ture, is to be found in the case of the Tay. This important river rises at the back of the lofty mountains that tower above the head of Loch Fyne. First it flows in a transverse course down Strath Fillan. It then turns into a longitudinal valley which follows a long north-easterly line through Glen Dochart and Loch Tay.[1] It next turns sharply round into the transverse valley of the Tummel, which a few miles farther north in like manner changes from longitudinal to transverse. Thus the drainage, which flows for many miles through the mountains towards the north-east, is turned back at a right angle to its previous course, and carried to the south-east, out of the Highlands and across the great boundary fault into the wide plains of Strathmore.

If one may venture to offer a possible explanation of the history of these valleys, I may suggest that the transverse depression of the Garry and Tay was defined at a very early period, before the now visible geological structure had begun to play a large part in guiding erosion. This valley comes down from the heart of the mountains and passes away to the south-east, like those of the neighbouring Forfarshire rivers. It thus follows what would be at first the natural descent of the water, by the shortest and readiest route from the high grounds to the sea. The long valley of Loch Tay and Glen Dochart, on the other hand, has been excavated along an irregular flat anticlinal axis or fold of the quartzites and schists.[2] But Glen Garry had already

[1] The surface of Loch Tay is 346 feet above the sea, and its depth varies up to more than 500 feet. Its bottom is thus upwards of 150 feet below the level of the sea.

[2] The coincidence of a valley with an anticlinal axis may perhaps be traceable to an actual fracture of the strata along this line of severe tension. Not that the present sides of the valley are the sides of the fracture, nor even that there was ever an open fissure at the surface at