

mental industrial arts, including a certain amount of metallurgical knowledge. Evidence has been traced of a progressive desiccation throughout long climatic cycles in whose favorable extremes civilizations flourished which disappeared in the arid extremes. And that the climatic conditions under which these civilizations vanished gave rise to very early migrations and to a constructive reaction upon the outside world would seem to follow from the early appearance, in Babylonia and Egypt and in the late stone age in Europe, of wheat and barley and of breeds of domestic animals which Dr. Duerst identifies with those first established on the Transcaspian oases.

I have in Chapter IV attempted to show that Central Asia was, from one of the epochs of the glacial period onward, isolated from Africa and Europe and that, excepting the elements of the lowest generalized form of human culture, all its cultural requirements were necessarily evolved and differentiated within the region of isolation. Before the supposedly Central-Asian Sumerians fused with the Semites on the Euphrates they had been trained in a struggle with nature which had culminated in the ability to conceive and execute great undertakings, as shown in the work of controlling the great river. Their field of thought was doubtless confined largely to economic effort and organization. Into the fusion, the contemplative nomadic shepherd Semites brought a new range of speculative thought, and out of the union arose the highly developed Babylonian civilization. And to the extent that this entered into the origins of preclassic Ægean and Mycenæan cultures, so far did it carry the contribution of the fundamentals of civilization from the Central-Asian oases to the Mediterranean.

The earlier reactions of the oasis cultures on the outside world were, therefore, both as regards migrations and ideas, essentially constructive in character. The later and greater migrations were of a different character. The growth of great nomadic populations, to whose outward movement these were due, could not have begun until after the development of the art of breeding the animals upon the possession of which alone life on the arid plains of Asia depended. I have shown, in the chapter on migrations, that during climatic conditions which depopulated the oases the grasses of the arid plains would permit the expansion and differentiation of nomadic shepherd peoples till all Central Asia should be occupied, and that later there came a time when—in the progressive desiccation through an arid extreme of a climatic cycle and some thousands of years after the beginning of domestication and breeding of animals—the populations, swollen to the limit of the supporting capacity of the pasturage, would be forced to seek outlets into more favored regions.

The great continental unrest which variously affected different parts of the West, being caused by the decreasing capacity of the pasturage to