

while another was 6555 m. high. On the Lunpo-gangri, WOOD determined several peaks of about 6700 m. From Tradum, Ryder saw a peak belonging to the same system and having an altitude of 7058 m. These belong to the same group of peaks I saw from the north, and of which I have several illustrations in Vol. III.¹ That means that on the Transhimalaya there are peaks rising nearly 2400 m. above the depression along the northern base of the system.

Now the question arises: what was the hydrographic arrangement in the depression north of Transhimalaya during the wet period preceding the period of beginning aridity, desiccation and formation of self-contained plateau-basins and steppes? Considering, to begin with, only the western half of the great depression we find a series of small rivers each of them having its source on the northern side of the great water-parting, and each of them being the affluent and feeder of a saltwater lake. The Soma-tsangpo goes to Teri-nam-tso, the Buptsang-tsangpo to Tarok-tso, the Pedang-tsangpo to Shovo-tso, and the Sumdang-tsangpo to Ngang-laring-tso. Although these lakes, as all other lakes in the interior of Tibet, are subject to the general law of desiccation, the inflow of fresh water to them may be said to be abundant enough to compensate for the evaporation from the lake. Between the river and its lake there exists a state of equilibrium. During the summer when the snows and ices melt and occasional rains fall, the rivers rise and carry down so much water that they sometimes may be crossed only with difficulty and at many places not at all. Then the lakes rise to their maximum level. In the late autumn the melting and the rains cease, the rivers dwindle and the surfaces of the lakes sink. In the winter mere brooks come down under the ice, but then the lakes themselves are frozen and the evaporation diminished. Thus there is an annual period of rise and fall in the lakes. There is also a period of a higher degree, *viz.* the one that is registered by the outflow of the Manasarovar. And finally we have the great period of general desiccation.

What would happen if the desiccation ceased and the climate again became more and more moist? The Soma-tsangpo would increase and many other, now temporary, brooks would by and by grow to permanent rivers. The Teri-nam-tso would expand in all directions. To the north and south where the mountains are close upon the present lake the shore-line would be less changed. In the east the lake would meet an obstacle in the hills separating its basin from that of Dangrayum-tso. To the west a rise of 9 m. only would bring the western shore 21 km. westwards to Mendong-gompa, to which place the mouth of the Soma-tsangpo would be removed. By increasing moisture the whole Neven valley would get filled and the overflowing water would continue W. N. W. always following the lowest

¹ I will deal with my own observations of their altitudes in a later chapter.