

of the concurrent processes of elevation and erosion, the existing mountain systems of the Himalaya and Tibet have been slowly evolved.» He adds »that the great series of parallel plications in Asia are supposed to have been caused by a horizontal thrust from the north.» It is important to remember this view, for the arrangement of the Transhimalayan folds cannot be explained merely as a result of a horizontal thrust from north to south.

A few quotations from Dr. FELIX OSWALD'S above-mentioned article will be of interest in this connection. Regarding the mountain-folding and formation of lakes he says¹:

»Although the Tibetan plateau is traversed, in the first place, by latitudinal mountain folds, which are to be regarded essentially as the expanding branches or fan-like virgation of the Karakoram ranges, yet in all probability Tibet consists, in its present condition, of a succession of uptilted and depressed blocks of resistant strata, no longer capable of being folded, just as I have shown to be the case in the plateau of Armenia. The innumerable lakes still scattered over its surface, although many more have completely dried up, lend support to this view, for their origin is now explained by local uplift of the beds of the rivers which originally traversed the region. Hence, if the rate of elevation exceed that of the erosion of the river, the stream would be unable to keep its channel open and consequently a lake would be formed. In other words, local elevation has enhanced the erosive power of the river below and diminished it above the line of uplift! However, in some cases at any rate, a river has been able to keep pace with the local uplift in the plateau region.» Here he mentions my observation that the Bogtsang-tsangpo at some places sharply turns to cut through a rocky crest, whereas it would seem much easier to flow on along the open latitudinal valley. The same phenomenon was observed by Oswald in the valley of the Murad or Eastern Euphrates, and BARRARD describes the curious way in which the Indus thrice pierces the Ladak Range.

In opposition to Prof. Hennig he regards the Tsangpo valley as a sunken trench and not as a valley formed by river erosion: »As a corollary to the explanation which I offer of the Transhimalayan system, it follows that the natural continuation of the parallel ranges of the block lies now sunk beneath the Brahmaputra valley, at the base of the great fault-scarp, to which the river flows in parallel alignment. Accordingly this valley must be of the nature of a rift-valley or sunken trench, especially since the opposite (southern) wall of the valley lies parallel to the northern wall and in like manner possesses an average height of 23,000 feet The sacred lakes Manasarovar and Rakas-tal lie centrally in a glacial trough in this W. N. W.-E. S. E. rift-valley, which occupies the site of a relative depression between uptilted mountain blocks.»

¹ Op. cit., p. 43 *et seq.*