

the Southern range if compared with Arka-tagh and the principal or northern Kara-korum system. The Northern Range, however, is composed of the Kara-korum and the Gang-dis-ri. Markham thus regards the Gang-dis-ri, Hodgson's Nyenchhen-thánglá, as a direct continuation of the Kara-korum, a view which originated from Hodgson and had no ground whatever in facts. If such a question as this: is the Transhimalayan system a direct continuation of the Kara-korum or not? should be put to all living geographers, not one of them would even now be able to answer. In 1877 it was easier, for then mere theories were used as proofs, and as next to nothing was really known, except the sporadic discoveries of the Pundits, one had a feeling of liberty to arrange the great features of orography in the way that seemed to everybody to be the most likely.

Markham also states as a positive fact that the sources of the Indus, Satlej and Brahmaputra are situated on the southern slopes of the Northern Range. The real sources of the Satlej and Brahmaputra are, as we have seen, situated on the northern slopes of the Himalaya, although many sources of northern tributaries come from the southern slopes of the Transhimalaya. The sources of the Indus are situated between different ranges belonging to the Transhimalaya. This conclusion could have been drawn even from the material existing in 1877, as ten years earlier some of the more or less parallel ranges had been crossed by Pundits. But Markham regarded the Transhimalayan system as one definite range, and as its water-parting followed its crest the Indus could not possibly originate from its northern side. The possibility of several ranges, some of which could be pierced by the river, was forgotten.

We cannot leave Markham without noting the Calcutta Reviewer's opinion regarding the three ranges. He suggests the phrase »Indo-Tibetan system» for the mountainous tract which Markham designates Himalayan and as inner and outer are words which are likely to lead to confusion, he recommends that they be abandoned altogether. If there were three chains, the appropriate terms for them would clearly be Northern, Southern and Central. He continues: »We had thought that this theory of three chains had long ago been exploded by Mr. Brian Hodgson and other great authorities who have the advantage over Mr. Markham of having studied the question on the spot, and who maintain that the so-called southern chain, being occasionally intersected by rivers of more remote origin, is not a chain at all, but a series of spurs running south-wards from an extended line of elevation more to the north — The line of the main watershed on the north, the general direction of which agrees with Mr. Markham's northern chain of Kara-korum and Nyenchen-thangla mountains, may be traced by the following passes, uplands, &c., from the north-west corner of the Tagdumbash Pamir:» — amongst the passes which he enumerates are: Mintaka, Kalik, Mustagh, Karakorum, Dapsang, Changlungbarma. Chumik, Lakmo, Chomorong, and Khalamba-la.¹

¹ Op. cit., p. 145, 147.