

comes a circular story or drum of the same height, with a diameter of 35 feet. Above this again rises the dome, which now reaches a height of $14\frac{1}{2}$ feet. As the diameter of the dome is 29 feet, this height if original would make its shape exactly hemispherical; but since the top is much broken this must remain doubtful.

The total extant height from the present ground-level is $29\frac{1}{2}$ feet, which, in relation to the greatest dimension of the base, 47 feet square, gives a much smaller proportion between vertical and horizontal measurements than observed in the case of the Mauri-Tim Stūpa (about 38 feet to 40 feet). It must, however, be borne in mind that, not having the time or needful labour for trial excavations around the Stūpa, I was unable to ascertain definitely whether the original level of the surrounding ground was not, perhaps, considerably lower than the present level. If accretion of silt had been proceeding over the adjoining ground, as has undoubtedly happened in the case of the Kurghān-Tim Stūpa¹, we might well suppose another story of the square base to lie hidden beneath the surface.

On the whole, however, I am not inclined to favour such an assumption. For a distance of 200 to 300 yards around the Stūpa and eastwards up to the edge about 70 yards distant of the above mentioned deep 'Yār' or ravine, the ground is strewn with potsherds which seemed old, and with fragments of stones. It seems natural to connect this débris with ancient habitations of less solid construction, which existed around the Stūpa when it was still an object of worship. Judging from the observations referred to in discussing Kurghān-Tim, and to be detailed hereafter in connexion with the site of Yōtkan², only long-continued irrigation could have led to heavy deposit of silt and consequent rise of the ground-level. In such a case we should expect the débris to have long ago been buried out of sight under layers of fertile soil.

But the assumption of the ground-level having remained practically unchanged since the latest date we can assign to the Stūpa, i.e. the period immediately preceding the introduction of Islām at the end of the tenth century, is not without its problems. With such striking evidence as the adjacent site of the 'Kakshal Tati' furnishes of the powerful erosive action of the winds in this region, it seems difficult to understand how the ground adjoining the Stūpa, if unprotected by cultivation, could have escaped being considerably lowered in the course of nine centuries. We shall see hereafter, when discussing the remains of Endere, that since that site was abandoned early in the eighth century wind erosion has proceeded there so effectively as to lower the unprotected ground around the local Stūpa some ten feet below the original level, as marked by the base of the extant ruin³. Climatic conditions, no doubt, affecting the frequency, direction, and strength of the desert winds, may differ materially now, and may possibly have differed still more during past periods, at such widely distant portions of the Taklamakān. Yet it must be noted, in regard to the destructive effect of erosion upon the outer surface of structures of sun-dried bricks, that the Stūpa of Endere has suffered scarcely more than the one of Tōpa-Tim⁴.

It will require a far more systematic study of all local conditions than was possible in the course of hurried journeys, and probably also accurate climatic observations extending over considerable periods, before such a semi-geological, semi-archaeological question can be safely answered. In the meantime I may suggest that the possibility of the ground near Tōpa-Tim having been protected against erosion by dunes, which kept it covered for centuries but

Condition of adjoining ground.

Wind-erosion and protection by drift-sand.

¹ See above, pp. 75 sq.

² See above, p. 75; also chap. VIII. sec. ii, below.

³ See below, chap. XII; *Ruins of Khotan*, pp. 421 sq.

⁴ For a view of the Endere Stūpa, see Fig. 50; I regret

not to be able to illustrate 'Tōpa-Tim', since the two negatives taken for that purpose have deteriorated too much to permit of reproduction.