

Stoliczka arrives at the following conclusions:¹

Thus we have the whole system of mountain ranges between the Indus and the borders of Turkistan bounded on the north and south by syenitic rocks, including between them the silurian carboniferous, and triassic formations. This fact is rather remarkable, for, south of the Indus, we have nearly all the principal sedimentary formations represented, from the silurian up to the eocene, and most of the beds abound in fossils.

On page 42 *et seq.* are found STOLICZKA'S annotations from the more western return journey from Kok-yar to the Kara-korum Pass. In his *Concluding Summary* BLANFORD says:

Two sections across the Kuenlun were examined, one, on the Karakásh river, the Suget and Sanju passes; the other, farther west by the Yangi Diwán. On the former route the greater portion of the range consists of syenitic gneiss, associated with various forms of schists On the more western route the same metamorphic rocks are found, but the syenitic gneiss is less developed, and there is a great quantity of greenstone.

To conclude this chapter I cannot find any better plan than to give a short *résumé* of Dr. PETERMANN'S splendid general description of the orography of Western Tibet so far as it was known after FORSYTH'S mission.² Petermann shows that the great features on HUMBOLDT'S and BERGHAUS' maps of the mountains in Central Asia were fairly correct, although the great Kara-korum was missing. The Kwen-lun and Himalaya form the northern and southern boundaries of the Tibetan highlands. Humboldt, and after him RITTER, regarded the Kwen-lun as the watershed between the Indus and the Tarim, and the Kara-korum Pass was part of the Kwen-lun. Between the Kwen-lun and the Himalaya the two great German geographers believed in the existence of an undulating, uninterrupted plateau. They did not suspect that tremendous ranges could exist between the two boundary ranges. Only the SCHLAGINTWEITS showed that a third system stretched between the two first known, although a transverse section across the whole lot hardly represented anything but a powerful protuberance of continuous mountains, sloping down to the plains in the north and south. Therefore, some geographers regarded the whole mass as one mountain system. Another theory, geologically proved by RICHTHOFEN from STOLICZKA'S materials, distinguishes between three independent mountain systems. In the following words PETERMANN expresses his view:³

Denn eine Dreitheilung ergibt sich in der That als die naturgemässeste Betrachtungsweise unseres Gebietes; freilich nicht eigentlich in der ehemaligen Bedeutung dieses Ausdrucks, denn die Annahme dreier *Gebirgsketten* ist gänzlich fallen zu lassen. Zunächst erscheint es mit Rücksicht auf das Herrschen von zwei verschiedenen Streichrichtungen

¹ Op. cit., p. 17.

² *Ost-Turkestan und das Pamir-Plateau nach den Forschungen der Britischen Gesandtschaft unter Sir T. D. Forsyth 1873 und 1874, bearbeitet nach dem offiziellen Report of a mission to Yarkund in 1873, under command of Sir T. D. Forsyth, etc. Calcutta 1875. Petermanns Mittheilungen, Ergänzungsband XI. 1876—1877, p. 29 et seq.*

³ Op. cit., p. 31.