

by its special form as a bovine metacarpus, its dimensions are nearly the same as those of the Apis bull of the ancient Egyptian tombs of Sakkara, of which there is a skeleton in the Paris Museum, and are even greater than those of the recent Indian wild bulls.


It is, therefore, evident that the bone did not belong to a horse, but to a bovine animal, although it might be still doubtful whether it was of the "bubaline" or the "taurine" form.

Another confirmation of the correctness of this view is found in the determination of the bones collected by Professor Pumpelly from the Komorof trench in the North Kurgan,* during his previous visit to Anau in 1903. These were sent to Professor Zittel, in Munich, for determination; and among them Zittel determined a small and well-preserved bone as a right scaphoid of *Equus caballus domesticus* Linnæus. Mr. F. A. Lucas, an American zoologist, better versed in recent comparative osteology than was the great German paleontologist, writes on the bone another and more exact determination: "Not *Equus* but *Bos*, from a large animal. We have no skeleton of water buffalo (*Bos bubalus*), but it is probably this." It follows that we must first decide to which bovine form this animal belongs, whether to a *bubalus* or a *taurus* species. To do this we must first solve the question as to whether the bovid of the Anau kurgan was a wild or a tame animal.

More prudence is now shown than formerly in the application of the characteristics given by L. Rütimeyer in recognizing whether bones belong to a wild or a tame animal.

I judge the Anau bovid in question to have been wild for the following reasons: (1) because it was much larger than all the other domestic bovine animals, which were found in great quantities in the higher layers of the Anau North Kurgan; (2) because the structure of the bones is much heavier and harder than that of bovine animals in domestication, whose bones are spongy and lighter; (3) because the other species in the same layers belong undoubtedly to wild animals, and because this large bovid seems to be wholly wanting in the higher layers of the kurgan. These are my reasons, and I observe that in several recent publications on subfossil bones the authors have been contented with only one of these reasons in attributing bones to a wild or tame form of animal.

Assuming that this bovid was wild, we will inquire what wild bovids were living in Turkestan or Northern Persia in prehistoric times. The first indications are those furnished by the ancient Babylonians.

In earlier publications† I have established the fact that two wild bovine animals lived in Babylonia, and that the language and writing of the Sumero-Accadians, who are supposed to have immigrated from Iran or Northern Persia, before these people united with the Semitic race, have only one word for wild bull. The ideogram of bull was a two-horned bull's head, written  = *gud*, in

*Explorations in Turkestan, Expedition of 1903, Carnegie Institution of Washington Publication No. 26, p. 8. Washington, 1905.

†Duerst, Die Rinder von Babylonien, Assyrien und Aegypten, Berlin, 1899; Notes sur quelques bovides préhistoriques, l'Anthropologie, 1900, pp. 129-158.