between forms usually separated by wide gaps, whether in the recent or fossil fauna, are eagerly sought for, and often more prized than the mere normal or typical forms.

It is clear, that the more ancient the existing mollusca, or the farther back into the past we can trace the remains of shells still living, the more easy it becomes to reconcile with the doctrine of transmutation the distinctness in character of the majority of living species. For, what we want is time, first, for the gradual formation, and then for the extinction of races and allied species, occasioning gaps between the survivors.

In the year 1830, I announced, on the authority of M. Deshayes, that about one fifth of the mollusca of the Falunian or Upper Miocene strata of Europe, belonged to living species. Although the soundness of that conclusion was afterwards called in question by two or three eminent conchologists (and by the late M. Alcide d'Orbigny among others), it has since been confirmed by the majority of living naturalists, and is well borne out by the copious evidence on the subject laid before the public in the magnificent work edited by M. Hörnes, and published under the auspices of the Austrian Government, 'On the Fossil Shells of the Vienna Basin.'

The collection of tertiary shells from which those descriptions and beautiful figures were taken is almost unexampled for the fine state of preservation of the specimens, and the care with which all the varieties have been compared. It is now admitted that about one third of these Miocene forms, univalves and bivalves included, agree specifically with living mollusca, so that much more than the enormous interval which divides the Miocene from the Recent period must be taken into our account when we speculate on the origin by transmutation of the shells now living, and the disappearance by extinction of intermediate varieties and species.