

If the surface of the land had been at first a vast plain, yet at the end of a certain time, through the operation of its water-courses, it would have lost that aspect, and would ultimately come to be traversed with mountains like those with which we are familiar.

In these deductions, the French philosopher re-echoed the principles established by De Saussure, Desmarest and Hutton. But he carried them to an extreme which may possibly have raised a prejudice against them. He declared that every mountain which has not been erupted by volcanic action or some other local catastrophe, has been cut out of a plain, so that the mountain-summits represent the relics of that plain, save in so far as its level has been lowered in the general degradation. Geologists have accepted this explanation for the systems of mountains which, having no internal or tectonic structure peculiar to themselves, appear to have been carved out of ancient tablelands. Lamarck, however, though he speaks of local catastrophes, seems to have had no conception of any widespread cause whereby the terrestrial crust has from time to time been folded and driven upwards into vast chains of mountains. He admits that in many mountains the component strata are often vertical or highly inclined. But he will not on that account believe in any universal catastrophe, such as had been demanded by many previous writers, and was still loudly advocated in his own time by his fellow-countryman Cuvier. He considers that the inclination of the strata may be due partly to the natural slope of the surface on which the sediments were originally deposited, like the talus-slopes of mountains, partly and frequently to many