Notes and News

CIVILIZATION, CITIES, AND TOWNS

If I have a complaint against distinguished contributors to ANTIQUITY and, indeed, its Editor himself, it is not that they use a different terminology to mine, but that they neglect the peculiar potentialities of the English language to express relatively subtle shades of meaning.

The use of the words ' civilization ', ' city ', ' town ', by Kenyon (ANTIQUITY, xxx, 192), Wheeler (*ibid.*, 132–4) and the Editor himself (*ibid.*, 129), in reference to neolithic Jericho, in no wise enhances the transcendant significance of the site. It just deprives prehistorians of convenient terms for giving expression to economic and sociological distinctions that can be recognized in the gross material data provided by dirt archaeology. Good English usage contrasts towns not only with villages but also with cities. Since the 18th century ' civilization ' has been applied to the culminating term of an historical process.

Lewis H. Morgan gave a more precise anthropological content to the terms ' savagery ', ' barbarism ' and ' civilization ' as denoting successive stages in cultural evolution. When the prospect opened in the 1920's of giving sociological or economic significance to the technological divisions of the archaeological record, Morgan's terminology, with some modifications of his criteria, seemed quite convenient. As a result of the insistence by Elliott Smith and Perry on the contrast between ' food-gathering ' and ' food-production ', ' savagery ' was equated with the parasitic economy of hunting, fishing and collecting and opposed to the productive economy based on agriculture and/or stock-breeding distinctive of ' barbarism '. Now just at that time the best known early neolithic cultures in Europe—Windmill Hill (just discovered by Leeds and Keiller), Vouga's Lower Neolithic on the Swiss lakes, and the Danubian of the Central European löss-lands—had been shown to rely for their food supplies on cultivation and stock-breeding as against hunting and gathering activities more than later neolithic cultures in the same provinces. Hence the criterion of neolithic became agriculture and/or pastoralism. So neolithic was also the first stage of barbarism.

Neolithic settlements seemed much larger and more numerous than palaeolithic or mesolithic ones, and comparative demographic studies show that the opening up of fresh food supplies is normally followed by a quite rapid increase in population. The observed and inferred increase at the beginning of the neolithic was then compared to that which ensued on the Industrial Revolution in Britain. On this analogy I termed the initiation of food-production ' the Neolithic Revolution '. But I was always at pains to insist that ' the revolution ' was not a single catastrophic event, but a slow, continuous process whose culmination could be defined only arbitrarily. After all, the foundations for the Industrial Revolution were laid in the Middle Ages and its climax lasted a hundred years. The Neolithic Revolution should occupy at least as many decades, perhaps as many centuries.

Ideally the long formative period should be divisible into two phases as Braidwood suggests (ANTIQUITY, xxx, 223). Archaeologically his first phase, ' incipient agriculture and/or animal domestication ' is hard to detect. Cultivators can hardly be recognized unless they had standardized implements of durable material for tilling the soil, reaping or processing the crop. To identify stock-breeders on acid soils where bones dissolve or within the natural habitat of domesticable animals is almost hopeless. Still, as Braidwood well

puts it, ' we have glimpses ' of this phase in caves round the Caspian and Mount Carmel and in middens in North Africa. But also in Europe it is now archaeologically discernible. The Early Tardenoisean or Sauveterrian bones of sheep or goats from Couzoul and Téviec no longer stand alone. Some microlithic industries may mark the tracks of food-gatherers who also bred small-horned cattle, and were to that extent incipient food-producers. Wherever osteological evidence is available at all, mesolithic groups in Europe were accompanied by dogs. At least in Europe ' mesolithic ' actually does denote, if not necessarily the phase of incipient food-production, at least the long transitional epoch during which incipient food-producers were about.

On the other hand in radiocarbon age ' the upper part of the pre-pottery neolithic ' of Jericho falls within the range of North European Mesolithic II (Maglemose), and the lower part may well turn out to be as old as Mesolithic I (Star Carr). But in our continent the neolithic begins with Danubian I, Starčevo, Cortaillod and TRB. But that is precisely Braidwood's second phase marked by village farming communities. For its beginning at a village on the northern edge of the Danubian province radiocarbon gives the respectable age of 4200–4000 B.C.

As a convenient, easily recognizable criterion of his third main stage—but not as a definition of its content—Morgan took writing. It in fact not only represents a new instrument for the transmission of human experience and the accumulation of knowledge, but is also symptomatic of a quite novel socio-economic structure—the city. In English this untranslatable word implies a cathedral, a bishop's palace, a body of canons and other clergy, and a large number of laymen who are neither farmers, fishers nor hunters. I have taken this as the essential character of a city: a community that comprises a substantial proportion of professional rulers, officials, clergy, artisans and merchants who do not catch or grow their own food, but live on the surplus produced by farmers or fishermen who may dwell within the city or in villages outside its walls. These professionals and full-time specialists represent a new class of persons, an absolute addition to the population that could be included in, or supported by, any barbarian community. This increment is my justification, or at least excuse, for speaking of an ' Urban Revolution ' on the analogy of the Industrial Revolution or the Neolithic Revolution.

Of course this Urban Revolution, just like the Neolithic Revolution, was a gradual cumulative process. There are intermediate stages between self-sufficing, i.e., neolithic, food-producing communities and ' cathedral cities '. It may be arbitrary to choose writing as marking the critical point. But what is the alternative? The criterion cannot be mere size. What are universally accepted as villages in Africa, South-Eastern Asia and Mediterranean Europe to-day are more extensive and more populous than most Sumerian cities of the 3rd millennium. Nor can public works be accepted. The seven-hut village of Skara Brae boasted a monumental sewer and paved streets. Many neolithic villages and mediaeval villages too in Europe were walled. Indeed a village may comprise a parish church and a priest and a village smithy with a resident smith. And the affairs of most villages are directed by a headman of a council of elders.

If anything intermediate between a neolithic village and a city is to be recognized, it must be defined by the same sort of economic and sociological factors. Any Bronze Age community had abandoned self-sufficiency (unless located on a copper mine). But few such communities in Temperate Europe supported a resident smith. On the other hand Early Aegean settlements, like Troy, Thermi, or Phylakopi, not only comprised resident smiths and sometimes professional potters and jewellers too, but also must have relied to an appreciable degree on overseas trade, perhaps even to supplement home-grown food. Though Troy II occupied an area about one-third of that of neolithic Jericho, it was further

advanced on the way to civilization as above defined. I find it tempting to profit by the unique advantage of the English language and call such settlements, more complex than villages yet not deserving the title of ' city ', ' towns '. V. G. CHILDE.

[We welcome Professor Childe's criticisms and will try to be more careful in our choice of words. He himself had laid the foundations on which these subtle distinctions rest, and he has every right to demand that we should use the correct terminology for them.—EDITOR.]

COMMENT ON ' EARLY GOATS ' (PLATE VIII, B)

The short article on ' Early Goats ' in the June 1956 issue of ANTIQUITY raises two major problems which, in my opinion, merit further discussion.

1. Professor F. E. Zeuner has stated (*Palestine Exploration Quarterly*, April 1955), and you quote him correctly, that the earliest, straight-horned domestic goats of the Neolithic period were replaced by goats with spiral or screw-horns in the Chalcolithic and Bronze periods of the Eastern Mediterranean. When you continue, however, ' Attention was first drawn to *them* (italics mine) in ANTIQUITY (XI, 1937, pp. 226–8) by Prof. Amschler . . .', you are presuming that the screw-horned goats mentioned by Prof. Zeuner were necessarily of the Girgentana-type discussed and figured by Prof. Amschler. The remainder of the article on ' Early Goats ', which is limited to further discussion of goats with the Girgentana-type horns, verifies this conclusion.

I cannot find any indication in Prof. Zeuner's article, however, to support a conclusion that he was referring to such Girgentana-type screw-horns. It is my opinion that Prof. Zeuner is merely stating that the earliest known goat from Jericho had horns of the scimitar or straight type, as in the wild *Capra aegagrus* of South-Western Asia, and that subsequently domestic goats are found in which the horns are *not* straight, but are twisted, and thus similar to those of most domestic goats.

The change from the straight horn-core with an almond-shaped cross-section (Zeuner, *op. cit.*) to that of a horn-core with an incipient twist and a flattened inner surface (PALTE VIII, B) had already happened before the Chalcolithic, as such advanced types were present in the village-farming community of Jarmo in the foothills of eastern Iraq, approximately 6700 years ago. Wild-type horn-cores are also found at Jarmo, side by side with the ' domestic ' type, so there may have been at that time both straight and twisted horns in the domestic flocks, or the wild-type cores may represent true wild goats, which are still present in the adjacent hills.

If one followed the argument expressed in the article on ' Early Goats ', one would have to assume that *all* domestic goats subsequent to the early Metal Ages were necessarily derived from those with Girgentana-horns; I do not believe that the evidence supports such a view, or that Prof. Amschler or Prof. Zeuner intended their remarks to be so interpreted.

The difficulty involved in this first problem seems to be a misunderstanding of the meaning of ' spiral or screw-horned ', as used by Prof. Zeuner merely to mean not-straight. The Girgentana-type horn would seem to be a special genetic variant of the general spiral-type, but its sporadic appearance at different times and places does not prove the continuity of any specific breed through all the time involved, nor indicate a blood relationship of all the individuals involved. I have observed this Girgentana-type horn, as a rare feature, in flocks of domestic goats in the mountains of Iraqi Kurdistan; in such instances, the goat was merely one of a flock, the remainder of which had the more typical screw-horns. Presumably, the Girgentana-type horn is due to a particular genetic combination which