

be growing in the path of the new stream is sooner or later rooted up and swept along with the advancing water, which thus becomes thick and turbid. Nor does it clear until the river settles with some degree of permanency into its new quarters.

Not only the appearance of the Jangi-darja, but its whole conformation, go to show that it is of recent origin. No doubt the reason why the stream seeks a new path is that the old channel has become choked with sedimentary matter, and its bed being thus raised, it is forced to seek a lower level. At any rate, the velocity in the new bed was greater and the fall more appreciable. But these characteristics will tend to disappear in the course of time, when the erosive energy of the river has been sufficiently long in operation. At first the Jangi-darja is perfectly straight and the actual channel follows the shortest line, so that the stream is swifter than a river which is full of windings. The velocities we measured were 1.68 m. and 2.05 m. in the second, the latter being the maximum; and at the season of high flood it is no doubt greater still. In such a deep, narrow channel the swift current makes of course greater work with the banks. Even now there are, in fact, appreciable deposits of alluvium, though they are nothing like so extensive, of course, as those which lie in the Tarim above the point of bifurcation. The destructive power of the current was especially manifest at the bases of the containing banks, which as they become undermined, fall over into the water, very often with a deafening splash. In this way the channel grows gradually wider, and begins to wind; and then, in proportion as the windings become lengthened out, the velocity tends to diminish. Thus, notwithstanding that the Tarim is a very ancient river, it is possible to study it in some places as though it were a stream of quite recent origin; in fact, passing down it as we did, we had opportunities of studying it at almost all stages of development. In some localities it is so ancient, and so well settled, that it seems as if it had flowed in one and the same bed from time immemorial; whereas in other localities it is extremely capricious and undecided. As a rule, the latter character becomes more and more pronounced the further the river advances from its source. Above Jarkent, owing to the configuration of the ground, it is not possible for it to quit its bed; but downwards from Lajlik, where it enters the low, flat plains, there is no longer anything to prevent it from deviating to right or to left as it finds occasion. And by the time it has travelled to the Lop country, through a region which is almost a dead level, its instability and readiness to change have attained their maximum, and the river becomes subject to alterations of the greatest magnitude.

The Kona-darja keeps pretty near to the new channel which has supplanted it. About 18 km. beyond it lies the Atschik-darja, and beyond it again, still farther to the north, extends the narrow sandy desert of Kisil-kum, though it comes to an end a considerable way short of the Ak-su-Kutschar road. In this part of the country it was estimated that there were 30 shepherds living, and that they had charge of some 10,000 sheep, belonging to merchants in Ak-su and Schah-jar. Ten of the shepherds dwelt in the Kona-darja. These men, unlike those higher up the river, and unlike the shepherds of the Chotan-darja, who lead solitary lives in the woods, had their families with them. Between the beginning of the Jangi-darja and Chotan-kemisi it was estimated that there were another 30 shepherds.