

research as regulative principles which the student of nature must always keep before him. It is, for instance, quite evident that to a common-sense view the physical world itself presents endless breaks and chasms. This leads to an aspect which is the main foundation of a special description of nature which deals with just those irregularities that science discards in principle. This aspect is that presented to the artist.

We shall revert to this point of view in the sequel.

Even the student of pure science has always to turn again from his rigid calculation and measurement to the broad view of actual life; he has to take in at a glance the world as it is before he dissects it; he has to recognise that no analysis and subsequent synthesis exhausts the nature of any visible or tangible thing, that the *ensemble* is more than the sum of its parts.

For its real progress science is ultimately always indebted to observation: though the astronomer may turn his back on the starry firmament in order to carry out his refined calculations in his study, he must always revert to observation in order to verify them. Though colours and melodies figure in the mathematician's language as measurable tremors or vibrations, the most delicate colour-tests are used in chemical research, and the tuning-fork in the science of acoustics. Without the Solar Spectrum and the discontinuity of the Lines of Fraunhofer, Spectral Analysis would be unthinkable and physical astronomy could not claim that important part in the exploration of the heavens which it now does. It was in the course of extensive travel over different regions that Darwin and Wallace were led to those speculations