

trains of change is similar, and offers the same features for description. The relics and ruins of the earlier states are preserved, mutilated and dead, in the products of later times. The analogical figures by which we are tempted to express this relation are philosophically true. It is more than a mere fanciful description, to say that in languages, customs, forms of Society, political institutions, we see a number of formations super-imposed upon one another, each of which is, for the most part, an assemblage of fragments and results of the preceding condition. Though our comparison might be bold, it would be just, if we were to assert, that the English language is a conglomerate of Latin words, bound together in a Saxon cement; the fragments of the Latin being partly portions introduced directly from the parent quarry, with all their sharp edges, and partly pebbles of the same material, obscured and shaped by long rolling in a Norman or some other channel. Thus the study of palætiology in the materials of the earth, is only a type of similar studies with respect to all the elements, which, in the history of the earth's inhabitants, have been constantly undergoing a series of connected changes.

But, wide as is the view which such considerations give us of the class of sciences to which geology belongs, they extend still further. "The science of the changes which have taken place in the organic kingdoms of nature," (such is the description which has been given of Geology,³) may, by following another set of connexions, be extended beyond "the modifications of the surface of our own planet." For we cannot doubt that some resemblance of a closer or looser kind, has obtained between the changes and causes of change, on other bodies of the universe, and on our own. The appearances of something of the kind of volcanic action on the surface of the moon, are not to be mistaken. And the inquiries concerning the origin of our planet and of our solar system, inquiries to which Geology irresistibly impels her students, direct us to ask what information the rest of the universe can supply, bearing upon this subject. It has been thought by some, that we can trace systems, more or less like our solar system, in the process of formation; the nebulous matter, which is at first expansive and attenuated, condensing gradually into suns and planets. Whether this *Nebular Hypothesis* be tenable or not, I shall not here inquire; but the discussion of such a question would be closely connected with

³ Lyell, *Principles of Geology*, p. 1.