

Speaking of »the third explorer», the young Tibetan of 1871, Markham says:¹ »The explorer advanced north from Namling with the intention of crossing the range, called by Hodgson the Ninjin-thanglá, and of exploring the great Namcho Lake — the Tengri-nor of d'Anville and the Chinese surveyors. The range was crossed by the Khalamba-la Pass, 17 200, on the 8th of Jan. 1872.» Speaking of the results of the three native surveyors Markham mentions »the exact geographical knowledge they have furnished us with respecting . . . the great chain forming the northern boundary of the basin of the Upper Brahmaputra».

He has used the term *range* several times and finally calls the Nien-chen-tang-la a *chain*. Thus he does not seem to make any difference between a range and a chain. I do not know whether the two significations were specified in the English geographical terminology of 1875. Even FREDERIC DREW who wrote in this very year does not make the difference clear; he says: »the quotation whether two certain lines of mountain should or should not be counted to belong to the same chain or range must depend on the definition you give to the words 'chain' and 'range'. It is conceivable that the definition might be different in the mouths of the biologist, the meteorologist, the geologist, and the pure geographer. In any case it would only be a difference of terms. I myself have been and am using the word in the most restricted sense, as merely descriptive of the most patent facts.» At any rate he does not seem to include any morphological distinctions in the two terms. With Markham the case is the same. So at this period the mountains north of the Tsangpo were still regarded as a chain, as they had been ever since Klaproth, Ritter and Humboldt. Only d'Anville had been right in representing a great number of ranges, that is to say, a mountain system. But d'Anville was not taken seriously. His map more and more lost its importance and was regarded as a mere object of curiosity.

The terms range and chain, and many other important matters, were discussed in the following years, specially on account of a critical article: *Trans-Himalayan Missions and their Results*.² The anonymous reviewer seems to have been led chiefly by political motives against Markham's proposal to open up trade and intercourse with Tibet. In his *Geographical Magazine* Markham wrote a very able and clever reply which is especially interesting to us, as it gives an idea of the general geographical knowledge of the two systems: Himalaya and Transhimalaya as compared with each other.³

Markham here proves that Captain HERBERT, in 1818, from his experiences between the Kali and the Satlej, was the first geographer who attempted to give a general view of the orography of the Himalaya. Herbert was also the first to observe that the line of water-parting was not always synonymous with the line of

¹ Ibidem p. 310.

² Calcutta Review, Vol. LXIV, January 1877, p. 115 et seq.

³ »The Himalayan System». The Geographical Magazine, Vol. IV. 1877, p. 113 et seq.