The third culture, beginning with the founding of the South Kurgan, belongs distinctly to the copper age of Central Asia, and enters upon the scene with a developed knowledge of the potters' wheel and furnace. With the introduction of the mechanical element in fabrication the artist in colors has disappeared, and, as Dr. Schmidt remarks, effects are sought rather in form than in painted ornament.

I have shown above that the settlement of the South Kurgan followed upon a climatic change to favorable conditions. This culture had an abundance of copper, to judge from the number of objects found, which, since they did not occur as burial gifts, had been lost and accidentally buried. This people brought with them the potters' wheel and furnace.

Tin now appears for the first time, but not in the way we should expect. It is an interesting fact that among the 20 objects examined for it by Professor Gooch only four contained it. A reference to the table of analyses will show that with the exception of a dagger near the top of the culture, in which the oxidized products showed 1.58 per cent of tin, all the cutting implements were wholly free from it. A ring and the crust on an awl contained each between 5 and 6 per cent, while the crust on another awl yielded 1.65 per cent. Tin exists in Khorasan, and on the border of Afghanistan, where it is also mentioned by Strabo.

Localities of copper ores in northern Persia are indicated on the geological map of Transcaspia by Muschketof, Andrusof, and Bogdanovitch, and since little is known of the mineral resources of Irania, there is no reason to suppose that the mountain system of northern Persia may not contain many other such localities. Copper was extensively mined during the real bronze age, and perhaps earlier, from Lake Balkash northward and eastward, according to Radloff (Aus Siberien) and to a letter from Mr. Fell, who is now mining copper there.

Further, the fact that the objects found in culture III are with so few exceptions wholly free from tin, and that where this does occur it is generally present in insignificant percentages and generally absent in cutting implements, shows that its use was not intentional. Its presence is in all probability due to the smelting of copper ores containing tin in irregular quantities. The general presence of arsenic and antimony in irregular quantities is doubtless due to the character of the ores. The metal would seem to be "blister copper" produced from oxidized ores.

On the other hand, the use of lead in the "stamp" (S.K. 363) and in the "ring" (S.K. 203) was probably intentional. That lead was known very early is shown by its occurrence near the end of the first culture. This is not surprising when we consider the striking appearance of galena and the ease with which it is converted to the metallic state.

While there is, therefore, little doubt that the copper was obtained from Central-Asian ores during the earlier cultures at Anau, the occurrence in culture III of figurines of Beltis, which indicate later communication with some region within the Chaldean sphere, makes it possible that objects were imported, or produced by remelting importations.

It would seem probable that in all of the earlier Asiatic and Mediterranean regions, the presence of tin was at first unintentional and due to its presence in