

wind. Since we know that the rate of progress decreases with the mass, the dune-accumulations would, once they had attained pretty considerable dimensions, advance at such a slow rate as to amount to a condition of almost complete standstill. If however it really could be proved, that there is a definite limit to the altitude to which dunes were able to rise, but beyond which they cannot go, then the limit of progress, which approximates to standing still, would never be attained. And until the moment came at which the maximum altitude was reached, the advance would be at increasingly slower rates. Subsequently there would intervene a stadium of unchangeableness; for the volumes of sand which up to that point were employed in augmenting the dimensions of the dune-mass would then help to thrust it forward.

In some places therefore the sand that is carried along by the atmospheric current is deposited, in other places the sand that lies on the ground is blown away, the conditioning circumstances being the force of the wind, the eddies, the counter-currents, and the retardation of the lowermost stratum of the atmospheric current. The sand that is derived primarily from the Kuruk-tagh does not remain and form dunes immediately at the foot of those mountains, the reason being that the wind just there appears to be of maximal force. Add to this the selective power of the wind, dunes not forming until after the material has been sifted. It is only under especially favourable circumstances that the shape of the mountains, for instance a ravine or a projecting spur, is able to afford an opportunity for the accumulation of sand. Otherwise the masses of sand accumulate at a considerable distance from their source of origin. In this respect too the fine æolian dust is much more sensitive than the sand. In the Lop country the former only settles when the air is perfectly quiescent, but is instantly blown away again by the next wind. Far from contributing to the formation of loess deposits like those of China, the wind on the contrary scoops out the clay of the Desert of Lop, and so forms depressions. But while these in the Desert of Tschertschen travel with the same velocity that the dune-accumulations do, in the Desert of Lop they are stationary, and consequently after a certain time they fill with water. In the Desert of Lop the process of excavation proceeds at an incomparably faster rate than in the Desert of Tschertschen, partly because in the former the wind encounters no resistance whatever, and partly because it has also a species of abrasive or rasping material to help it, namely the sand. Yet, notwithstanding that the lofty dune-waves in the latter desert afford protection to the bajirs, the force of the wind is still strong enough to perform its excavating labour in spite of this, and that equally whether the deciding factor is the activity of the meridional winds, or of the cascade-like and eddying winds that pour over the dunes from the east. It was by means of this activity that I attempted to explain the origination of the bajirs. In some of these we found the ground moist right up to the surface, and against moist schor wind is powerless; and in that case the bajir depression has reached its maximum depth. Apart from this, there is nothing surprising in the wind now depositing dust and sand, and now carrying them away. That is precisely what happens in every river: in some of the quieter reaches the current forms alluvial sand-banks; in other places, where it runs strong, it excavates and erodes its bed.