

almost meridional situation and on the north leans against the Bei-schan. As its north-western boundary we may take the flat, scarcely perceptible slope which without doubt forms a continuation of the western wing of the Tschit-sin-schan Mountains».

Lower down Obrutscheff continues —

»Upon these passages, cited from Mr Grum-Grschimajlo's account of his travels, I have to remark as follows: Nothing is said about the topographical relations of the region rendering the presence of these lakes impossible, and this was the point at which my objection was especially levelled, more particularly as the phrase involves an inaccurate characteristic of the region. The explanation of the origin of this phrase, which occurs in the opening sentence of the quotation, is in every way unsatisfactory; for, in the first place, the account of the topography of the region is too brief and too confused — it would have been useful to have had a sketch-map based upon Mr Grum-Grschimajlo's own observations, because the large map that accompanies his book does not accurately represent the real orographical relations — in the second place, towards the end the quotation gives an account of the cauldron-valleys, and amongst them of the Jü-min valley and the next following depression of In-pan-fu-tsi (my oasis Chor-chi-tse) to the east of it, that is to say the precise spot in which I place the lakes under discussion. Now trough-shaped depressions represent, as is well known, precisely this form of relief, and not only are they not antagonistic, but they are actually favourable, to the formation of lakes.»

»Further Mr Grum-Grschimajlo says, with regard to the lake of Chua-chai-tsi, that, according to tradition, it owes its origin to the artificial irrigation of the tracts adjacent to the river Bulungir in the Mongol period. Let us assume that this really was the case, although the author does not tell us by whom the tradition was preserved, nor, if it is due to himself, does he tell us where he picked it up or when. But, after all, is it not really a matter of indifference how the lake was formed, whether artificially or naturally? Anyway it did exist, that is to say its origination was in no way prevented by the topographical conditions. But these conditions, taken in conjunction with the character of the soil in the depression, with the traces of ancient shore-lines at the foot of the Bei-schan, and with the conformation of the surface in the shore-terraces of the Mogutun-gol, prove that the lake of Chua-chai-tsi did exist long before the Mongol period, or indeed even before the historical epoch. I have already indicated its boundaries, based upon topographical facts and upon the properties of the surface. It was fed by a branch from the river Bulungir (Su-lai-che), and its surplus water flowed westwards, possibly to the other lake situated in the An-si and Dun-chuan depression, and did so by a channel which cut its way through the ridge called by Mr Grum-Grschimajlo the San-sjan-tsi. This ridge was indeed one of the first conditions for the creation of the lake, owing to its acting as a natural dam shutting in the western end of the Jü-min depression. The cause of the disappearance of the Chua-chai-tsi is perfectly intelligible. In proportion as its drainage channel gradually cut its way deeper and deeper through the ridge of San-sjan-tsi, the surface of the lake was naturally lowered, and so gradually became shallow, and divided into pools, surrounded by salt marshes and