accumulations and plunged over down their steep leeward side. However small may have been the contribution which each individual dune has made to the general augmentation of the mass, it has nevertheless been a plus, and all these contributions have successively built themselves up into the sandy mountains we see to-day.

I have already briefly referred to the question as to why the northern and eastern parts of the Desert of Lop are free from drift-sand dunes. We must of course assume, that the prevailing east-north-east wind is in those parts at least equally laden with drift-sand as in the more westerly parts, where it does form dunes. Why are there not dunes then in every part of the desert alike? The reason cannot be the fact that the eastern part of the desert, in which schor predominates, is free from jardangs, which might arrest the sand; because in the vicinity of the bed of the Kuruk-darja and in the neighbourhood of Lôu-lan jardangs are especially numerous and well developed, and yet there are no dunes there. The answer to this question is to be found in the following words of Cornish, in which he discusses the origin of barkhans: »They form here and there upon the desert floor where the wind will let them. It appears that they neither occur in localities where the sheet of wind has everywhere the complete mastery over the sand, nor where the burden of the flying sand is everywhere too great for the carrying power of the wind; they dot the desert plain in localities where the sheet of wind has, for the most part, the mastery of the sand, but drops its burden here and there at certain points, or more probably along certain stripes. A rapid current of air can no more flow smoothly and with uniform strength over the ground than a rapid current of water can flow uniformly upon a rough channel or between winding banks. Wherever there are opposing lateral deflections, there is a double burden of sand, with a current relatively, perhaps absolutely, feebler, and here the sand drops.»*

No matter how heavily the wind in the northern and eastern parts of the desert may be charged with sand, this never has an opportunity to remain, but is borne continually onwards. The rudimentary dunes that originate during the hours in which a storm is subsiding are in any case so small that they are destroyed by the next sand-storm that blows, and the sand of which they were composed is carried on farther by the atmospheric current. In the western part of the desert, where dunes exist, the circumstances are so far the reverse of this that the wind, no matter what its intrinsic force may be, is unable to sweep away continually all the sand that chances to be deposited there. In the extreme eastern dunes a sort of equilibrium is however regularly maintained. In that part we find small scattered dunes, very active, but temporary only in their existence, in that they are renewed almost *in toto* by every fresh storm. The power to form dunes is there exactly counterbalanced by the force of the wind. If on any occasion the wind is the stronger, then these extremely small dunes are destroyed; but if the power to form dunes is superior, then the wind is not strong enough to carry away the whole of the sand. And the farther we advance towards the west, the greater grows the superiority of the dune-forming power over the transporting power of the wind. Under existing circumstances, one might almost imagine a retro-active ten-

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* *Geog. Journ.*, March 1897, p. 290.