

connect the phenomena of all geological periods, from the most ancient to the most modern epoch, into *one grand system of natural revolutions*, it follows that we may look upon the present condition of our globe as one term of a magnificent series of appointed changes, to which others may from analogy be expected to follow, according to the same laws. The creation of intelligent man is indeed an event not in the calculation which man can make of the effects of such laws; nor, indeed, is it given to us creatures of a day exactly to know the laws of variation which bind all the phenomena of nature — past, present, and to come — into one great system of appointed effects, flowing from a predetermined cause, — much less to deduce these effects. Yet let not the search for these laws — which comprises the whole of geological theory — be censured as a chimerical inquiry. The augmentation of light that has already been poured on the dark pages of geology encourages perseverance; the extent of man's power to interpret the phenomena of nature may be vast, compared with his present knowledge, however small, compared to the amount of things unknown. In searching for general theory we shall at least find limited truth; and the experience of some thousand years has proved the labour, which seemed vainly tasked in abstract discovery, to be seldom unproductive of practical utility.

To understand rightly the daily accumulating stores of organic reliquæ, requires more than a slight knowledge of existing nature, — more even than an acquaintance with animal and vegetable forms. The philosophy of their existence must be considered — the variations of their structure, with respiration in air or in water — life in fresh or salt water — in trees or on the ground — carnivorous or herbivorous food — their geographical distribution — dependence on climate and atmospheric conditions. Thus viewed, the present system of nature appears, when compared with the older periods, one in which local diversities of condition have gone to extreme — where all the peculiarities of climate and surface have