no lack of other activities. Earth-movements have taken place, mountains have been uplifted, plateaus have been carved into mountain ridges, basins have been intensified, and volcanoes have poured forth sheets of lava, but all these actions have been more or less local in their application. On the whole, their action in Eastern Persia during Tertiary and Quaternary times has tended steadily in the one direction of elevating the mountains and increasing their area, while at the same time the basins have grown steadily smaller by the folding up of their edges. Nevertheless, this action has not gone on simultaneously over the whole country, and there are many parts of Persia where as yet we have found no evidence of tectonic action since the end of the Tertiary era.

With climatic changes the case is different. Their action is uniform over broad areas, and if our interpretation of the phenomena of Eastern Persia is correct, they have been extraordinarily active throughout the whole of Quaternary time. Thus interpreted the recent geological history of Persia begins with an arid climate at the end of the Tertiary era, after which ensued a fluvial period composed of some fifteen fluvial epochs of prolonged rivers and expanded lakes, separated by interfluvial epochs of shortened rivers and diminished lakes. The fluvial epochs increased in frequency and possibly in length and intensity from the beginning up to about the middle, after which they decreased. The evidence for these many epochs is of varying degrees of validity, and increases in certainty from first to last. The two lacustrine terraces of the various lakes and playas indicate two recent fluvial epochs. The kind of evidence and the method of study are of a sort which is everywhere familiar and which has been successfully tested in many cases. The three preceding epochs rest on less effective evidence. The evidence for them in the three gravel strata at Sistan is not in itself conclusive, since it consists of but two or three sections; and the warping and volcanic action which are known to have been taking place at the same time may have influenced the deposition of the gravels. Nevertheless, the widespread occurrence of a series of five terraces in other localities, and the impossibility of explaining these except on the climatic theory, give a fair degree of reliability to the conclusion that three more severe fluvial epochs preceded the two recorded in the lake shores. The test of this conclusion lies in a further study of those regions where, according to theoretically deduced consequences, similar terraces ought to be found.

The remaining ten epochs rest confessedly on a small basis of fact. It has been surmised that the glacial period may have consisted of an increasing series of climatic changes preceding a decreasing series, and there is evidence that the extension of the ice during what is commonly known as the second glacial epoch was greater than during its predecessor. Further than this, however, so far as I am aware, no one has ever gone. The facts of Sistan seem explicable only on the theory of a large number of increasingly severe fluvial epochs followed by an approximately equal series of decreasing epochs. This is at least a fair working hypothesis. To test the theory is difficult in the very nature of the case. Yet it can be done. In the first place, a far more extensive study of the abundant deposits of Sistan is practicable to-day, and it is only a matter of time when it will be