

may cross the range at a spot intermediate between two such swellings, the other may skirt the foot of one of them, and consequently cross by a higher pass than the former route. Nevertheless we may take it as a general rule, that in the region under consideration the pass-altitudes decrease somewhat towards the east; and probably this law would stand out with greater convincing force were we able to continue our investigations as far in an eastward direction as the Arka-tagh would admit of being followed.

When, on the other hand, we study the figures quoted for the three latitudinal valleys, we see that, while the law does indeed receive confirmation in the first of the three, although it is due to a purely accidental circumstance, yet in both the other two valleys the altitudes are very irregularly distributed; indeed in the case of the middle valley we ought rather to speak of a rise towards the east. These circumstances are connected with the general orographical structure of the Arka-tagh system. Since the system consists of parallel ranges, erosion is operative partly in the latitudinal valleys, partly in the transverse glens that break through the ranges. The Pitelik-darja, for example, cleaves a passage through two of the parallel ranges, but it owes its formation to streams that drain long stretches of the latitudinal valleys. In these valleys there exist, as there do everywhere on the Tibetan plateau, cross-ridges or thresholds, from which the water flows both east and west until it reaches a convenient transverse glen. Hence in one and the same latitudinal valley the absolute altitudes vary pretty considerably, and the difference of elevation between a cross-threshold and the entrance to a transverse glen may often amount to 200 or 300 m. This again is another reason why the altitudes which we possess, taken more or less at random, of these latitudinal valleys vary considerably and irregularly according as the various sites lie nearer to or farther away from a cross-threshold or a transverse glen.

As the result of the preceding inquiries we obtain the following mean pass-altitudes for the parallel ranges of northern Tibet and for the latitudinal valleys that lie between them: —

Lower Astin-tagh	3028 m.
Latitudinal valley	2799 m.
Upper Astin-tagh	3435 m.
Latitudinal valley	2970 »
Akato-tagh	3971 m.
Latitudinal valley of Tschimen	3237 »
Tschimen-tagh	4240 m.
Latitudinal valley	3918 »
Ara-tagh	4373 m.
Latitudinal valley	4094 »
Kalta-alaghan	4462 m.
Latitudinal valley of Kum-köl	3887 »
Arka-tagh I	5021 m.
Latitudinal valley	4770 »
Arka-tagh II	5193 m.