

marked by geological changes which produced distinct geographical conditions in adjacent regions.

That the Old Red Sandstone of Britain does represent the prolonged interval between Silurian and Carboniferous time can be demonstrated by innumerable sections, where the lowest strata of the system are found graduating downward into the top of the Ludlow group, and where its highest beds are seen to pass up into the base of the Carboniferous system. But the evidence is not everywhere so clear in regard to the true position of the Devonian rocks. That these rocks lie between Silurian and Carboniferous formations was long ago shown by Lonsdale from their fossils. But it is a curious fact that where the Lower Devonian beds are best developed, the Upper Silurian formations are scarcely to be recognized, or, if they occur, can hardly be separated from the so-called Devonian rocks. It is quite possible, therefore, that the lower portions of what has been termed the Devonian series may, in certain regions, to some extent represent what are elsewhere recognized as undoubted Ludlow or even perhaps Wenlock rocks.¹²⁹ We cannot suppose that the rich Silurian fauna died out abruptly at the close of the Ludlow epoch. We should be prepared for the discovery of Silurian rocks younger than the latest of those in Britain, such as Barrande showed to exist in his Etage II, or for a Devonian facies of fossils in rocks which are nevertheless regarded as Silurian. The rocks termed Lower Devonian may partly represent some of the later phases of Silurian life. On the other

¹²⁹ According to Kayser and Beyrich the limestones of the Hercynian series in the Harz and Nassau, together with Barrande's Upper Silurian Stages F, G, H, in Bohemia, are to be regarded as truly Devonian, and as being the deeper water equivalents of the arenaceous series of the normal Lower Devonian series on the Rhine. (Abhandl. Geol. Specialkarte Preussen, II. Heft 4, 1878. Zeitsch. Deutsch. Geol. Ges. xxxiii. 1881, p. 628.)