

If Markham had not studied the question on the spot, we have seen above that Hodgson has not either done so. Even some years before »The Calcutta Reviewer» WILFRED L. HEELEY deals with the country north of Himalaya in a way which proves that he has more confidence in Nain Sing than in Hodgson. He says: »Hills are always in sight, generally in low ranges parallel to the river, but often rising into snowy peaks. From the source of the Brahmaputra a long range bearing numerous glaciers stretches 150 miles to the east. North of the river there is, generally speaking, an open country intersected by immense tributary rivers, and without cultivation of any kind.» Further on he says that north of the Yaro Tsangpo is a »wild wide country, tenanted by nomads».<sup>1</sup>

However, Markham's orography was widely accepted, and was introduced even into such an important work as *A Manuel of the Geology of India*,<sup>2</sup> where, in 1893, it is said: »The most popular of the views regarding the physical geography of the Himalayas is probably that proposed by Clements Markham, which regards them as consisting of three more or less parallel ranges known as the northern, central, and southern, respectively. This view was most beautifully illustrated in the map attached to his edition of the travels of Bogle and Manning, where three long ranges are depicted, stretching across the map from east to west. The view appears to have a certain resemblance to the truth, and cannot be absolutely disproved owing to our ignorance of the geography of the greater part of the Himálayas and to the indefiniteness of the term mountain range, but our knowledge of Himálayan geography is sufficient to show that the orography of the Himálayas is by no means so simple or well defined as it is represented on the map just referred to.»

OLDHAM is of course quite right in dealing with Saunders' map in Markham's book in this critical way. Brian Hodgson's Nyenchhen-thánglá was of no use to him, and he does not even mention it.<sup>3</sup> The north-western portion of the mountain system in question is the best known, and consists, according to Oldham, of four ranges: Mustagh or Karakorum, the Ladákh range, the Zanskar range and the Pir Panjál. He very wisely adds: »Nothing definite can be said of the south-easterly continuation of the ranges.» But the Ladákh and Kara-korum ranges may be regarded as coalescent to continue in the range of mountains which runs north of the great longitudinal valley, of the upper Indus, Sutlej, and Sanpo rivers. »It may, however, well be doubted whether either of these ranges has a real continuity along the whole length of the Himálayas, and it is altogether more probable that, whether we regard them structurally or according to the accidents of the existing contour of

<sup>1</sup> The Calcutta Review, Vol. LIX, Calcutta 1874, p. 139 et seq.

<sup>2</sup> By Medlicott and W. T. Blanford, Second edition: R. D. Oldham, Calcutta 1893, p. 460.

<sup>3</sup> HANS LULLIES is right in saying: »Das Motto der Ritterschn Erdkunde: 'citius emergit veritas ex errore quam ex confusione', könnte wohl kaum der Darstellung eines andern Erdraumes passender vorangestellt werden, als der Beschreibung des chinesishtibetanischen Grenzgebietes, und kaum anders- wo hat der Glaube an falsche Autoritäten Hydrographie und Orographie in gleicher Weise entstellt und verwirrt.» Das chinesishtibetanische Grenzgebiet . . . 1880.