

The only incongruity between the geological results, and those which our dredging experiences might have led us to anticipate *à priori*, consists in the frequency of fossil reptiles, and the comparative scarcity of mammalia. It would appear that during all the secondary periods, not even excepting the newest part of the cretaceous, there was a greater development of reptile life than is now witnessed in any part of the globe. The preponderance of this class over the mammalia depended probably on climatal and geographical conditions, for we can scarcely refer it to "progressive development," by which the vertebrate type was steadily improving, or becoming more perfect, as Time rolled on. We cannot shut our eyes to the positive proofs now obtained of the creation of mammalia before the excess of reptiles had ceased,—nay, apparently before it had even reached its maximum.

In conclusion, I shall simply express my own conviction that we are still on the mere threshold of our inquiries; and that, as in the last fifty years, so in the next half century, we shall be called upon repeatedly to modify our first opinions respecting the range in time of the various classes of fossil Vertebrata. It would therefore be premature to generalize at present on the non-existence, or even on the scarcity of Vertebrata, whether terrestrial or aquatic, at periods of high antiquity, such as the Silurian and Cambrian.*

* For observations on the rarity of air-breathers in the coal, see above, p. 401.