

to later periods. It also accounts for the difficulty which in the present state of our knowledge must often be experienced in fixing the approximate date of discoveries made there, especially when they result not from systematic excavation but from 'irresponsible' digging by cultivators and others.

Continuous
occupation
of sites.

This difficulty of fixing chronological limits is increased in the case of Turfān remains by two causes, one connected with historical, the other with geographical circumstances. Owing to the protection that the Turfān territory enjoyed for long periods, first owing to continuous Chinese occupation and later under undisturbed Uigur rule, it was spared, as far as we can judge, any violent cataclysms that might have resulted in the complete destruction of important localities and their consequent abandonment, together with their places of worship, &c. This immunity from permanent devastation is reflected in the fact that practically all ruins of pre-Muhammadan times in the Turfān basin are found within the area of actual cultivation or in the immediate vicinity of still occupied towns and villages. It is manifest that under such conditions it is far more difficult to fix a *terminus ad quem* for all remains brought to light at particular ruins than where the sites, such as those traced along the southern edge of the Tārīm basin, when once abandoned to the desert, have never been occupied again.

Irrigation
of Turfān
district.

The same result follows from the fact that, owing to peculiar features of geographical position and climate, the Turfān district includes no sites that have become definitely uninhabitable within historical times through 'desiccation', i. e. lasting diminution of the water-supply needed for irrigation. The climate of the Turfān basin can be shown from available records and by the evidence of archaeological indications to have always been one of great aridity. But the comparatively close vicinity of the high range to the north, carrying permanent snow and receiving a great deal of precipitation from the distinctly moister zone beyond, causes a considerable amount of drainage to descend into the basin, either above or below the surface. Owing to a remarkable geological faulting, represented by the range of low but strikingly bold hills that rises all along the northern rim of the basin proper, from near Pichan in the east to beyond Yār-khoto in the west, most of the drainage absorbed by the glaciis of piedmont gravel comes to the surface again in the form of plentiful springs whereby the most fertile portion of the basin at the foot of those hills is irrigated.

No sites
abandoned
to desert.

Thus the main oases of Lukchun, Kara-khōja and Turfān have remained assured of adequate irrigation; while such outlying portions of them as might have suffered through the diminution in the discharge of surface canals which probably did take place during historical times, have been saved from abandonment by the use of Kārēzes or underground canals. In the area, all below sea-level, that lies beyond this belt and descends towards the deepest portion of the depression, cultivation must at all times have been much restricted, where not altogether precluded; for there we find great salt-encrusted wastes surrounding the terminal lake-bed of the basin, now for the most part dried up (Map No. 28. c, d. 3). This explains why, in that area too, we find no ruined sites, like those beyond the end of the Niya river or those of Lou-lan, which were abandoned to the desert at a definite period and which, having remained uninhabitable and practically inaccessible ever since, have preserved for us undisturbed remains of everyday life datable within comparatively narrow chronological limits. For these reasons the ruins of Turfān sites are almost all to be found well within the limits of the living. Fortunately, however, the archaeologist may turn to the abodes of the dead, and these, as we shall see, have preserved much that those ruins cannot reveal as regards the life that was once led around them.