

It will be obvious that when a land-surface which, with its characteristic topography, has been submerged and buried under thick sheets of sediment, is once more raised into the air, the subsequent degradation of these overlying sediments may reveal portions of the older topography. Ancient valleys obstructed by detritus may be partially uncovered, and may even serve again as channels for the drainage. Now this is actually the case in Scotland. Some of the Highland valleys are in part at least as old as the time of the Old Red Sandstone. The line of the Great Glen is one of these. Others of younger date are found in the Southern Uplands, such as the upper part of Lauderdale with its Upper Old Red conglomerates, and the valleys of the Moffat and Nith, with their Permian breccias. It is not, therefore, as if we could start from a definite ascertained point in geological time, in an attempt to trace out the history of the valley-systems of the country. The geography becomes more and more uncertain the farther back we try to follow it. But the main features in the history of its development can be satisfactorily made out.

Moreover, it is obvious that if after a land-surface has been so deeply buried under sedimentary deposits that all its topography is entirely concealed, the area should be raised once more into land, the new drainage-lines would have little or no reference to the old ones. They would be determined by the inequalities of surface of the overlying mantle of sedimentary material, and would be wholly independent of any relation to the geological structure of the rocks lying below that mantle. Slowly sinking deeper and deeper into the land, they might eventually reach the older rocks, but they would keep in these the lines of valley that they had followed in the overlying deposits. In process of time, the whole of these later deposits might be denuded