lels for the passage-grave series. Neither author explicitly admits intrusion from the Continent, but the (current) European chronology for passage-graves does not suggest that the British and Irish examples were the earliest, and a Continental origin in fact remains probable. The "Beaker" phase remains unavoidably attributable to intrusions from the Continent, and to some now seems an even more complex welter of intrusions than formerly! Burgess concludes that there was limited immigration from Brittany in the Early Bronze Age (p. 187), and he cautiously suggests further limited immigration from northern France at the beginning of the Middle Bronze Age (p. 217). Around 1100 B.C. he suggests an incursion of "Urn-Field" warriors from the Continent (p. 207), and in the 7th century B.C. an incursion of raiding/invading Hallstatt warriors (pp. 211–213). Burgess is not enthusiastic about explanations based on invasions, but feels that the available evidence supports these interpretations. For the Iron Age (chapter 6) Cunliffe provides a quick introduction to the historical assumptions that first furnished the "invasion model" for later British prehistory, and to its application to the Iron Age from the 1890's to the 1960's. He appears even less enthusiastic about invasions than Burgess. Nevertheless we have references to La Tène incursions in the 5th to 4th centuries B.C. (p. 255) and to the Belgic invasions in the 2nd century B.C. (p. 257). These last are referred to by Caesar and are not denied by the archeological evidence. Thus, for all the right, proper, and usually justified reaction against the former almost universal application of the "invasion hypothesis," it stubbornly remains, however its eminence is attenuated.

Why should this historically derived model appear more frequently justifiable and more difficult to avoid as we move later in time? Some maintain this to be a reflection of ethnographic reality in that later prehistoric groups, being, it can be argued, larger and more organized politically, had more incentive to migrate and were better able to exploit conquered territory (and peoples?). This viewpoint is certainly plausible and deserves respect. But it also can be argued that, as the archeological record approximates more and more closely to historically known societies, it can be interpreted in some respects with rather less ambiguity. Thus, in the 1st millennium B.C., the prehistoric archeology of Britain takes on an increasingly familiar aspect. Hill-forts, bronze and iron weaponry in increasingly effective and diverse forms, and linguistic reconstructions indicative of population movements, not to mention the earlier classical references to incursions of northern "barbarians" into the Mediterranean world, all promote an interpretative climate in which invasions are indeed plausible agents of cultural change. With far less adequate historical or ethnographic models for comparison, the far less familiar Britain of the 4th and 3rd millennia B.C. may appear less amenable to the "invasion hypothesis" partly because it is, simply, less familiar.

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Prehistory in France

France before the Romans. STUART PIGGOTT, GLYN DANIEL, and CHARLES MCBURNEY, Eds. Noyes, Park Ridge, N.J., 1975. 240 pp., illus. $28.

This synthesis for students and scholars of the archeological data for the proto- and prehistory of France is marked by four chapters translated from the French that provide English readers with the rich detail of French archeology. Contributions by eight authors are arranged chronologically into seven chapters that begin with the Lower Paleolithic and end with Roman Gaul. Editorial comments by Charles McBurney are incorporated as footnotes into two chapters, and comments by the other two editors form a summary chapter; these provide additional views, for example on the origin of the Upper Paleolithic Solutrean beyond France and the astronomical significance of Brittany megaliths.

The editors identify the book as culture history with an emphasis on chronicle, and make allowances for sparse explanation. As a chronicle of material culture, it stands as a welcome reference; but, with reconstructions of past lifeways barely discernible and explanations for culture change weak, the book is not good culture history. Stratigraphy, chronology, and typological relationships characterize the three chapters that cover the period ending in 4000 B.C. The treatment of later prehistory, likewise, focuses largely on the careful correlation in time and space of such objects as Urnfield poppyhead pins, details of funerary customs, and ceramic changes for the purpose of identifying regional and temporal divisions, and not on the socioeconomic and demographic processes that underlie the sequences.

Data for reconstructions are incomplete, admittedly, but the reader is too often left with disconnected house counts, population estimates, and seemingly endless details about funerary architecture and grave goods which, as Jacques Briard assures, say much about social structure, but which as presented permit only the most obvious and general conclusions about social stratification during the Bronze Age. For the Lower Paleolithic, McBurney fails even to mention the Acheulian base camp of Terra Amata at Nice, complete with superimposed seasonal occupation floors, shelters, and a large inventory of organic remains (see H. de Lumley, "A Paleolithic camp at Nice," *Sci. Am.* **220**, No. 5, 42 [1969]). There is also no serious attempt to discuss the subsistence-settlement system of the Mousterian, and the behavioral implications of the functional-statistical approach are lost by being bracketed between more lengthy descriptions of the typological-statistical and diachronic approaches. While technological and typological characteristics of specific Upper Paleolithic cultures are presented in detail, those of habitation, subsistence, and the like are summarily treated for this stage.

More pronounced than reconstructions are the major modes of explanation of culture change used: (i) population displacement; (ii) a biological model for industrial change; (iii) environmental conditions; and (iv) socioeconomic processes. McBurney uses the first to explain the abrupt break between the Mousterian and Upper Paleolithic; whereas Denise de Sonneville-Bordes uses the second to argue for an indigenous development of the Upper Paleolithic from the Mousterian in France, and to reaffirm her view of a genetic link between the temporally separated Perigordian I and Perigordian II on the basis of similar techniques for backing blades. The second mode is also evident in Max Escalon de Fonton's tracing of the genetic links through industrial mutations between the Azilian, Azilio-Sauveterrian, Sauveterrian, and Tardenoisian. The biological model has been discredited elsewhere (see S. R. Binford, "Early Upper Pleistocene adaptations in the Levant," *Am. Anthropol.* **70**, 707 [1968]).

The third mode is derived from Grahame Clark's study (*Prehistoric Europe: The Economic Basis*, Methuen, 1952), which first viewed European cultural changes as adaptations to dynamic post-Pleistocene environmental conditions. It is most fully developed by Escalon de Fonton to explain the indigenous development of a pastoral economy during the Mesolithic Castelnovian and Early Neolithic Cardial sequence (6000–4000 B.C.) in Provence as a response to desiccation; and by Gerard Bailloud, who relates the cultural uniformity in the French Midi and cultural diversity in north France during the Middle Neolithic, and the reverse condition during the Late Neolithic, to temperature and hu-

midity changes that characterized the shift from the Atlantic to the Subboreal period.

The fourth mode has been stimulated by the recent recalibration of the radiocarbon time scale by dendrochronology that now dates European developments, such as megalithic architecture, earlier than the supposed Mediterranean prototypes, thereby undercutting the prevailing models of diffusion or migration from the Mediterranean and stimulating a search for causes for the rise of indigenous European cultures (C. Renfrew, *Beyond Civilization*, Knopf, 1973). Colin Renfrew combines in a systems model developing economy and technology, trade and exchange mechanisms, population densities and growth, and levels of sociocultural integration.

While there are no direct parallels to Renfrew's models in the book, some problems in French prehistory are seen as ultimately being explained by socioeconomic and demographic causes. One is the expansionist tendency of the Middle Neolithic Southern Chassean culture in the French Midi described by Bailloud. Briard mentions the new chronology that places the Wessex and Armorican cultures of southern Britain and Brittany, respectively, earlier than the sustained trade with the Aegean, but he does not adopt it; however, his brief explanation for the development of these warrior aristocracies as primarily the result of their monopolization of internal trade, rather than long-distance trade, is similar in outline to the one by Renfrew. Briard does not attempt a socioeconomic explanation for the subsequent Urnfield expansion as others have (see D. Collins *et al.*, *Background to Archaeology*, Cambridge University Press, 1973), but he does relate the Hallstatt incursions to the economic collapse of the cultures dependent on bronze metallurgy following the introduction of iron. Also, the development of three main 6th century B.C. cultural foci with overlapping zones of influence (one of which was the Greek colony at Massalia) is explained by F. R. Hodson and R. M. Rowlett as the result of economic ties between the Mediterranean and interior European peoples for the flow of prestige items associated with wine drinking to the north and, perhaps, tin and salt to the south.

The book fulfills in splendid detail the requisites of a major reference, the synthesis of literature and description of material culture. But the lack of adequate reconstructions and explanations, together with its high price, will likely restrict its wider use as a text.

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Interpretation of Intellectual Diversity

Culture and Thought. A Psychological Introduction. MICHAEL COLE and SYLVIA SCRIBNER. Wiley, New York, 1974. x, 228 pp., illus. Cloth, $8.95; paper, $4.95.

Modes of Thought. Essays on Thinking in Western and Non-Western Societies. ROBIN HORTON and RUTH FINNEGAN, Eds. Faber and Faber, London, 1973 (U.S. distributor, Humanities Press, Atlantic Highlands, N.J.). 400 pp. $20.

Most cultures think more highly of themselves than of their neighbors. They have a sense of the superiority of their own values and customs. More often than not most cultures agree that the thought processes and beliefs of the other, the outsider, are confused, deficient, childlike, or at least erroneous.

Modern cultures and their intellectual spokesmen fully participate in this reciprocal denigration. William James told an Oxford audience in 1909 that the "German mind" lacked an affinity for "truth's natural probabilities" (*1*). Only a few years later, before a Parisian audience, Emile Durkheim described William James's pragmatism as a national threat, a foreign intellectual product of the "Anglo-Saxon milieu" (*2*). Contemporaneous German audiences heard a different message. The French and Anglo-Saxon mind, they were told, was bound by fact not reality. It was superficial not deep, artifically manufactured not organically grown (*3*). Today a global audience hears from some psychologists of the deficient "cerebral endowment" of whole ethnic groups.

The two volumes under review are attempts to assess such intertribal characterizations and repudiations against standards of empirical and conceptual adequacy. What role should we grant to terms like "mind," "mentality," "cerebral endowment," and "milieu" when we go about describing and explaining another people's thought processes and beliefs, and ultimately our own?

Cole and Scribner's *Culture and Thought* is a review of the experimental psychological literature on thinking in various cultures. The review is animated by a single question: Are there differences in the intellectual processes of people reared in different cultures? By means of a format organized according to such categories as perception, learning, memory, classification, problem solving, and reasoning, Cole and Scribner prepare the way for a final, climactic chapter in which they (i) admonish those who would infer that "poor performance on a particular test is reflective of a deficiency in or lack of 'the' [intellectual] process that the test is said to measure" (p. 173); (ii) argue that "experiments are unlikely to allow us to rank different people in terms of the 'existence' or 'amount' of any particular cognitive process" (p. 176); and (iii) try to persuade us that the investigation of how people think in relation to what they think about is a more fruitful topic than the study of individual or cultural "mentality" differences. Thus Cole and Scribner suggest (pp. 176, 193–194) that experiments will allow us to consistently rank *situational* features (for example, the experimental task) in terms of the cognitive processes they elicit. Cole and Scribner's answer to their guiding question is clearly no. The same intellectual processes are available to members of all cultures.

Culture and Thought is an excellent introduction to many of the theoretical issues and much of the pertinent empirical literature that help define the field of cross-cultural psychology. Numerous hypotheses concerning the relationship of cognition, language, and culture are weighed against the available evidence, often to be rejected. These include Whorf's hypothesis that the language we speak is decisive for how "we cut up nature, organize it into concepts, and ascribe significances as we do," a series of claims concerning the influence of cultural experience on visual perception, and a number of propositions about the superior memory and inferior abstract reasoning abilities of people in nonliterate cultures. Suggestions for future research are interspersed throughout the volume.

Intellectual diversity is an undeniable fact. Its interpretation is rarely unequivocal. People differ in the precision of the concepts they use, in their memory of certain events, in the speed with which they acquire certain skills, and so on. Yet, a decisive explanation of these intellectual differences may be forthcoming from (i) theories concerned with what was thought about, or the *content* of thought (for example, familiar or unfamiliar materials, matters pertaining to oneself or to others); or (ii) theories concerned with who did the