

lay at the foot of the Kwen-lun, and if, as would then be the case, the Ak-su-darja had to traverse the entire desert before reaching the Tarim, it would be the Chotan-darja that would appear to be the more powerful stream of the two. From this it results, that we err, when we estimate the magnitudes of the different chief tributaries of the Tarim by the distances they have to travel respectively across the lowlands. Previous to 1896 the Kerija-darja in particular was very much underestimated, for it was reputed to proceed little more than a score or two kilometers north of Kerija; but upon travelling down beside it, I found that it reached a good bit beyond the 39th parallel of latitude. Generally speaking too, the effects of the irrigation drain are misleading, and with the exception of the Ak-su-darja and the Tschertschen-darja, it is pretty certain that all the large rivers of East Turkestan appear to be less than they really are precisely because there is such a heavy drain upon them through the irrigation canals.

Nor do these resemblances between the Kontsche-darja and the Tschertschen-darja exhaust the symmetry of arrangement that obtains in the gathering basins of the encircling mountains and in the pair-wise grouping of the rivers, but they extend also to the terminal lake, which is, so to speak, double, or rather the principal river empties itself alternately into two different depressions, first into the northern depression of the Lop-nor and then into the southern depression of the Kara-koschun. Hence originates what I have ventured to describe as the pendulum-like oscillation in the changes of the lowest part of the Tarim. At the present time the terminal lake lies in the southern part of the basin, although the greater part of the Tarim belongs to its northern side. But everything points to its having begun a new pendulum-swing back towards the north.

Of the two largest constituent streams of the Tarim, I have come to the conclusion, that the Jarkent-darja ought to be regarded as the mother-river, the true main artery of the system, and this not only in virtue of its length but also of its more extensive catchment-area, while at the same time I have also been led to the conviction, that it is the Ak-su-darja which contributes the greater volume to the Tarim. Now even though the Kaschgar-darja be reckoned, as I have here reckoned it, to the northern peripheral zone, and if the Mus-art-darja contributes, as it does contribute, a considerable volume to the Intschkä-darja, and if the Kontsche-darja is a more powerful river than the Tschertschen-darja — nevertheless all this ought not to mislead us into believing that the northern peripheral zone contributes a greater volume of water than the southern peripheral zone, or in other words has a heavier precipitation. The reason that this appears to be so is solely the fact that the Tarim flows so close to the foot of the northern peripheral zone. I am almost inclined to believe that it is the southern peripheral zone which has the heavier precipitation, if for no other reason than for this, that it lies nearer to the monsoons that blow in off the Indian Ocean, at any rate the southern peripheral zone feels the effects of their moisture more than the northern peripheral zone does. We are prone to overlook the Kerija-darja and the rivers of the Kirk-saj, because they are cut off from the main system and isolated from it, although hydrographically they still belong to it *de facto*. And yet enormous quantities of water flow down their beds in spring and summer, all of which is swallowed up in the sand, for none of these streams is able of its own power alone to penetrate right across the desert. The future must answer the difficult questions as to the relations which exist between the precipitation on these mountains and the