Early Civilization in China

Shang Civilization. KWANG-CHIH CHANG. Yale University Press, New Haven, Conn., 1980. xviii, 418 pp., illus. $30.

During the 18th century B.C. in the Yellow River alluvium of North China arose one of the earliest civilizations of China. The Shang left remains of walled cities with palaces and temples built on stamped earth foundations, numerous inscribed bones and turtleshells used in oracle-taking rituals, and large tombs where the elite were buried with sumptuous grave offerings, including many bronze vessels and hundreds of humans sacrificed in their honor. Very simple graves, houses, and tools of the common folk, by contrast, suggest vast differences in wealth and power that existed in that society.

In *Shang Civilization* K. C. Chang does a superb job of presenting "a brief but comprehensive history of the Shang civilization . . . drawing upon available sources of all kinds" (p. xiii). These sources include the corpus of historical texts, written or edited after the fall of Shang about 1100 B.C.; ritual bronzes with their changing decorative styles; some 100,000 inscribed oracle bones and turtle shells, almost all of which were actually or purportedly recovered from the last capital at An-yang; other archeological materials; and "middle-level theoretical models" based on cross-cultural comparisons.

More than half of the book is devoted to An-yang, excavated since 1928, for which the data are most complete. Chang's careful presentation and examination of relevant materials point up not only what is known but also what is not known. Available archeological data are sufficient to construct a schematic model (p. 130) of what is called a special type of urbanism in which a number of agricultural and industrial settlements were linked with a ceremonial-administrative core, but apparently not to demonstrate the actual layout of this network or to estimate the population size, because in many cases only small portions of the sites have been excavated. Archeological evidence concerning the economic base of the Shang society is rather slim. There are animal bones and tool assemblages, but no plant remains. Reconstruction must rely on oracle bones, which refer to large numbers of cattle being sacrificed, suggesting large herds, to frequent hunting expeditions, which Chang thinks were not merely for royal pleasure, and to ritual uses of several grains, whose botanical identities, it appears, are still debatable. A heavy inflow of raw materials and finished goods to the Shang capital is suggested, but the paucity of mineralogical analyses makes it difficult to determine whether pottery was locally manufactured or imported and where jade, tin, and copper were actually mined. If the cowrie shells were indeed currency, they may indicate a market economy, but oracle records, unlike the cuneiform of Mesopotamia, are silent on economic transactions. Therefore the role of the state in the procurement and distribution of resources is unclear. With respect to the ongoing discussion of the relative importance of population pressure, irrigation agriculture, competition and warfare, economic exchange, and religious integration for the rise of state and civilization, the Chinese data, which were not collected with anthropological models in mind, have limitations. Religion and warfare appear to loom large in the case of Shang, but this may be because the data are skewed.

Although the stated aim of the book is to present "history," Chang hopes "to see to what extent our current thinking about Three Dynasties archaeology can be related to social evolutionary schemes and to the issue of state origins" (p. 362). In earlier works, Chang suggested that the first of the Three Dynasties, Hsia, may be represented by late Neolithic remains or by what were believed to be early Shang. He now chooses the latter alternative and states that the site of Yen-shih was the seat of Hsia dynasty. Early Shang remains still lie buried under the thick alluvium of the lower Yellow River in the area further to the east. Textual materials and radiocarbon dates suggest to Chang that Chou was already developing in the northern and western parts of the plain as early as the 14th century B.C. Hsia, Shang, and Chou, then, were successive dynasties only in the order in which they gained

Digging tool (*lei*) held by ancient sages as depicted in the stone art in an Eastern Han temple (after Jung Keng, *Han Wu-liang tz'u hua-hsiang lu*). "Shang implements that are attributable to uses in agriculture were probably manufactured of wood, stone, bone, and shell for the most part." Though some stone tools believed to have been used in agriculture have been unearthed, "the single most important agricultural implement of the Shang period may be a wooden tool that has largely eluded the archaeologist's spade thus far. This is the *lei* . . . widely mentioned in ancient texts. Many oracle bone characters concerned with cultivation contain a component in the shape of a two-pronged digging stick, the same shape attributed to the *lei* in Han art . . . , and it is likely that the basic Shang implement to turn over the soil for cultivation was such a digging stick." [From *Shang Civilization*]

political supremacy in the North China plain; as political entities they, along with many other states, were coeval. Thus, one of Chang's "laws of ancient civilizational development" states that "early civilizations came about only with a political situation in which more than a single state is involved" (p. 366). Such a situation existed in the plains of North and Central China, as it did in Mesopotamia, Mesoamerica, and Andean South America.

In numerous publications spread over two decades, Chang has emphasized the autonomous development of Shang civilization out of its local Neolithic antecedents. His earlier papers tended to characterize the distinction between the Shang civilization and the Neolithic Lung-shan cultures in terms of differences in the degree of cultural intensification. More recently Chang has leaned toward stressing societal transformation that may have been brought about by a breakthrough in military technology, such as horse-drawn chariots. This of course raises further questions: why did the Shang find it necessary to invest in military machines, and what were the causes for the hostile condition? Readers who look for Chang's latest thoughts on the process of this transformation in *Shang Civilization* will be disappointed. Nor will they find detailed discussion of individual elements that were integrated into Shang and other civilizations of early China. Wheat, which was used, but apparently not cultivated, by Shang people, is certainly of West Asian origin, and so possibly is the chariot. Though Shang bronzes are unquestionably distinctive in style and manufacturing technique, bronze metallurgy itself could very well be one of those items that the emerging civilizations incorporated from other sources. Chang has broadened the concept of local origin from that of in situ evolution out of local Neolithic in Honan to autonomous development within the North China plain, where several cultures interacted. Future examinations of the relationship between the North China "nuclear area" and the surrounding regions to the north, west, and south may indicate that early civilizations of North China arose as the results of still wider interactions, making it even more difficult to make clear distinctions between "pristine" and "secondary" states and between "primary urban generation" and "secondary urban generation."

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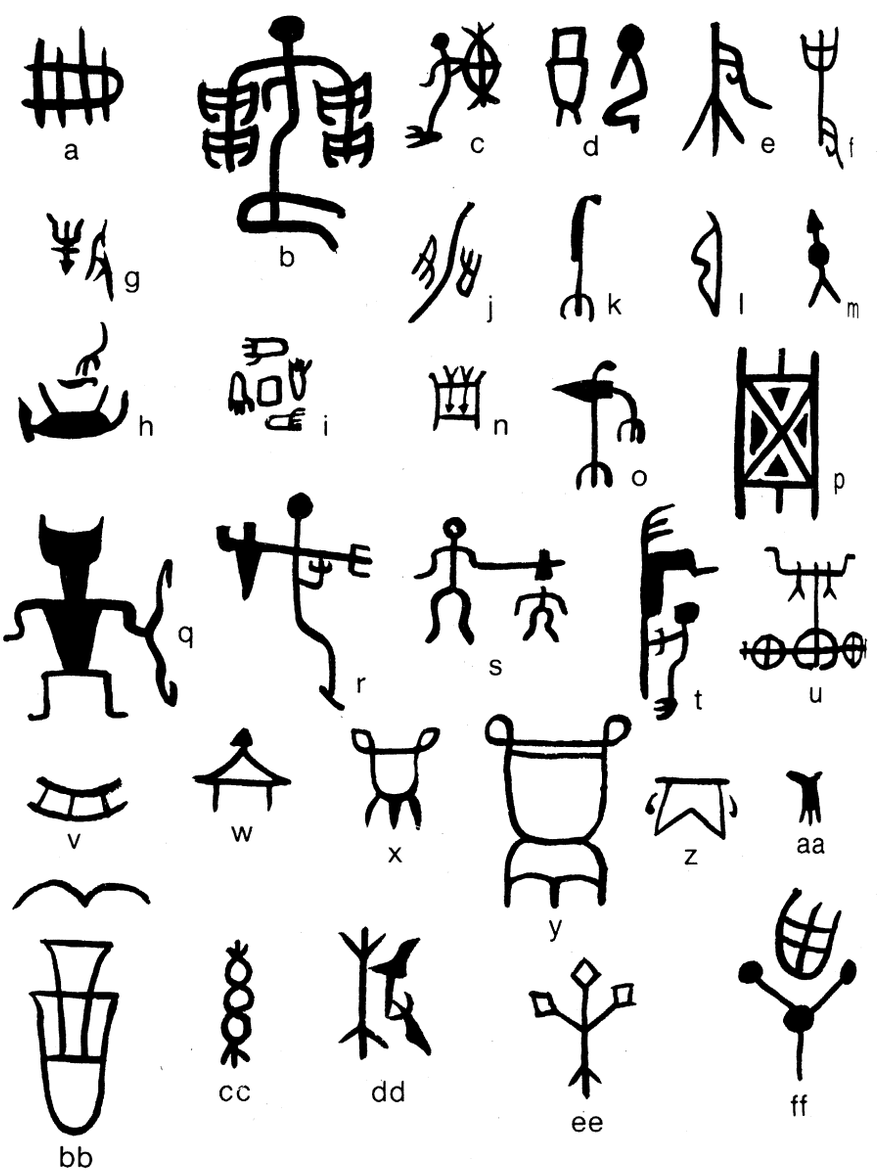

Emblems from Shang and early Chou bronzes that may be related to professions. *a*, animal herder; *b*, trader; *c*, carrier; *d*, food service; *e*, painter; *f*, archivist; *g*, herder; *h*, butcher; *i*, guardsmen; *j*, messenger; *k*, knife-maker; *l*, bowmaker; *m*, arrowmaker; *n*, quiver-maker; *o*, halberd-maker; *p*, shield-maker; *q*, bowman; *r*, halberder; *s*, executioner; *t*, flag-maker; *u*, chariot-maker; *v*, boat-maker; *w*, house-builder; *x*, *ting*-tripod-maker; *y*, *yen*-steamer-maker; *z*, *li*-tripod-maker; *aa*, chüeh-cup-maker; *bb*, wine-maker; *cc*, silk-maker; *dd*, woodsman; *ee*, orchard grower; *ff*, net-hunter. [From *Shang Civilization*]

River Fisheries

Fisheries Ecology of Floodplain Rivers. ROBIN L. WELCOMME. Longman, New York, 1979. x, 318 pp., illus. $45.

Large rivers with extensive floodplains such as the Ganges, Mekong, Nile, Zaire, and Amazon are the dominant aquatic features of tropical landscapes. This is not apparent from the perspective of the temperate zone, where lakes and ponds are conspicuously numerous. In lowland Asia, Africa, and South America, however, river systems provide the focus for human activities, from the search for foodstuffs to the devising of heroes and demons to populate society's myths. Welcomme's book concerns these large rivers and their fisheries, with emphasis on tropical systems, the author's forte.

Three factors give river fisheries their distinctness: spatial diffuseness, high species diversity, and marked seasonality. The author examines these attributes of rivers in a concise and absorbing introductory chapter, covering topics