

maps. It is, I admit, quite true that, as I have already mentioned, Nain Singh on his map of 1874 shows the Luma-ring-tso in western Tibet as being much bigger than I found it in 1901. But, although of the former lakes there now remains in many places nothing except a bed of gypsum, fantastically modelled by winds from every quarter, it is nevertheless not credible that the desiccation proceeds so rapidly as to be noticeable within the space of two or three decennia. But an easier explanation can be found if we call to mind the Brückner periods; besides, we have no knowledge whatever as to whether the level of the Jamdok-tso is or is not dependent upon the seasons. In several of the lakes of Tibet, both fresh and salt, we have had occasion to observe a rise in level when the snows begin to melt in the spring on the surrounding mountains. Now as it happened, Chandra Das and his travelling-companion passed between Nagartse-dschong and Pedi-dschong in the end of May, and the English expedition in the end of July. On the former occasion the thaw-water was streaming down to the lake from every direction; on the latter occasion the inflow had passed its maximum stage, but evaporation was very active and was rapidly lowering the level again. It is therefore very probable that both maps are correct and that the isthmus is under water in the spring. And the likelihood of this supposition being true is strengthened by the fact that at the end of July the innermost part of the bay is called on the English map by the name of Jamdok-tso, just as the principal lake is, so that it is evidently regarded by the Tibetans as being a part of that lake rather than as a permanent, independent side-lake.

It is a matter of less importance to ascertain whether it was Ugyen Gyatso or Chandra Das who drew the map of the Jamdok-tso. According to Landon the merit of this belongs to the former, whom he calls »one of the best of our native explorers»; but according to Rockhill it was the latter who is the author of the map. In his preface to Chandra Das's book, Rockhill says, that when the latter set out on his second journey in 1881 he »was again accompanied by Ugyen Gyatso, who acted as secretary, collector, and surveyor, though much of the later work, including the extremely important survey of Lake Palti (Yamdok-tso), was done by the traveller himself».

According to what Landon and Waddell say, the Jamdok-tso is undergoing a process of desiccation, although their statements are not backed by any reliable figures. The former says: »There is, perhaps, much excuse for the old belief, that the Jam-dok-tso is indeed a ring of water, for in the two wide places where the great circle is broken the shaking stretch of black mud is even now more kin to water than to land . . . A hundred years ago it must have been shallows — a thousand years ago, perhaps, the old level betrayed on the hill-sides to this day was awash. Forty feet added to the present height of the water would change the shape of the lake curiously indeed.»* In Waddell we find the following interesting statement: »Although this magnificent curve of landlocked water winding among the hills is not now a complete ring, it probably was so originally in its glacial period, when its waters overflowed the stony promontory of the Tag or 'Rocky' Pass. It certainly must

* *Lhasa*, II, p. 94.