Man's Circuitous Route to the Modern World

Mankind, endlessly restless, moves into and out of phases of civilization.

Robert H. Dyson, Jr.

The late anthropologist, Alfred Kroeber, in discussing the formation of cultures once wrote "Every culture is an accretion. . . . It is the end product of a long series of events occurring mostly in other cultures, accidents from its own point of view, but ultimately of influence upon it." The mechanics of such cultural development are admirably illustrated by the 13 pictorial chapters and essays presented in **The Dawn of Civilization** (McGraw-Hill, New York, 1961. 404 pp. $23.50, until 15 March 1962; then, $28.50), edited by Stuart Piggott.

Some of the contributing authors are already well known to readers of general works in the field of art and archeology by virtue of their own masterly contributions to that field; others, less widely known perhaps, now make a significant contribution through their synopses of regions hitherto neglected in Western literature. The combined result of these talents is a book which brings the prehistory of the major cultures of the Old World, in particular, into fresh focus for the general reader and which provides a broad orientation for the student and the teacher as well.

The format of this volume was inspired by a series of articles entitled "The Epic of Man" which appeared in *Life* magazine during 1955 and 1956. Greater coverage and much additional illustrative material in color and in black and white leads the reader through a logical progression in time and space: The hunters and gatherers of the Stone Age (Grahame Clark); The beginning of village and urban life (James Mellaart); Mesopotamia and Iran (M. E. L. Mallowan); Ancient Egypt (Cyril Aldred); The sea peoples of the Levant (William Culican); The early settlement of Anatolia (Seton Lloyd); The Aegean before the Greeks (M. S. F. Hood); Ancient India (Sir Mortimer Wheeler); China (William Watson); The diverse traditions of South East Asia (Anthony Christie); The nomad peoples of the steppes (E. D. Phillips); Barbarian Europe (T. G. E. Powell); and The birth and growth of New World civilization (G. H. S. Bushnell). An excellent introduction and an epilogue are provided by Stuart Piggott, the editor, along with a selected bibliography for each chapter and a list of the sources for the illustrations. Each chapter is introduced by a map of the area to be discussed and, where practical, by a comparative chronological chart of the cultures of related areas. The subtitle of the book, "The first world survey of human cultures in early times," promises somewhat more than is actually covered, since Africa outside Egypt is largely omitted, while the complexities of archeology in the New World are reduced to a single chapter. Nonetheless, through the inclusion of the cultural history of such areas as South East Asia, Central Asia, and Europe, the major centers of the Old World (Egypt, Sumer, the Indus, and China) are brought into relationship with one another and with their hinterlands in a way which, for once and for all, should show the inadequacy of the standard compartmental approach to ancient history.

The ebb and flow of thought and form between the areas described is constantly stressed in the selection of the many excellent colored plates and in the text: Sumerian cylinder seals appear in Egypt before 3000 B.C.; Indus valley script occurs on seals in Sumer around 2300 B.C.; socketed bronze celts are shared by southern Siberia and Shang China by 1200 B.C.; a Roman lamp turns up in Thailand in the 3rd century A.D., and so on. Mostly, such objects are trade items marking the route of more perishable goods carried by traveling merchants. With them moved a growing wealth of ideas and an increasing knowledge of the world at large. The process of shrinkage of the world, so visibly accelerating in the present day, had already begun.

The vast data of the study of prehistory are made logical and intelligible through a judicious choice of photographs, artists' reconstructions, and the chronological ordering of cultures within a geographical framework. At the same time the strangeness of the names, the condensed nature of the information, and its quantity will not make light or easy reading for the average reader. Perseverance on his part will, however, reap a rich reward in the general understanding of the circuitous route by which man has reached the modern world. Reading about this subject is made easier by the self-contained nature of each chapter; one is enabled to deal with the book a piece at a time without loss of comprehension. Each chapter presents the most recent evaluation of the problems it contains, as set forth by its particular author. The book as a whole, therefore, is an excellent introductory text, while at the same time it forms a major reference point for scholars. Each author has, of course, a different background, and as these backgrounds shift from anthropology to art history or ancient history, there is a corresponding shift of emphasis in the text. The editor, Stuart Piggott, is to be congratulated on holding these differences to a minimum. As a consequence he has produced a reliable and instructive text by virtue of having had an authority write each chapter, while maintaining a common standard for style and presentation which provides an over-all unity.

Much of this book would have been difficult, if not impossible, to write at the end of World War II. The fact that it has now been published is a measure of the progress which our study of mankind has made during these last years. Temporally, our horizons have been pushed farther and farther back by the remarkable fossil discoveries in Africa—the antiquity of man the tool-

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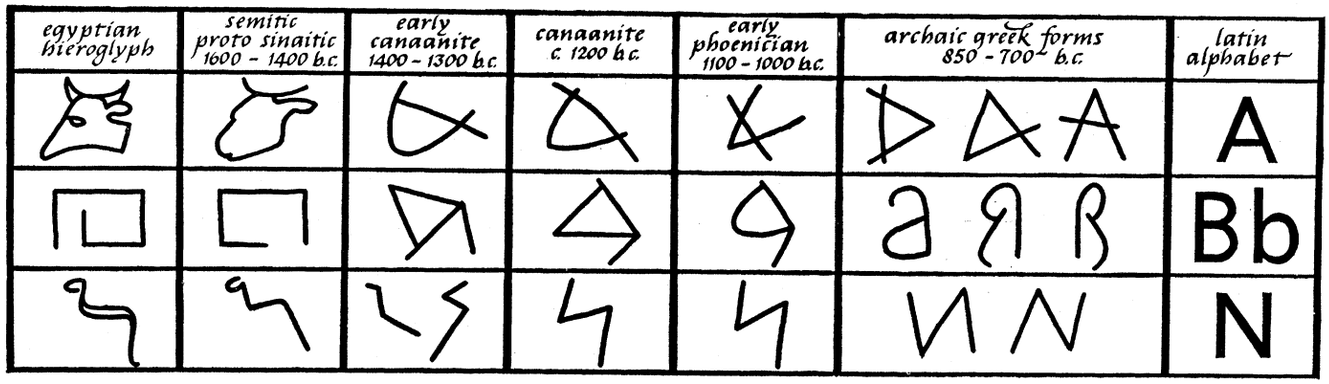

Fig. 1. Development of the alphabet. Diagram shows how *aleph* (an ox), *beth* (a house), and *nun* or *nahas* (a snake), evolved into the letters A, B, and N of our alphabet. [From *Dawn of Civilization*]

maker being perhaps more than twice as great as previously estimated, according to the latest atomic dating. Equally important, the beginnings of food production now appear to be two or three thousand years older than anyone would have dared to suggest 20 years ago. Spatial lacunae are also being filled, with the gradual application of modern excavation methods to India south of the Indus, Oceania, and so on. The continuing refinement of the established archeological yardsticks in major centers like the Indus, the north China plain, and the Near East allow the gradual integration of data from more marginal regions like central India, south China, and central Asia into the known picture. The result is the emergence of a view of the continental land mass of Eurasia as a functioning whole where events in one area lead to events in another. Indo-Europeans migrate from the Caucasus through Iran into India, changing the course of civilizations of the second and first millennia B.C. drastically; nomads flee the borders of an expanding Han China only to storm the frontiers of a belligerent Roman empire; Indonesians settle in Madagascar, bringing South East Asia to Africa. Mankind, endlessly restless for a multitude of reasons, is seen constantly on the move from place to place as well as into and out of phases of civilization.

Civilization Defined

The use of that word "civilization" brings to mind the title of the book and leads one to ask just what it is that is "dawning." For an answer we may turn to Piggott's introduction. "In this book," he says, " 'civilization' is used to mean a society which has worked out a solution to the problem of living in a relatively large permanent community, at a level of technological and social development above that of the hunting band, the family farmstead, the rustic self-sufficient village or the pastoral tribe. Civilization is something artificial and man-made, the result of making tools of increasing complexity in response to the enlarging concepts of community life evolving in men's minds" (page 11). Equally succinct is Wheeler's statement in the chapter on the Indus: "Civilization, in a minimum sense of the term, is the art of living in towns, with all that the condition implies in respect of social skills and discipline. . . . More particularly, it is held to include a systematic method of accounting, so that revenue and wages may be adequately registered, and orderly government ensured. *Writing*, in some form or other is on this view a pre-supposition" (page 243). And he adds a comment to the effect that writing should not be overemphasized to the detriment of the achievement of nonliterate peoples. (After all, most of the great technological discoveries in the periods covered occurred before the invention of writing: grinding and polishing of stone; pottery; the wheel; domestication of plants and animals; the use of copper, gold, and lead; boats and the sail; brick architecture; spinning and weaving; and so on.) As a means of making "civilization" objective for archeological purposes, the use of the appearance of writing in conjunction with the remains of urban living is convenient. By admitting writing as a major criterion of civilization archeologists follow the lead of the 19th century anthropologists Tylor and Morgan, who originally proposed it as the basis for differentiating an earlier stage of "Barbarism" from a later stage of "Civilization." The importance and connection of writing with urban life in its early stages is made more explicit by Mallowan in discussing Mesopotamia. "Trade, the organization of labor, sustenance of the people, cultivation of the land, required an elaborate social organization and a bureaucracy capable of maintaining records of its transactions. The necessity of establishing title to property, close supervision over the distribution of goods, the care of rations for all kinds of workers employed by the state could not have been systematically organized in these expanded communities without the aid of written records. The invention of writing was therefore indispensable to the concentration of life in cities" (page 83). The uses to which writing was put, who understood the writing and had access to it, and how it evolved are long stories in themselves. From the first pictographic signs (see Fig. 1) through intermediate scripts to the alphabet was a period of nearly 2000 years; from the first pictographic inventories to known connected historical records was a matter of nearly 1000 years; while universal literacy is a goal toward which the world still struggles, some five millennia later.

The operational definition of "civilization" adopted by archeologists (urban existence plus writing) pinpoints a specific time and place where "civilization" first occurred; namely, in the Uruk period in southern Mesopotamia, just prior to 3000 B.C. Significantly, the primitive condition of writing leaves us uninformed as to the ideological content of the culture at this important moment. The full light of history follows quickly, however, as does the

birth in quick succession of civilization in Egypt, India, and China. The sharp contrast between the precivilized and the civilized worlds from our vantage point is neatly drawn by Seton Lloyd. "The clear historical character of this later period, the evidence of political development and religious thought, the sequence of royal names and the battles or treaties associated with them, all serve by contrast to emphasize the drab impersonality of the 'archaeological' ages which preceded it, where the biography of a nation can be written only in terms of broken pottery and the discarded belongings of its most humble artisans. Yet, even in this obscure half-light of 'material cultures' and 'racial criteria', . . . brief moments of illumination do intermittently occur" (page 185).

Illuminating, Brief Moments

The pictorial parts of *The Dawn of Civilization* provide an assemblage of many such "brief moments of illumination" in our knowledge. The sum total of the 940 illustrations underlines the astonishing richness of the human imagination, faced with a multitude of environments and varying amounts of knowledge, in its ability to represent in material form the world of reality as well as the equally important world of dreams. Most philosophers would probably agree that while the birth of civilization is important, the birth of imagination and the consequent world of thought is even more fundamental to the human condition. Regretfully, the early stages of this obviously rich landscape of the mind are largely lost to us. Yet, even so, from the multitude and complexity of the objects set before us in this volume something of its quality and meaning may be inferred. The anthropologist, Loren Eiseley, describes this "dream world" in one of his essays. "It was a weird multiheaded universe, going on, unseen and immaterial save as its thoughts smoldered in the eyes of hunters huddled by night fires, or were translated into pictures upon cave walls, or were expressed in the trappings of myth or ritual. The Eden of the eternal present that the animal world had known for ages was shattered. . . . Through the human mind, time and darkness, good and evil, would enter and possess the world."

Earth's Yesterday

History of the Earth. An introduction to historical geology. Bernhard Kummel. Freeman, San Francisco, Calif., 1961. xiv + 610 pp. Illus. $8.75.

Has the geology instructor ever been confronted by so many new textbooks on historical geology? Moore's *Introduction to Historical Geology* (1958), the veteran among the five, is still valuable. Distribution maps, correlation charts, the wealth of photographs and diagrams, and the mature treatment of the material make it a good classroom and a good reference book. To my mind, Dunbar's *Historical Geology* (1960) is too simple and easy, largely because it avoids the interesting problems. Stokes' *Essentials of Earth History* (1960) is very strong on the organic side, with excellent chapters on evolution, migration, and similar subjects. Clark and Stearn's *Geological Evolution of North America* (1960) is the first truly regional text published in some 30 years; the diagrams alone make it tempting.

As a traditional text, Kummel's book has unusually full introductory chapters as well as an excellent treatment of the Paleozoic, Mesozoic, and Cenozoic eras of North America and of the life of those eras. But what is new and different in Kummel?

This is the first textbook to give the history of all continents, rather than just that of North America. Now we have an over-all view. No longer are we trapped in the Appalachian geosyncline—we see what is happening at the same time in other parts of the world. Nor are we misled into thinking that the Triassic is all red and nonmarine; Tethyan history is enlightening. The Cenozoic of the Alps, the Himalayas, and the Philippines is treated briefly but exceedingly well. These chapters are valuable both for current study and for permanent reference.

Also completely new is the chapter "Gondwana formations." Discussion ranges widely, from rock type to glaciation, from *Glossopteris* flora to paleomagnetism. The chapter is a marvel of condensation and completeness and an outstanding example of what a "problem chapter" should be.

Throughout the text the unifying theme is "evolution and interrelations of mobile and immobile belts." Local detail is held to a bare minimum, and attention is focused first on geosynclines and then on stable areas. This is not new, but it is clearly and consistently worked out.

Also, the author has brought in a wealth of new material or has revitalized the familiar. Examples are: the history of the ammonoids (pages 215–16 and 287–92); geographic range of fossil reefs (pages 296–97); Pleistocene climates (pages 468–78); and the extended account of the evolution of man (pages 483–505).

Not everything in the book meets with my approval. I think the author has gone completely overboard in favor of "tectonism"; I wonder why there are eugeosynclines on only the maps of North America. I regret that we are told nothing about the "how" of oil in the Middle East. Also, the next edition must have more extensive bibliographies, especially for students. I can find out what "G. G. Simpson, 1953" refers to (in Fig. 14-36, page 465), but a first-year student, or even a more advanced one, needs encouragement to look up anything.

Which book to choose? If you are already using a familiar, straightforward text, without complications, you may want to stick to it. If you want a challenging, somewhat difficult text, one that everywhere shows the intelligence and learning of its author, a complex book with many facets, then you must consider Kummel's volume.

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Sherborn's Index Extended

An Index to the Genera and Species of the Foraminifera, 1890–1950. George Vanderbilt Foundation, Stanford University, Stanford, Calif., 1961. 393 pp. $10; unbound, $9.

This volume, which is similar in style to the annual indexes published by Hans Thalmann for many years, provides students of the Foraminifera with an invaluable tool, for it covers all newly proposed generic and specific names that appeared in the literature between 1890 and 1950.

In 1955 the Smithsonian Institution reprinted Charles Davies Sherborn's *An Index to the Genera and Species of the Foraminifera.* Sherborn's volume, long