture. This foreshadowed Tilley's pioneering phenomenological work (Tilley 1994), but it was rhetorical to some degree (after all, not even the most radical postprocessualist gave up using radiocarbon dates!). Yet, it set the tone for subsequent discussion, which replaced discussion of change with discussion of time and then dealt narrowly with time as a cultural construction, particularly involving ritual scales of time, materiality, and ancestors (Bradley 1991; Edmonds 1999; Parker Pearson and Ramilsonina 1998; Tilley and Bennett 2004). This approach to time as meaningfully experienced also characterized postprocessual work that dealt with larger scales. For instance, Olivier (2001), Thomas (1996), and others have recognized palimpsests of temporalities as embedded within larger landscapes of places or fields of things that are, of course, the results of long-term inhabitations of localities and regions. The latest restatement of this general approach is Harding's (2005) attack upon time perspectivism, in which he reiterates the point that cultural practices need to be interpreted in terms of their own temporality rather than one imposed by the analyst. "What, then, is the point of imposing the analytical scales of time perspectivism without first assessing whether they may have actually existed as recognizable categories to the societies in question, especially as preliterate non-Western communities clearly possess very different conceptions of ideological time?" (Harding 2005:93).

The study of how ancient people constructed time is fascinating and important, but how ancient people experienced their world meaningfully

is not the only possible goal of archaeological analysis (cf. Murray 2006). Archaeological analysis cannot be conducted only within "native" categories, a goal that does not even describe what the best of postprocessualist analyses themselves do. Fortunately, Harding ends his critique of time perspectivism with a call for archaeologists to examine the "historical genealogies" of specific meaningful practices:

Genealogies would...trace the descent of particular institutions, practices and material culture through the network of social realities, or lived presents, within which they were created, reproduced and transformed.... This is to conceive the past as chains of ordered presents along which the complex networks of mnemonic and anticipatory relations are played out as part of specific social practices. [Harding 2005:97–98]

In effect, the past is a "chain of ordered presents"; each of these includes the native's sense of time extending forward and backwards, and these presents are linked together by historical relations. Both this sense of time and the historical relations between successive "nows" are appropriate objects for archaeological investigation.

BUILDING BIGGER HISTORIES

Where does all of this leave us? Many scholars have posed the question of long-term change and scales of analysis; nobody has answered it. This is particularly striking in a period in which many archaeologists (whether formerly identified as processualists or postprocessualists) feel that the "theory wars" are over; although spectrums of opinion exist in the field, there exists a set of broadly shared general principles of theoretical archaeology (Hegmon 2003; Hodder 2007). However, one casualty of this consensus has been the hope of understanding long-term, deep-time history. Twenty years ago, the battle lines were drawn between system-oriented and humanoriented approaches, and these were associated with top-down analyses of deep time and ethnographic-time analyses of agency, gender, phenomenology, and similar issues, respectively. In the theoretical middle ground of the 2010s, the past has been peopled, and issues of agency, meaning, and experience have moved to the forefront of explanation. These, in turn, imply that interpretation should be situated in ethnographic time; as an almost unnoticed consequence, the possibility of deep history drops out of the agenda of what is considered theoretically desirable or possible.

In moving forward, archaeologists can ill afford to follow the pathways

already explored. That is, we cannot ignore the discussion and work exclusively in ethnographic time (the general strategy in postprocessualism). We also cannot assume that long spans of time have no structure different from that of short-term time (the general strategy in historical-processual models: one explains one thousand years in the same way that one explains twenty years, merely repeating the operation fifty times). Nor should we suppose that recognizing multiple scales is the same as understanding historical processes at those scales. And finally, we must avoid reverting back to a simplistic environmental determinism when called upon to actually contemplate deep time (a not uncommon reflex in Palaeolithic and hunter-gatherer studies, and one we fear will become increasingly common as attention turns to long-term climate change). While convenient, this partitioning simply reinforces our preconceived notions about culture, nature, and time and asserts that although humans act with agency in the short term, that agency does not matter in the long term.

Although the obvious solution is a multiscalar approach, it is undertheorized. Braudel never really managed to theorize the relations between levels or scales of historical time and the nature of multiscalar units of analysis, and problems such as this continue to bedevil the promising attempts at a multiscalar archaeology. There are the beginnings of a rapprochement (for instance, between the analytical strategies recommended by Harding [2005] and Bailey [2007]), but without more systematic theorization, regarding history as an accumulative palimpsest of processes occurring at multiple scales does not do justice to the structure of history.

HUMANS AS OBJECTS OF HISTORY, HUMANS AS SUBJECTS OF HISTORY

The way forward begins by asking the question, What is history the history *of*? People? Places? Things? Institutions? Societies? Systems of cultural logic or the environment? Suppose we take the protagonists of history to be societies ("the Roman Empire," "Cahokia," "a network of Mesolithic foraging bands"); we then assume that the people through whose actions history is made are somehow congruent with the needs and intentions of societies such that, for purposes of historical interpretation, the latter societal needs and intentions tell us all we need to know about the former people's histories. The same is true for interpreting history as the working-out of systems of cultural logic, or of responses to environments. If at the other extreme, we see history as only the accumulated stories of individuals, then we assume the most radical kind of methodological individualism, one that offers the

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most limited possibilities for interpretation at any scale beyond the single lifespan. The point is, inherent in the deceptively transparent choice of analytical units is a logic rooted in a dichotomy of subjects and objects. By invoking units that separate and oppose humans and institutions, societies, environments, and cultural logics, we are forced to see humans either as the subjects of history or the objects of history; humans can only be either context-free protagonists of history or history's prisoners.

This unfortunate bifurcation can be circumvented via a number of different conceptual approaches. In this volume, they range from Susan Pollock's examination of space to Pauketat's phenomenology, all stressing in different ways how agency is continuously redefined in relational networks. In overcoming this dichotomy, large strides have been made via a dialectic or practice-based model in which people are understood as acting according to habitus or structure that is then reproduced through their actions (Bourdieu 1977; Pauketat 2001). Thus, we take this as our point of departure. Building upon this, the subject-object dichotomy has been attacked in three separate but interrelated bodies of work recently: relations between humans, relations between humans and material things (materiality), and relations between humans and places/time (landscape and temporality theory). The first of these deals primarily with the construction of human agency, personhood, gender, and identity (e.g., Dobres and Robb 2000; McNay 2000; Orser 2000). The second of these has often been discussed in terms of the biographies and agencies of particular things or classes of things (e.g., Dobres 2000; Gell 1998; Meskell 2004). The third is composed of the relations between humans, space, place, and time. As approached through landscape archaeology, it may be the most open-ended and theoretically dynamic field of thought (e.g., Ashmore 2004; Johnson 2007).

Each of these can help us construct narratives that avoid dichotomizing humans as subjects and the world as the object (or vice versa); we need terms of narrative that cross or obviate such distinctions. The practice model, however, tends to be rooted in ethnographic time, and we need to be creative in extending relationalities into deep time. To suggest what a big history of relationalities might potentially look like, we give a few examples of possible theoretical terms of analysis.

Social Relations: Institutionalized Relationalities

Long-term and large-scale histories often treat institutions, organizations, and societies as unified entities pursuing their own interests, formulating plans, and so on. This elides the individuals in them and compresses a sense of their divergent interests and conflicts; it promotes a deceptive

sense of unity that identifies the quasi-volition of the whole with that of the political class. An alternative version of this tends to promote a cultural rather than political functionalism, in which cultural structures and traditions coast down the centuries, re-enacted by generations of individuals faithfully following their script. On the other hand, short-term views that look within institutions tend to regard society as simply an empirical pattern resulting from the accumulated actions of individuals; ironically, this characterizesthe views of both processualist political theorists, who view humans as acultural, presocial ambitious actors who enter as free agents into voluntaristic social contracts, and their postprocessualist critics, who, equally horrified by the methodological individualism of this view and the specter of reification, focus exclusively upon local experience.

What is missing in this view is the sense of how social lives are prescribed through intersubjective experience. That is, even when pursuing their own interests, people within an organization do so differently than they would without the organization. Conversely, even when delimiting a corporate program, institutions can do so only through real people with individual identities, goals, and capabilities. History is not the history of individuals, nor of institutions, nor yet of both simultaneously; it is the history of relations between individuals and between individuals and groups. For example, when explaining political behavior in hierarchical societies in classic processualist analysis, the politics of chiefdoms and states is typically viewed in terms of ambitious elites, the protagonists or active subjects of history (Pauketat 2007). Yet, this subjecthood is achieved by relegating the majority of people to the status of passive objects. Moreover, the subjectivity of these leaders is a historical, defined before they enter into social contexts. Given all the ways humans can be, why are these leaders the way they are?

An alternative view is taken in this volume by Michael Heckenberger (chapter 5), who believes that, among the Xinguano people of the Amazon, subjectivities are formed within socially constituted, long-term historical relationships. People enact their deep history or embody historical identities and temporalities. Similarly, Susan Gillespie (2001) has argued that Maya elites acted in some contexts not as ambitious individuals but as members of a lineage or "house" with a sense of corporate personhood. Rather than make the "house" an instrumental accessory to elite political strategizing or, conversely, view Maya nobles simply as passively reproducing a social tradition, it is the evolving relationship between individuals and corporate persons that is the unit of historical interpretation here.

In the case of Upper Paleolithic foraging societies, an alternative

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approach is presented by Clive Gamble (chapter 3, this volume). His solution to the question of "origins" of modern human beings is to re-contextualize the problem: there were different kinds and degrees of metaphorical practices in the distant past. These were cognized via the engagement of bodies in different physical realities with variable long-term historical effects. In this way, Gamble suggests that another set of relations is key to rethinking deep history: our relations with material things.

Material Relationalities: Genealogies of Material Practice

Several convergent lines of thought suggest that we should decenter humans and consider them as reciprocally creating the material world in their relations with it, a line of thought usually expressed in terms of the agency of material things (Gell 1998; Latour 2005; Robb 2004). Various reconsiderations of practice and agency that break down the subject-object, mind-body, and culture-agency dualisms have led some to rethink the degree to which agency might be extended to other beings, substances, experiences, and so forth, to the point that it becomes indistinguishable from social fields, relational networks, or, simply, structure (Ingold 2000, 2006; Pauketat 2008b). Arguments over the appropriateness of the dehumanizing conflation of subjects with objects aside (but see McGuire 2008), doing so is consistent with the emphasis on relationships (i.e., practices) rather than on agents (Pauketat 2001).

People live in a world of material things, and things are not incidental, passive accessories to human volition; as an increasing variety of researchers argues, action and consciousness not only are impossible without things but also are channelled and formed by them (Knappett and Malafouris 2008; Miller 2005; Renfrew 2004). Human relationships have a materiality. Therefore, things connect or "enchain" people and practices (Chapman 2000). Hence, both humans and things need to be understood in terms of mutually constitutive relationships of materiality. Extending these relationships into historical time is straightforward. Indeed, history exerts its effects upon present action in terms of a material world that embodies the weight of history and that shapes possible futures. As Harding (2005), Pauketat and Alt (2005), and others have noted, the appropriate tactic here is to trace genealogies of historical practice (see also Mills and Walker 2008).

To give just one example, consider the relations between an individual artist and the creative tradition in which he or she works—say, a Bronze Age European sculpting a large stone human statue that will take its place in an alignment of such statues at a ritual site (Robb 2008). As Gell (1998) points out in his example of Maori meeting houses, the artist is aiming to

reproduce, with variations, a prototype central to this genre of sculpture; this prototype is known from earlier examples and experiences carving it, and the sculpture our sculptor produces will instantiate it further, providing guidance for future sculptors. Each act of creating a new sculpture is an individual act and can be interpreted as such. But neither we nor the participants in the web can meaningfully interpret any individual act of production without reference to this prototype and the genre of activity understood to reproduce it, and the result is a web of material things possessing a certain unity, directing the action of people within it, and extending through space and time at a different scale from any individual sculptor's action.

In some sense, therefore, we should interpret this history as a network of things connected via people rather than the converse. This is to see tradition as a long, material conversation, as an entity possessing agency (Robb 2008). This is very nearly Susan Pollock's argument (chapter 7, this volume) when she notes that people "grow up, live in, and contribute to a realm of limitations" or a "space of possibilities"—*Handlungsraum*. But Handlungsraum, for Pollock, is a way of bridging interests in "microhistory" and the wider, long-term patterns that constrain what people do. Thus, the real subject of history is neither the individual act of creation nor the tradition, but the genealogies of material practice, the evolving relationships between them.

Human-Place Relationships: Historical Landscapes

One of the most patent theoretical splits in archaeology is between "environment" and "landscape." Pertinently here, this is closely tied to scale; long-term studies have almost always focused upon physical "environments," whereas short-term studies have almost always focused upon "cultural landscapes," yet again reinforcing a nature/culture distinction and the idea that cultural meanings are short-term epiphenomena. Because humans inhabit a given space in many different ways, theoretically, looking at places in terms of human activity (for instance, in terms of practical activity, as in Ingold's [2000] concept of taskscapes) is more satisfactory than simply taking the environment as an objectively existing fact. But how can this be extended in time? What is a historical taskscape?

This is a surprisingly straightforward question to answer, and in ways that recall the *Annales* project (because cultural geographies formed an important component of the longue durée [Horden and Purcell 2000]). Ethnographically, there are often long-term ways of inhabiting a particular landscape (via its particular sets of salient material and symbolic features, economic and political affordances, and modes of occupation)

that straddle the physical and human worlds. Such historical landscapes, which objectify stable cultural understandings about possible ways of life, often provide a basis for very long, human-term occupations. For example, the mountains of southern Europe have, since medieval times, been defined in complementarity with lowlands in ways specifying their economic potential for specialized pastoralism complementary to farming, their political geography (remote and with an ever-present potential to escape from control), and their symbolic potential (uncouth, marginal, wild). As a unit of analysis, a historical landscape ignores the traditional divide between natural "resources" and cultural "knowledge" by tracing long-standing configurations of places and ways of dwelling in them. One can imagine many parallel examples of characteristic historical landscapes that have endured centuries or even millennia. In this volume, Scott MacEachern (chapter 6) parses the apparent "changelessness" of sub-Saharan Africa's southern Lake Chad region, where Melgwa outlaws exist in a persistent but, in agentic terms, dynamic frontier zone. Similarly, Ruth Van Dyke (chapter 9) envisions how one such Puebloan landscape articulated with the social lives of the people of Chaco Canyon.

Implementing This: Units of Analysis

Building upon this, how can we make histories that work at multiple scales, including deep time? All theoretical vocabulary is scale dependent; a potter making a figurine or a Plains Indian priest opening a medicine bundle may work in experiential time of a few days, but the tradition of material practice or corporate personhood they work within may unfold over several centuries. Hence, a history composed of relational units inherently involves tacking back and forth across scales. Virtually all our studies of long-term change in this volume involve the juxtaposition of distinct, repetitive *historical units*. Of course, these are analytical fictions defined in relation to particular analytical questions, but we believe that they are useful ones that allow us to see emergent properties of history at a particular scale.

On the biggest scale are *historical ontologies*, the long-lasting, loosely bounded cultural worlds that provide not narrowly prescribed ways of life but general repertories of potential meanings, techniques, and forms of action. Placing a site in the Puebloan world or in Amazonia, medieval Europe, or Mesopotamia connotes a whole set of historical taken-for-granteds that give a historical way of life comprehensibility to its inhabitants and to us—basic ideas about what cosmologies, historical landscapes, technologies, social traditions, and potential meanings were available. As discussed in more detail by Robb (chapter 4, this volume), historical ontologies—namely, the

concept of the human body in medieval Europe—provide orientational frameworks for action and self-understanding and general cultural environments in which institutions and traditions develop. Historical ontologies often last a millennium or more and span half a continent.

In addition to historical ontologies, there are *historical landscapes*. These are both stable and elastic configurations of mutually reinforcing traditions that form partial social orders. For example, the prehistoric Pueblos bundled together inherited, long-standing traditions of economy and ritual practice with newly invented forms of settlement and ritualism to create a way of dwelling in the American Southwest that endured from about 900 CE through the Hispanic colonial era.

In comparison with historical ontologies, historical landscapes may be similarly long-lived but tend to be tied more closely to specific places, social configurations, and technological possibilities; for instance, medieval Europe probably encompassed half a dozen or more particular historical landscapes. Similarly, ancient Mesoamerica comprised a cultural world with many widely shared cosmological possibilities and social traditions, but highlands and lowlands formed quite distinct possibilities for dwelling. One of the most direct effects of technological change upon historical development is probably the way it shifts the possibilities for dwelling in historical landscapes; the transformation of the Plains Indian way of life following introduction of the horse is one example.

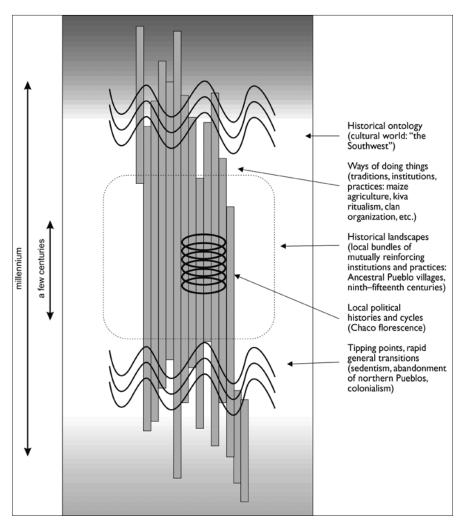
Within historical landscapes, genealogies of material practice, traditions, and institutions often form threads of continuity spanning hundreds or thousands of years, even as their form and meaning change. Traditions of commensality in Mesopotamia (Pollock, chapter 7), veneration of saintly burials in the Christian church (Robb, chapter 4), sacred bundles in the Midwest (Pauketat, chapter 2), or mound building in the Southeast (Sassaman, chapter 8) provide examples. *Cycles of political and ritual development* tend to take place within historical ontologies but on a much shorter timescale of a few centuries. The florescence and decline of the Chacoan system (Van Dyke, chapter 9) and the development of large villages with hierarchical leaders among the Xingu (Heckenberger, chapter 5) provide examples, along with well-known archaeological cases such as the classic Maya and various hot spots of European megalith building. As mentioned above, these are probably associated with the development of particular modes of personhood.

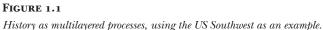
Finally, most historical sequences also are punctuated by highly visible *tipping points*, moments of rapid transformation—the depopulation of Southwest Pueblos, the abrupt formation of Greek city-states, the

lightning-fast spread of a preclassic religious horizon, or the shock of a colonial encounter. In a relational history, the key point here is not to deny the importance of such quantum changes, nor to see such moments of transformation in opposition to long-term continuities or as ascribable only to "external" forces, but rather to understand how they grow out of the historical interplay of the multiscalar factors discussed above.

If we combine such interpretive strands to create a multiscalar history, we bring together the idea of history as multiple genealogies of practices and the vision of history as a palimpsest of qualitatively different processes (figure 1.1). Such a rapproachment is exemplified by Wiessner and Tumu (1998), who collated oral traditions to create a deep-time ethnohistory of the Enga of Mt. Hagen, New Guinea, over the past three to four centuries. They clearly show that to understand this history, one first has to place the Enga in the broad cultural world of central New Guinea, with a particular repertory of economic techniques, institutions such as exchange as a way of constituting social relationships, and potential understandings of prestige, the body, and gender. The introduction of the sweet potato two to three centuries ago led to the formation of a particular historical landscape, a way of inhabiting the central highlands in which sweet potato gardens nourished pigs, which supported a geographical network of male exchange partners. Within this, there was room for the development of quite distinct threads of material practice, including warfare, ritualism, gardening, and ceremonial exchange. Combined with other historical processes, such as the demographic filling-up of the landscape probably resulting from more abundant nutrition, the result was a cycle of specific historical developments in which ceremonial warfare reached its zenith in the late nineteenth and early twentieth centuries and big-scale ceremonial exchange reached its zenith in the early to mid-twentieth century.

Likewise, Pauketat's (2005, 2008a) recent research on the problem of ancient Cahokia (and the midcontinent-wide transformation of the Mississippi valley after the mid-eleventh century CE) begins by situating the peoples and events of the time in a native Prairie-Plains relational milieu or historical ontology. Especially important here is understanding the animistic basis of human cognition and social action and its relationship to routine experience (Pauketat, chapter 2, this volume). And within that macrorelational field were landscapes that defined and were defined by cross-cutting genealogies of practice, including those of "Effigy Mound Culture" peoples to the north and the Cahokians to the south, with their ancestors, formal religion, and uber-bundled technologies (Pauketat,





n.d.). When so positioned, that which was formerly characterized as "political power" and analyzed as a series of abstract political centralizations and disintegrations becomes instead a suite of dispersed supernatural powers that were gathered or emplaced and that, when centralized, afforded historical landscapes and political configurations that rapidly and fundamentally altered social life at a large scale and with long-term ramifications (see also Pauketat 2004, 2009).

Beyond Palimpsesting: Relational Histories

Admittedly, analyzing history as a static, synoptic, tidy juxtaposition of closed and bounded entities (as in figure 1.1) has its problems. It is history as pattern rather than as process. In seeing history this way, we not only risk making history too tidy, without mess and texture (an organizational chart or periodic table rather than a Kandinsky or Seurat painting). We lose the texture of people, an abstraction that can be a political act (see below). We also risk losing the inherent relationality (discussed above) that motivates historical processes and allows us to understand relations between different scales.

As noted above, at the heart of a new approach is an interpretive move that regards humans neither as subjects nor as objects but as an integral part of relationalities. For example, material action brings together physical elements, embodied skills, forms of remembrance, and channelled social traditions in a moment of meaningful experience (Pauketat, chapter 2, this volume). Such "bundling" is a process of historical meaning making; for present purposes here, the key point is that a single act works simultaneously in a multitude of levels of analysis that cannot be separated analytically. The medieval body was located in history, yet history was also located in the body, because the relations and meanings that made up the fabric of medieval society were embodied ones (Robb, chapter 4, this volume). Similarly, for Native Americans, a glance at the night-time sky could be momentary, but the sky formed a long-lasting, large-scale historical configuration of meaning.

Acts of bundling, bringing together nodes in networks of meaning, form the fabric of history (see Pauketat, chapter 2, this volume). Recent archaeological approaches to landscapes, cultural objects, or substances (seen and unseen) begin with the recognition that agency—or what we may loosely define as causal power—is distributed differentially across larger relational fields (Chapman 2000; Mills and Walker 2008b; Strathern 1988). The upshot of such distributed powers, however, is that agents are less doers and more the "mediators" of complex networks (Keane 2005; Küchler 2002; Latour 2005; Pauketat n.d.). Such networks, then, perhaps not completely unlike traditions if not also the phylogenies of evolutionists, almost become the (distributed) agents, at least as considered as gestalts.

Thus, we make two additional points. First, explaining history involves seeing lots of networks that intersect; these involve relations between people, things, and ideas, and these generate, and result from, structured processes whose patterning is evident at many different scales. Ingold (2000) gives the example of the deciduous tree that grows, blows in the wind, leafs out and then loses its leaves, becomes entwined with the genealogies of bird lineages and the chemistry of the soil, and enables or constrains the movements of beings and atmospheric phenomena alike. The tree mediates a number of overlapping networks or "meshworks" (Ingold 2006, 2007a, 2007b) wherein the histories of the many interactions are located or concentrated, essentially defining through such locations the nodes where mediation occurs. It affords certain actions on the part of others (following Gibson 1979).

Of course, depending on the type of tree and its particular life history relative to that of other organisms, it may prove to be more or less of a node of articulation for some social field. The point, then, is that the nodes, or agents, result from the relational fields as much as they produce (or "reproduce") the structure. Indeed, the configurations or entanglements of more or less "cluttered" or dense fields of social mediation will impart very different long-term and large-scale dynamics (Pauketat and Emerson 2008). This is saying more than just "social processes are local but contingent on large-scale and long-term constraints" (as we criticized "posts" for doing earlier). It is instead to say that the causal forces of history are more than the sum total of their agentic parts. The configurations of relational networks are, themselves, the causal agents, to be understood at large scales and over the long term, consistent with the earlier evolutionary and complexity theories.

Our second point is that, although it remains a useful concept, in a multiscalar history, we need to rethink what we mean by causation. Effectively, we move from a model of absolute causation ("A caused B") to a model of contingent causation ("A caused B, given conditions C, D, and E"). Perhaps a southern American burial tradition was caused by rising sea levels, but the modes of burial and their relationship to other aspects of social life engaged land and water in ways that set up, in part, the ways Europeans engaged natives, which then contributed to that which we know as the American South, which today structures American political reactions to the BP oil leak in the Gulf of Mexico.

If this seems a stretch, consider the Gulf War. Perhaps we might say that it was caused by the West's need for cheap oil, but this need, and the fact that war provided a convenient solution to it, was contingent upon histories of other kinds: reliance upon the internal combustion engine, a governmental and logistic history of American addiction to inexpensive fuel, systematic global inequality in which the politics of the developing world are arranged around the needs of the developed world, evolving relations between Europe, Israel, the USA, and the Arab world over the past

half century, and America's need to find another super enemy following the end of the Cold War. Contingent causation is a matter of relations within elements of a picture, and it is a matter of assigning analytical priority with regard to a specific research question as to which relation forms the subject of the picture and which forms the frame defining it.

CONCLUSION: THE POLITICS OF DEEP HISTORY

Thinking of causation in such contingent terms also should remind us that, whether or not we intend it to be, archaeology is inevitably a political endeavor. No form of archaeology illustrates this better than our proposed study of big history. Political attitudes permeate the practice of large-scale interpretation. Moreover, the political stakes escalate exponentially with the scale of historical interpretation, and we cannot afford to be naïve about how our interpretations will be understood—or misunderstood—by nonarchaeologists.

There has been increasing discussion in recent archaeology about how to formulate research that spans multiple communities-research that answers the needs not only of a small core of academic participants but of other stakeholders in the past as well. In Heckenberger's terms (chapter 5, this volume), this is associated with a shift from a "Mode 1" single-centered research process to a "Mode 2" multicentered process. Although such a shift is welcome, it poses particular challenges for an archaeology of deep time. This is so because collaborations tend to be based upon concrete empirical foci rather than on conceptual issues. Probably the single most common form of collaboration is the kind in which participants have different worldviews and research questions but are interested in the same actual things. But the political contexts of archaeology and the consequent verdict of "What is all of this really about?" tend to diverge more sharply as the scale of the narrative grows. For example, one of us collaborates with local people in researching the history of a small town in the Mediterranean. To most of the local community, the importance of the project is to underscore the special historic origins of the group, whereas to most of the academic researchers, the history is of interest as it interacts with theoretical ideas about the social development of ancient society. Agreement on the small scale of "What have we found?" is relatively simple; agreement on the large scale of "What does it mean and why is it important?" is more problematic.

Abstracting from the concrete to the general is always an act of authority. Small-scale interpretations can be multiple; large-scale truths tend to be exclusionary. Imagine the following situation (which in fact occurred during our 2009 seminar): you deploy images or data to represent a particular

large-scale history. In this case, one of us presented an ensemble of about forty archaeological and historical pictures, from Paleolithic "Venus figurines" to modern "Barbie dolls," to represent the history of the human body. Half the archaeologists will be fascinated by the patterns emerging from this particular representation of the past. The other half will object; assembling this array of images means prioritizing some elements of the past over others. Why use a medieval crucifixion rather than an earthy, toiling peasant, a warlike Crusader, a homosexual, or a Jew to represent medieval males? Why use a "Barbie" doll rather than "Rosie the Riveter" or indeed Margaret Thatcher or Indira Gandhi to characterize the female body in the twentieth century? Abstracting from the particular to make general statements about the past is an act of selection, authority, and power that divides the past into zones of visibility and invisibility. Declaring that the ensemble truly represents the past endows it with a sense of closure that excludes things kept beyond the vision.

This argument is central to feminist critiques of writing the past but has been raised also for other forms of difference. Underlying these arguments lies a broader, subtler critique of abstraction and generalization as the denial not only of particular differences but also of the potential for difference per se. For instance, any society is made up of people with divergent natures and interests; the tension among these may be an element in social experience and an important driving force in historical process. Creating a large-scale narrative may mean characterizing social worlds in ways that flatten out their texture, homogenize them, and obviate such positioning (for instance, in discussing "Mesopotamian society" rather than "the different individuals within Mesopotamian cities").

Big histories provide narratives, and narratives always have at least an implicit political morality. They address questions of origins—of ourselves, of our groups and identities, of our ways of life. They underline directionalities—the rise from the primitive, the spread outward from a center, the descent into chaos. Small histories often reference large narratives implicitly; for instance, the long-term sweep of directed social evolution is implicit in category terms such as "Formative" and "Classic" in the New World or "Paleolithic," "Neolithic," and "Bronze Age" in the Old World. With big histories, the narrative is front and center. The origin of agriculture, for example, is seen as a fundamental and irreversible transformation of human society, a key origin point for our own world; it is almost always seen either as a "rise" above a precarious and in many ways presocial life or as a catastrophic "fall" from a bounteous, stable, forager world. The same may be said of virtually every other major transition.

The politics of big-scale narration are sometimes all too obvious, as in the harnessing of a widely shared "Aryan" view of European prehistory to Nazi xenophobia or the identification of Fascist Italy with the Roman Empire that underwrote Italy's brutal twentieth-century colonial wars in North and East Africa. The political implications of global warming narratives are equally evident—are they a damning verdict upon twentiethcentury industrial consumerism or a neurotic loss of confidence in progress and development? Sometimes the politics are more subtle; for instance, accounts of long-term change foregrounding political economy (in Europe, in North America, in Mesoamerica, in the Andes) show history as the creation of a minority of politically hyperactive adult males among an inert, silent majority. Similarly, origins-of-agriculture stories polarize the world into a forager past versus a farmer present and future in a way that legitimates the former at the expense of the latter (Pluciennik 2001).

In our view, there is no solution to the politics of long-term narratives because it is not a problem. Rather, it is simply a condition, inherent to the activity of theorizing. We end by proposing only two injunctions. The first: always consider the consequences of theorizing. To take an example, the idea of "Indo-European" or "Aryan" invasions creating a characteristic prehistoric European culture was constructed and accepted by archaeologists throughout Europe in the early twentieth century. Very few of these were Nazi supporters; virtually none of them foresaw how their intellectual construction could be invoked to legitimize genocide.

Considering the potential political implications of theorizing does not mean their refraining from interpreting the past as they thought they should or trying to safeguard it from all possible future hindsight-informed criticisms; it would, however, have meant thinking critically about how this narrative mapped onto potential axes of difference in twentieth-century Europe (as Childe indeed did) and in presenting it in such a way as to forestall undesired interpretations. To take a more recent example, over the past decade there has been a move towards viewing ancient empires from Rome to colonial Spain as multicultural, disordered ensembles of heterogeneous social relations. In some ways, this allows us to see individuals and groups within such empires as creating their own interstitial, meaningful social worlds. But how would archaeologists feel if this vision were harnessed to a vision of the modern world as multiple ethnicities tied together as cocitizens of the benign, productive empires of globalized multinational corporations? Does this mask the very real domination that ancient or modern empires actually sometimes exert? Publish, but think before you publish.

This leads to our second injunction, which is very simple. Regardless of why we do archaeology for ourselves, the public funds us and puts up with us because we supply narratives about the past, with answers to things people want to know. Contemporary archaeologists and historical anthropologists cannot afford to restrict our field of study to small scale out of a reluctance to commit ourselves politically. There is a void to be filled. If we do not fill this void knowledgeably, others will do so unknowledgeably, in ways that mislead rather than inform. Hence, we have a responsibility to narrate and an imperative to consider big histories.