

concealed since their formation by the deposition on them of other newer rocks; or they may be situated in areas which are at present hidden from us by the ocean. Fourthly, there may have been times in which great changes in life were actively progressing in areas in which there might be little or no contemporaneous deposition of rock.

From these and similar causes, it is almost certain that we shall never be able to point to a complete series of deposits linking one great geological period, such as the Cretaceous, to another, such as the Eocene. Still, we may well have a strong conviction that such deposits must exist, or must have at one time existed, though all traces of them may now be lost. Upon any theory of "evolution," at any rate, it is certain that there can be no break in the great series of stratified deposits, but that there must have been a complete "continuity" of life and of deposition, from the Laurentian period to the present day. There was and could have been no such continuity in any one given area; but it is not credible that the chain should ever have been snapped at one point, and taken up again at another wholly different one. The links may, indeed must, have been forged in different places; but the chain nevertheless remained unbroken. From this point of view, there would be little impropriety in saying that we are still living in the Silurian period; but we could say so in a very limited sense only. Most geologists probably would admit that there must in nature have been such an actual continuity of the great geological periods. Nevertheless it remains certain that we can never dispense with the division of the stratified series into definite rock-groups and life-periods. We can never hope to discover all of the lost links of the geological chain, and the great formations will ever be separated from one another by more or less pronounced physical or palæontological breaks or by both combined. The utmost we can at present do is to arrive at the conviction that the lines of demarcation between the great formations only mark gaps in our knowledge, and that there can be in nature no *hiatus* in the long series of fossiliferous deposits.

The theory, then, of geological "continuity" may in practice be carried so far as to be useless or even injurious to the progress of science. This would seem to be the case with a recent attempt by Professor Wyville Thomson to show that "we are still living in the