1 Archaeology and Annales: time, space, and change

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Introduction

Microscopic problems of historical research can and should be made macrocosmic – capable of reflecting worlds larger than themselves. It is in this reflected flicker of truth, the revelations of the general in the particular, that the contribution of the historical method to social science will be found. (Postan 1939: 34)

By and large, social scientists have not attempted to link the day to day events in the lives of individuals (ecological or synchronic processes) and the long term or large scale patterns of human societies (historical or diachronic processes). (Boyd and Richerson 1985: 290)

To inherit the past is also to transform it, or so a recent geocultural synthesis maintains (Lowenthal 1985: 412). As historians “auto-reflexively” narrate past processes or events by means of concepts and terms drawn from their own culture, so social anthropologists often treat the past as a “boundless canvas for contemporary embroidery” (Appadurai 1981: 201). Archaeology’s most prominent historiographer regarded the past as something discovered chiefly through the filter of modern society’s beliefs and attitudes (Daniel 1975).

Anyone involved in the study of the past realizes that is is difficult to relate our own ideas about the past to ideas actually held in the past (Hodder 1986: 2–6; Gallay 1986: 198–200; Trigger 1989: 351). Although archaeologists in general seek to study the past as an entity quite distinct from the present, many post-processualists, and particularly critical theorists (Leone 1981; Leone et al. 1987; Handsman and Leone 1989; Tilley 1989a; cf. Earle and Preucel 1987), maintain that the past
A. Bernard Knapp


The reconstruction of the past on various scales of time, i.e. through the evaluation of long-term processes or continuity, and shorter-term events or change, facilitates the investigation of “different world views, and the impact of space and time on human action” (Gamble, 1986: 238). Various aspects of time, space, and change attract the common attention of archaeologists, anthropologists, geographers, and historians. As David Clarke once observed, the metaphysical concepts of time and space form the boundaries of archaeological events, processes, and explanations (1973: 13).

Clarke, however, maintained that archaeological theory “either treats relationships of a purely archaeological kind, or processes with space and time scales for which there is no social terminology” (1973: 17), a viewpoint which Hodder believes has “in fact contributed to a continued blindness to the social construction of the archaeological past” (1987: 8). Clarke, however, was not insensitive to the role of material in the creation and maintenance of social relationships, nor was he as blind to social theory as he was dubious about its “primitive terms and correlated concepts” and how they could be related to the space, time, and sampling aspects of archaeological data (1973: 17). Furthermore, his insight into the (social) significance of documentary and ethnohistoric data for archaeological interpretation was unprecedented in the hypercritical, halcyon days of the New Archaeology, and stands yet as one stable mooring in the current quagmire of archaeological theory (Clarke 1973: 18):

The new developments insist that the historical evidence be treated by the best methods of historical criticism and the archaeological evidence by the best archaeological treatment and not some selective conflation of both sets of evidence and their appropriate disciplines. The severe problems and tactical advantages which arise from integrating archaeological and historical evidence emerge as no more and no less than those arising between archaeological and physical, chemical, biological and geographical evidence. Indeed, work in text-aided contexts will increasingly provide vital experiments in which purely archaeological data may be controlled by documentary data, bearing in mind the inherent biases of both.

In a well-known passage, Clarke defined archaeology as “the discipline with the theory and practice for the recovery of unobservable hominid behaviour patterns from indirect traces in bad samples” (1973: 17). The fragmented, disproportionate, taphonomically transformed, and even non-representative material database of archaeology or parahistory has led, inevitably if not universally, to an analytical emphasis on deeper currents, on collective instead of individual behavior, and on socioeconomic or ideological trends instead of institutional decisions or political acts.

If long-term processes are regarded as inherent in the archaeological record of any place or time, short-term events might be regarded as more intrinsic to ethnohistoric or ancient documentary evidence. Yet the archaeological record bears witness to instants of change just as written materials reveal social patterns or politico-economic trends. Documentary evidence, wherever it exists, tends to dominate sociocultural and historical interpretation, whilst contemporaneous archaeological evidence is underemphasized. Although methodologically the information provided by archaeological and documentary or ethnohistoric records must be kept separate (Evans 1974: 17), in the study of the past it is necessary to develop a dialogue between the two.

... the historical document does not necessarily contain more truth than the artifacts recovered from the ground. Nor is the structure of phenomena as interpreted through history necessarily more valid than the structure observed and interpreted by the archaeologist. The historical and archaeological records are different analogs of human behavior, and they should not necessarily be expected to coincide. (Ferguson 1977: 7)

The use of general analogy provides an important means to relate ethnohistoric data to archaeological interpretation (Charlton 1981), and recent archaeological studies of ethnicity concur that the material and documentary records “measure similar behavioral trends ... with
varying degrees of strength” (Pyszczek 1989: 244; also Stevenson 1989: 271–4).

The dilemma that confronts human science in the evaluation and holistic interpretation of discrete types of evidence runs deeper than the rifts that divide traditional, processual, and post-processual archaeology, and that separate pre- or protohistoric archaeologists from historians. The roots of this 200-year-old debate lie in the division between humanistic, historiographic methodology, on the one hand, and social- (or natural-) science analytical procedure, on the other. Whereas brief consideration is given below to the dispute between history and the social sciences (see also Hodder 1986: 77–102; 1987: 1–3; Lewthwaite 1988b: 161–76; Knapp 1992), this volume aims to develop the potential for interdisciplinary co-operation, and to investigate how individual archaeological, social-science, or historical approaches to the study of the past might be recombined effectively in a non-positivist, human science approach.

Major theoretical differences have often separated historians or classical archaeologists from processual (“positivist”) archaeologists who have steadfastly resisted any alignment with history (e.g. Binford 1962; 1968; Earle and Preucel 1987; cf. Renfrew 1980; Snodgrass 1988: 6–9; Trigger 1989: 356). The processualist approach emphasized model building, theory formulation and hypothesis testing, sought to establish general laws in human behavior (e.g. Watson et al. 1984; Watson 1986), and focused on systems theory and cultural process instead of culture history. Striking similarities nonetheless consistently outweigh trivial differences amongst the types of evidence that archaeologists, anthropologists, and historians employ, or within the range of absolute or relative chronological resolution at their disposal (Lewthwaite 1986: 61). Even the natural and social sciences increasingly re-examine historical aspects of their data in order to stimulate archaeological development (Boyd and Richerson 1985; Gould 1986; Grene 1988). Philosopher of science Stephen Toulmin anticipated this trend in the mid-70s (1977: 144–5):

Nowadays, we seek to develop not so much timeless theories about the general nature of “social groups” and “social action” as historical insights into the character and experience of this or that human group or collectivity; to grasp not so much the general statics of cultural equilibrium as the dynamics of particular cultural changes; to achieve not so much the formal rigor of axiomatic systems as the practical testability and computability of programs and algorithms . . . if the price of reestablishing this contact with actual experience includes breaking down the fences separating the established academic disciplines so that we can bring their varied techniques and theories to bear on some specific practical problems, so be it. These days, we are all prepared to be “interdisciplinary.”

Archaeologists and anthropologists increasingly express the need for a more historically based, less theoretically abstract human science; historians increasingly acknowledge that anthropological enquiry has become critical for both narrative and quantitative history (Stone 1979: 13–14; Feeley-Harnik 1982; Hodder 1986: 153–5; 1987; McNeill 1986; Pinsky 1989; Trigger 1989: 336–40; Carrithers 1990: 189–91, and n. 4 with further references; Spencer 1990). The ahistorical, non-processual, derivative concept of culture esteemed by some social anthropologists has given way in many quarters to a realization that culture is rooted in social relations and plays an active role in shaping history (Sider 1986: 5–7). For Bourdieu, whose concept of habitus is increasingly utilized by post-processualists (Hodder 1986: 70–6; Tilley 1989b: 65–6; Moreland, this volume), history produces culture “in accordance with the schemes engendered by history” (1977: 78–84; Levi 1988: 607). Or, as Trigger recently put it (1989: 336): “Archaeology thus has an important role to play not only in unravelling the complex history of the past but also in providing a historical perspective for understanding the significance of ethnographic data.”

Historical explanation involves both particular and global description, and description as such should not be opposed to explanation or theory (Finley 1977: 139–40; Hodder 1987: 2). Sahlin (1985) now argues that a false dichotomy has been created between structure and event, between myth and history, and that history is culturally ordered, just as cultural schemes are historically ordered. Because historical processes may constrain certain social factors, an understanding of historical meaning is necessary to put symbolism and ideology in context.

Annales-oriented research has always sought to produce human science by interweaving historical and social-science approaches to the past. Marc Bloch utilized the tools of history, sociology, economics, and anthropology forty years before the current cycle of human scientific practice became fashionable (Chirot 1984: 22). Both Durkheim and Bloch maintained that the individual could only be understood within the
context of society, and that the structure of society manifested itself in concrete institutional and material remains (Iggers 1975: 49–50). With emphasis on the analysis of rudimentary material culture, on time, place, and social reality, and on the interdisciplinary study of their covariance, Annalists share many of the aims and methods of contemporary archaeology. Archaeology, furthermore, provides an obvious link between social-sciences and humanistic approaches, particularly when the broader material and written record is applied to specific interpretive problems and issues.

Because the changing focus of archaeological emphasis triggers the search for new or different types of evidence, archaeological data will never be complete (Feeley-Harnik 1982; Yoffee 1982: 347). Furthermore, the stopping point in any archaeological explanation or historical reconstruction is never definitive, only incidental to the data selected for analysis. Both on the material plane of the prehistorian and in the documentary landscape of the historian, continuity and change are apparent in the spatio-temporal disposition of power strategies. To analyze such strategies, to study transformations in the material record, and to consider the association amongst society, economy, and ideology, it is necessary to theorize about patterns, processes, and breakpoints.

Amongst humanistic and social-sciences disciplines, archaeology alone is characterized by a nearly inexhaustible material record (including documentary evidence), an evolving—albeit imperfect—theoretical corpus, and the interdependence between the two. Archaeologists must enter into a dialogue between empirical findings and theoretical concepts (Wagstaff 1987: 34), a process that parallels the reciprocal movement from description to explanation, from the idiographic to the nomothetic, from structure to event, and from continuity to change. This dialogue has been expounded not only by sociologists (e.g., Weber 1956), anthropologists (e.g., White 1945: 245), and archaeologists (e.g., Hodder 1986: 11–17), but by all generations of Annalists.

In what follows, I present first a broad overview of four generations of Annalists scholarship in the context of the rift that developed in nineteenth-century scholarship between history and the social sciences (more substantive discussion of the philosophic underpinnings of Annalists are presented by Lewthwaite 1986: 58–67; 1988b). Next I offer a general discussion of some common principles that link archaeology and Annalists: temporal and spatial scales, chronology theory, continuity and change, a concern with human action. These principles are discussed in greater detail in the subsequent introductory essays by Smith and Fletcher, and are accommodated to various degrees in the volume’s case studies (briefly summarized). The introduction ends with a statement that suggests why Annalists approach to the past may appeal to contemporary archaeologists, anthropologists, and ancient historians.

**Origins: the Annalists tradition**

In 1929, the Annalists approach to French history crystallized with the establishment of the journal *Annales d’Histoire Sociale et Economique* (since 1955, *Annales: Economies, Sociétés, Civilisations* [Annales: ESC]). Subsequent opinion on the methodology of Annalists, an intellectual movement whose impact has been felt worldwide, ranges from decidedly enthusiastic to resolutely disparaging (e.g., Trevor-Roper 1973: 408; Kinzer 1981a: 676). The pros and cons of this methodology and its ever-changing relationship with other historical and social-sciences methodologies have been discussed widely in several papers and monographs (e.g., Iggers 1975; Stoianovich 1976; Harsgor 1978; Braudel 1980; Wallerstein 1982; Clark 1985). Today Annalists scholars draw inspiration and models as much from ecologists, psychologists, economists, art historians, and anthropologists as from other historians.

In his historical overview of the Annalists, Stoianovich maintains that historical scholarship was born in classical Greece, nurtured in eighteenth- and nineteenth-century Germany (under Ranke’s concept of history *was eigentlich war*), and matured in twentieth-century France within the *Annales* school (1976: 25–39; see also Harsgor 1978: 1–2). Wallerstein provides a useful counterpoint and discusses the origins, dispersal, and attempted unification of history and the social sciences, as well as the *Annales* role in that process (1982). For Wallerstein, both history and the social sciences are nineteenth-century phenomena, born out of the French Revolution. The birth involved a process of separation between “universalizing” and “sectorializing” thought: knowledge begins with the particular and ends with the universal (or abstract). To the extent that all particulars were “equal,” the universalist path ultimately formed the ideological basis of the more traditional, humanistic, Rankean historiography. The sectorializing mode of thought, devoted to the study of politico-economic and sociocultural phenomena, underpinned the five social-science “disciplines”: anthropology, economics, geography, political science, sociology (Wallerstein 1982: 108–10).

Rankean history became an idiographic pursuit that
sought to reconstruct the past on the basis of individual state archives. The social sciences, meanwhile, became nomothetic in orientation, and sought general laws to explain universal phenomena. Both disciplines increasingly exhibited a narrow, “hyper-specialized,” spatio-temporal focus of research: historians sought truth in the unchanging past, ethnographers in the unchanging present. Narrative history presented the past “as it really was”; ethnographers evaluated what made things happen in the “anthropological present.” (It may be noted that as Victorian archaeologists extended the antiquity of humanity by outlining the stages of the Palaeolithic era, anthropologists were busy dismissing modern “primitives” as relics of the Palaeolithic: Kuper 1988: 42–104; Bowler 1989; Trigger 1989: 94–109).

Toward the end of the nineteenth century, at least three major reactions had formed to challenge these well-established patterns of “universalizing–sectorializing” thought: Staatswissenschaften, Marxism, and Annales (Wallerstein 1982: 109–12). Annales was a relative latecomer, but its animosity towards the Rankean model then dominant in France – notably in the Sorbonne – was no less intense, if somewhat more eloquent and intellectual than that of the other emerging challenges (Bailey 1977: 1033). The Annalesites emphasized holistic rather than “segmentalized” thought; economy and society rather than politics; long-term patterns rather than short-term events; global man rather than “fractional” man. They examined quantitative trends instead of chronological narrative, structural instead of political history. They rejected the uniqueness of history in favour of blending history with the social sciences (Wallerstein 1982: 110–11).

The principles of Annales methodology may be delineated through a glance at the work of its first three generations:

1st 1930–1950: Lucien Febvre (1878–1956) and Marc Bloch (1886–1944)

Through Febvre’s teacher Gabriel Monod, both Bloch and Febvre traced their methodological lineage back to Jules Michelet (1798–1844). Amongst many aspects of Michelet’s methodology, those most directly associated with the work of Annales historians are the “total” scope of history, the broad range of sources used in its reconstruction, and a concern with “ordinary people” and daily life (Burrows 1982: 78). Sociological input from F. Simiand represents another key influence in Annales methodology and mentality. His published attack (1903) on traditional historians at the Sorbonne renounced “surface history” and promulgated a new alliance of history with sociology, geography, anthropology, economics, and psychology, an alliance still intrinsic to the Annales (Forster 1978: 61–2; Simiand’s essay was reprinted in Annales ESC 15 [1960] 83–119).

The final member of a triad who exerted notable impact on the Annales was Henri Berr, a philosopher of history who sought to recombine all aspects of historical study: political, social, economic; history of science, history of art; philosophy of history (Braudel 1973: 454–61). In 1900, Berr commenced publication of the Revue de Synthèse Historique, a journal that provoked traditionalists, and serves as a rallying point for those “active, lively, combative, conquering men” in the social sciences and history alike, a group similar to that which soon would rally round the Annales banner: Henry Hauser, François Simiand, Lucien Febvre, and later Marc Bloch (Braudel 1973: 459; further discussion in Lewthwaite 1986: 58–61; 1988b: 161–76). Annales, in fact, coalesced and succeeded not least because of the philosophical support it enjoyed: Annales was a social product of its time (see also Sherratt, this volume).

Febvre and Bloch had a common vision of history, and subscribed to the Durkheimian principle that the individual must be studied within a social context. The practice of history, furthermore, entailed the study of material culture, social groups, economic trends, regional or local customs, even profound mental categories. Above all, in a context of interdisciplinary collaboration, history should strive for synthesis and comparison. Accordingly, the focus of Annales historical research shifted from the individual to the collective, from the political to the socioeconomic, from narrative description to analysis and interpretation, and from single-factor to multivariate explanation (Lucas 1985: 4). The first generation aspired to a synthesis of all the mental, physical, and material forces that shaped past human experience, and to a methodology that would relate all these forces within an interacting hierarchy.

As editors of the new Annales journal, and in their “passion for the past” (Braudel 1973: 467), Febvre and Bloch encouraged research based on a diverse range of written and material, socioeconomic, and mental data therefore regarded as unsuitable for historical research. The methodological building blocks set up by the first generation of Annales were two:
A. Bernard Knapp

(1) interdisciplinary research, particularly with geography and the social sciences;
(2) a “total” approach to historical reconstruction, through use of a broad and diverse database.

From the publication of *La Méditerranée et le monde méditerranéen* in 1949 (Braudel 1972) until he relinquished the editorship of *Annales* to its “young men” (Le Goff, Le Roy Ladurie, Ferro) in 1968, Fernand Braudel dominated *Annales* history and historiography, and the second generation of *Annales* may be attributed solely to him. Under Febvre’s tutelage, Braudel heeded his mentors’ call for social science input into history (Braudel 1973: 452–4). In France, socio-historical research converged on the study of people (*in sensu lato*), within the multidimensional context of time, space, and social reality. During Braudel’s reign, the *Annales* eclectic approach to the past attained international recognition. Objects of historical study were defined and validated through the methodology of social science whilst the historical database diversified widely.

Braudel’s major contribution to this dynamic attempt at human science, and a hallmark of *Annales* methodology, is the principle that macrophenomena are determinate and microphenomena indeterminate (Lucas 1985: 5). Historical events achieve significance only when evaluated in spatially extensive, diachronic contexts. In his own thesis (*The Mediterranean*), Braudel viewed the past from his now well-known tripartite perspective: long-term geographic or environmental structures (*la longue durée*), medium-term socioeconomic cycles (*conjoncture*), and short-term socio-political events (*l’histoire événementielle*). Although the weakest link in Braudel’s trinitarian chain is the ecological determinism embedded in the concept of *la longue durée*, his intention was to balance the fleeting event and the persistent process in an unitary socio-historical account.

Within Braudel’s schema, the multidimensionality of social time assumed a central place. In his structural history (“macrohistory”), physical or material factors that operate over long periods of time (*la longue durée*) act as constraints on human behavior. Macrovershoty encapsulated centuries- or even millennia-long biological, environmental, and social interrelationships, what today might be termed human ecology (Chiriò 1984: 32). Braudel’s concept of structure is not some adjunct of a Lévi-Straussian scheme for ordering the world (*contra* Little and Shackel 1989: 496), nor is it concerned with the reciprocal interaction between spatial context and social organization; rather it assumes that there is a range of geophysical “structures” within whose confines human action takes place (Clark 1985: 183).

Braudel’s conjunctural history (“mediohistory”) occurs in five- or ten- to fifty-year spans, and is applicable to any form of human behavior that may be considered through its outline and its fluctuation around a norm (Kinser 1981b: 92–4). Braudel generalized the economic nature of a *conjoncture*, and reformulated it as a quantifiable sequence on either side of a normative activity; recurrent phenomena – prices, wages, accounts, demographic and technological change, and economic trends – form the object of study. The dynamic concept of the *conjoncture* made it possible to reconstruct historical life through measurable change in quantities of material. The inclusion and evaluation in historical analysis of a plethora of material and documentary data – even if initially ill-suited, inadequate, or poorly conceived – presaged the *Annales* foray into “serial history,” and laid the foundations for a quantitative, quasi-statistical approach to historical data.

Braudel’s *l’histoire événementielle* (“microhistory”) represented little more than a concession to narrative political history. For Braudel, the short-term was ephemeral and events were infinite, mere “dust” in the diachronic sweep of historical pattern and process. This repudiation of the short term ultimately gave rise to serious contention within *Annales* historiography. Indeed human actions are not simply responses to deep structures, and here lies the crux of widespread dissatisfaction with this particular aspect of a Braudelian approach, both within and without the *Annales* camp (e.g., Adams 1984: 87–8). Events, viewed as historical realities lacking in pattern (Kinser 1981b: 94), ultimately proved to be basic to the *Annales* paradigm. Le Roy Ladurie (third generation) believed that events should be regarded as intersections that break patterns, and as such are critical to understanding and explaining change (1979: 111–16).

To the global historical approach and the interdisciplinary, social-science-based research that had been characteristic of the earliest *Annales*, Braudel added a trinitarian concept of time as a diachronic assemblage. In Braudel’s “dialectic of time spans” (Clark 1985: 183), different spatial, politico-economic, or socio-ideological systems have characteristic rhythms, whilst time itself lacks any predetermined meaning. Since history, therefore, is a composite of different times moving at different speeds, historians must first define the object of their research, and subsequently determine the time span most relevant for data analysis (Furet 1984: 6–9; Lucas 1985: 6–7).
Braudel’s methodology and writings inspired the epistemological views and research activities of the entire second generation of French historians. His intellectual overture to Lévi-Strauss (1980/1958) set the stage for several later issues of *Annales* devoted to structural anthropology, and so facilitated a dialogue with a discipline frequently hostile to history. By 1970, two decades of internal deliberation and external reaction led to the *émiessment* (“scattering”) of *Annales*. This notion of fragmentation presumes a unity, but it would be misleading to think that an *Annales* “school” had amalgamated under Braudel. The “scattering” was in fact an opening of new avenues of research into traditional *Annalist* concerns (Wallerstein 1982: 115).

The third generation of *Annales* carried out historical research global in scope and millennial in time, from prehistory (Bottero et al. 1973; Demoule 1982) to classical antiquity (Austin and Vidal-Naquet 1977; Vernant and Vidal-Naquet 1981), through the more customary realm of post-medieval to post-revolutionary France (e.g., Forster and Ranum 1977; Le Roy Ladurie 1979; 1981), to contemporary America, Israel, and Russia (Ferro 1980; Furet 1984: 153–206; Berelowitch et al. 1985). If the third generation was disinclined to tackle global history à la Braudel, their concern with social anthropology, demography, and the “unconscious world of *mentalité*” (Lucas 1985–8) – ideology, symbolism, cultural pattern – incorporated a vast new body of source material. The “scattering” usually associated with the third generation in some ways represents a return to concepts that inspired Febvre and Bloch: global history in the geographic sense was complemented by “total” history in the interdisciplinary sense (e.g., Le Goff and Nora 1985; Murra, Wachtel, and Revel 1986). Le Roy Ladurie observed that “history is the synthesis of all human action aimed at the past” (quoted in Harsgro 1978: 3, emphasis added).

Quantitative innovations, however, were perhaps most typical of third-generation research. Renewed emphasis on the systematic collection of data and an increased concern for statistical sophistication were the inevitable outcome of a preoccupation with measuring long-term cultural or historical patterns. Yet there is a certain paradox in that precise quantification requires that the time scale be more precise than the analysis, so that – in effect – the concept of structure in broader, non-specified time breaks down (Sturt Manning, personal communication). Quantification provided a means to distinguish amongst the trivial, the random, and the significant, whilst experimentation with systems analysis necessitated further quantification of similarities and differences within and between systems (Furet 1984: 40–53; Lucas 1985: 7).

Whereas the mania for statistics retains a prominent place in *Annalist* research (Furet 1985; Bruguieres 1985), the basis of a quantitative approach was and remains “serial” history (Chaunu 1985: 38–41). If serial history once denied punctuated change, more recently it has produced increasingly sophisticated analyses of discontinuity (Birnbaum 1978: 232). Yet even when data lend themselves to quantification, *Annales* historical research seeks chiefly to study the diachronic dimension of these phenomena, and to place material or documentary evidence into a temporal series of homogeneous and comparable units in order to measure fixed intervals of change and diversity (Furet 1984: 42). Indeed, the repetitive and comparative data of quantitative serial history replaced the elusive event: the breakdown of these data into different levels or subsystems ostensibly allowed the historian to use qualitative probabilistic analysis to consider the impact of internal relationships or external forces. But the contextual link between quantitative – often material – data and human action, and the theoretical link between data, human action, and interpretation, were yet to be established.

How closely is current, fourth-generation *Annales* methodology associated with that of previous generations, and what is the state of that methodology today? The most enduring characteristics of *Annales*-oriented research are three: (1) an emphasis on the multivariate nature of the historical discipline; (2) a commitment to an interdisciplinary relationship with the social sciences; and (3) an ongoing focus on the “sociale” (of the original journal-title), whose indetermination, as Febvre noted, helped to transform history into human science. Utilizing the techniques and tools of various ancillary fields, and integrating various levels of temporal, spatial, material, and behavioral analysis, *Annales* research still embraces a wide spectrum of socio-historical and cultural issues.

Braudel’s trinitarian scheme not only instilled a temporal dimension into the study of human behavior, it also demonstrated that different time scales affect interpretations of environmental, politico-economic, or socio-ideological issues. Although subjects of narrower temporal and spatial scope have superseded those that emphasised *la longue durée* (Forster 1978: 64), the processes and events of the past are still seen as determined at least partly by unchanging physical forces (geology, climate), and partly by intangible but more volatile social forces (ideology, social formations) (Trevor-Roper 1973: 470). Such forces, or variables, may be
viewed along a continuum from the biological/ecological through the socioeconomic to the political or individual. The temporal dimension has become subservient to the topic of research, whilst the nature of the question often determines the time scale for analysis.

If temporal concepts, therefore, still spark controversy amongst Annales, quantification – particularly when used to identify limiting and motivating forces – has had a more unifying effect. Annales quantification has been defined as a “halfway house” between cliometric and impressionistic history (Forster 1978: 69). For François Furet (1985: 13), however, the point of Annales quantitative history is to take the discipline of history in its widest possible sense, that is to say in its conceptual indetermination with all its multiplicity of levels of analysis, and from that point to devote oneself to the description of those levels and to the task of establishing simple statistical links between them, starting with hypotheses which, whether original or imported, are nothing more than the intuitions of the historian.

Although historical data cannot be reduced readily to mathematical formulation, at least they may be expressed in problem-oriented terms, and analyzed quantitatively with respect to regularities or differences, in order to consider basic elements in the process of change. Criticism directed toward an obsession with the quantitative (Lyon 1987: 206–7) at the expense of the qualitative has resulted in increased influence from social anthropology, cultural ecology, and demography (Forster 1978: 68; Lucas 1985: 9).

Braudel’s call for a “new humanism” in history, and for the reaffirmation of social analysis within specific temporal dimensions (1957: 182), was echoed in the introduction of Faire de l’histoire (1974 publication of Le Goff and Nora 1985), when an appeal was made to history – in the face of “aggression” from the social sciences – to reassert itself (à la Bloch) as the “science of change, of transformation” (Lucas 1985: 9). Furet (1983: 409) also challenged the “scientific illusion” and remarked that history’s concern with human action was the best antidote against the misleading simplifications and illusory rigor inherent in the notion of a science of society. It is all the more effective an antidote for having dropped its traditional qualms about hypotheses and ideas, some of which it now borrows from the social sciences.

In Lawrence Stone’s view, the number and diversity of historical variables have forced historians to adopt a “principle of indeterminacy” in which only middle-range generalizations can be made: “The macro-economic model is a pipe-dream, and ‘scientific history’ a myth” (1979: 13). In place of previous concerns with social groups or economic trends, the current, fourth generation of Annales emphasizes – often in a narrative mode of discourse – ideology and symbolism within the cultural context: mentalités (Duby 1985; Le Goff 1985).

The study of mentalités constitutes a direct link with Bloch and Fevebre, albeit with divergent concerns: Bloch focused on mental phenomena closely linked to material and social life, whereas Fevebre sought to explore the intellectual and psychological phenomena of a mental universe (Bruguères 1982: 433). The present emphasis on mentalités is regarded by Stone as “the end of the attempt to produce a coherent scientific explanation of change in the past” (1979: 19). Forster too argued over a decade ago that, along a spectrum from “scientific” to “humanistic” history, Annales scholars incline toward the latter, and practiced “qualitative empiricism” (1978: 74). Whereas certain ambiguities will always persist in the relationship between history and social science, it is useful to recall the words of Marc Bloch (cited in Bruguères 1982: 430): “Social realities are a whole. One could not begin to explain an institution if one did not link it to the great intellectual, emotional, mystical currents of the contemporaneous mentalité … This is an interpretation of social facts from the inside.”

In many respects, Annales history today remains faithful to its diverse ideological and interdisciplinary origins. In 1985, for the first time since its founding in 1948, the Sixth Section of L’Ecole Pratique des Hautes Etudes (since 1975 L’Ecole des Hautes Etudes en Sciences Sociales) has elected an anthropologist (M. Augi), not a historian, as its president. In France at least, Annales historians dominate the course and determine the trends of historical research, and the election of Augi perhaps signals as much the security and power of Annales history as a continuing commitment to interdisciplinary research. Furet nonetheless maintains that history must continue to diversify through an interdisciplinary methodology, and that it must remain “all-embracing” in order to comprehend the social phenomena with which it is most closely concerned (1983: 392).

If Braudel saw structuralism as a crisis for history in 1958, and Le Goff and Nora felt aggression from the social sciences in 1974, the current crisis stems from post-positivists, who maintain that history’s newest challenge is no longer a self-critique, but rather a critique of
the postulates of social science itself (Chartier 1988). It is argued that this crisis, which affects all human science, revolves around two themes: (1) the scale adopted for analysis, and (2) the cognitive implications of practicing and writing human science (Les Annales 1988: 291–3). These two themes are linked, it is argued, by the failure to acknowledge the relationship between the subjective human scientist and objective reality. If in previous generations nobody questioned the fundamental correspondence between historical or ethnographic sources (however falsified, perforctory, or even lacking they may have been), on the one hand, and past reality, on the other, today’s consciousness has undercut this implicit consensus, and forced human scientists to acknowledge that the sources themselves may have been constructed, in specific ways and towards specific ends (Chartier 1988: 45; Ginzburg 1990: 22).

However one regards the post-positivist critique, it must at least be acknowledged as an issue (or several issues—e.g., Tilley 1989a) that must be addressed. Chartier’s (1988) account of philosophical introspection in history, its uncertainty about truth, reality, and practice, and its methodological limitations “dressed up as theoretical innovations . . . , the same ultimate muddle” (Chapman 1989: 550), echo the refrains of critical theorists and post-processual archaeologists. To place archaeology in its dialectic context with Annales, and thus to examine the two-way relationship between social structure and human action (Hodder 1987: 7), it is necessary to look not only at the social generalizations of first- and second-generation Annalistes but also at the more integrative, behavioral efforts of the third and fourth generations (Bailey 1981: 106; Furet 1983; Hunt 1986; Lewthwaite 1988b).

Annales, archaeology, social theory and time

The past is a foreign country; they do things differently there. (L. P. Hartley, The Go-Between)

Early Annales scholars pursued a “scientific history” and were confident that this would provide general laws to explain historical change (Stone 1979: 4–5). With their emphasis on mentalités and input from social anthropology, demography, and cultural ecology, the fourth generation has redirected research effort from matters global and systemic toward resolution of definable, more readily circumscribed problems (Lucas 1985: 8). The gap created by the collapse of Braudelian economic and demographic determinism, however, has yet to be filled by any ideological, ideational, or cultural model (Stone 1979: 13, 19).

Annales history, nonetheless, succeeded in substituting the study of anonymous people for that of great men, a model of continuity and discontinuity for a model based on change alone, and the analysis of rudimentary, material culture for the testimony of “great literature” (Furet 1984: 74). In Birnbaum’s view (1978: 230), the tasks of “contemporary” Annales historical analysis are five:

1. to establish distinctive temporal periods;
2. to indicate major lines of development within each;
3. to identify and measure regularities specific to each;
4. to recognize innovation and the emergence of new structures within and between eras;
5. to posit a range of elements that helps to isolate and explain continuity or change within and between periods.

Another recent focus of research published in Annales: ESC is the analysis of cultural systems, a shift in emphasis that poses for historians an array of questions already raised by archaeologists, anthropologists, sociologists, and philologists (Revel 1978: 17–18; Snodgrass 1982). Such a trend, however, is only the most recent Annales attempt to construct a positivist “total history,” and to examine the “inner inter-connectedness” of culture and society (Birnbaum 1978: 232), pursuits already familiar to, if seldom undertaken by, most archaeologists.

One of the Annales’ most significant achievements has been to force historical attention on social theory. Although Annalistes characteristically rejected any single theoretical principle, it was felt that major historical enquiries ought to contain a set of generalizations that would relate the model employed closely and clearly to an individual situation (Chiroit 1984: 40). Concepts and theoretical formulations associated with mentalité postulate that human intentionality and praxis affect social change, a highly contentious issue in contemporary archaeological theory (Trigger 1989: 355). The Annales lack of a comprehensive theory of social change may be attributed to a skepticism over any approach whose propositions could not be verified empirically. Such skepticism, however, does not remove the need for theoretical formulations that treat social, behavioral, or politico-economic factors often disregarded by archaeologists and Annalistes alike: cognition, praxis, ideology, and power (Iggers 1975: 73; Stone 1979: 10).

Alain Schnapp (1981) has pointed out several areas of disciplinary overlap between archaeology and Annales:
(paleo-)ethnobotany, archaeometry, the concept of treating material/documentary patterns (e.g., seriation, "serial" history); he also emphasized that early Annalistes had somehow managed to overlook the major social and theoretical contributions of V. Gordon Childe (1981: 470–1). Whilst it is necessary to be aware of such links or omissions, the thrust of this overview is instead to highlight the major themes that permeate the outlook of the two disciplines.

With its emphasis on time, space and change, archaeology is structurally similar to history (Leone 1978: 30), particularly to Annales methodology in history. Furthermore, although archaeologists, like geographers, observe material data rather than social facts (Wagstaff 1987: 34), the two share a basic interest in modeling the spatial operation of power and dominance, conflict or co-operation, and other human action (Renfrew, 1983); in this light, Cherry suggests that archaeology, may be viewed as "political geography in the past tense" (1987: 146). Similarly, some Annales historians have sought to examine the ideological aspects of domination within sociocultural and institutional contexts (Le Goff 1971: 4–5).

Archaeology's unique frame of reference (as repeatedly noted) is the study of long-term diachronic change (e.g., Renfrew 1981: 264). Like the historian, the archaeologist can only interpret the past by looking through time-coloured lenses; different archaeological perceptions of time, however, diverge in the extreme (e.g., cf. Bailey 1983, with Shanks and Tilley 1987: 118–36). Nonetheless, within defined temporal boundaries, archaeology aims to interpret regularity or discontinuity in the spatial disposition of economic, social, and political relationships in human society, many of which are intended to overcome what Braudel called "distance, the first enemy" (1972: 355; Renfrew 1981: 267).

Most scholars who work today beneath the Annales banner find Braudel's structural–ecological determinism seriously flawed (Forster 1978: 64; Clark 1985: 189–96). Yet Braudel's hierarchical temporal rhythms – episodic, cyclical, structural – do not represent fundamentally different orders of reality (Binford 1981: 197), but rather inclusive aspects along a continuum. Such multiple, hierarchical time scales provide for archaeology an heuristic framework in which to conceptualize time and change in prehistoric or protohistoric society (Smith, Fletcher, this volume). The diachronic dimension of archaeological phenomena is central to their analysis: excavated data and documentary or ethnohistoric "facts" must be categorized abstractly, measured, compared, and – where possible – considered probabilistically.

With traditional archaeological and historical concepts of time, periodization attempts to define a sequence of events, represented as discontinuities but described in a narrative mode of continuity. In contrast, processual (and post-processual) archaeologists and serial historians attempt to discuss sequential "events" in a mode of discontinuity (Furet 1984: 48–52). Although Braudel always remained vague about the precise relationship between structure and event, and thus about discontinuity and change, his students and successors recognized that social structures could constrain human behavior, just as human behavior could have unintended consequences for social structure (similarly Giddens 1979). If human actions are regarded as points of articulation with social, politico-economic, or ideational structures, they may serve analytically as intersections that reveal configurational change in material and historical pattern. Events are not historical facts, but heuristic reconstructions, like structures and conjunctures, intended to provide insight into cultural pattern and process, and into human action.

Material culture forged the earliest and pre-eminent link between archaeology and the Annales tradition (Schnapp 1981: 469–70), and Leone recognized almost twenty years ago the significance and potential for archaeology of the material aspects of human behavior (1972: 18):

At the moment, material culture as a category of phenomena is unaccounted for. It is scattered between interior decorators, adverising firms, and historians of technology. But when one considers how little we know about how material culture articulates with other cultural subsystems, one begins to see the potential. There exists a completely empty niche, and it is neither small nor irrelevant. Should archaeology become the science of material objects or technology, many of the aims, problems, methods, and data of the field would be completely transformed.

As the product of human behavior, material culture is not simply a passive reflection of past social systems, but rather an active entity in the creation and maintenance of social relationships ( Hodder 1987:6–7). Although archaeology still lacks adequate theories on material culture (but see Moreland, this volume) and on the nature of the material component of human community life (Fletcher, this volume), the material "constructions" of cultural similarities and differences, of historical continuity and discontinuity, play a role in the dialectical relationship between structure and event (Hodder 1987:8).