

during a single lifetime,\* the whole of this most perfect of sciences might, from those data, and as to the objects included in them, be at once reconstructed, and appear precisely as it stood at their conclusion. To take another instance: mineralogy, till modern times, could hardly be said to exist. The description of even the precious stones in Theophrastus and Pliny are, in most cases, hardly sufficient to identify them, and in many fall short even of that humble object: more recent observers, by attending more carefully to the obvious characters of minerals, had formed a pretty extensive catalogue of them, and made various attempts to arrange and methodize the knowledge thus acquired, and even to deduce some general conclusions respecting the forms they habitually assume: but from the moment that chemical analysis was applied to resolve them into their constituent elements, and that, led by a happy accident, the genius of Haüy discovered the general fact, that they could be *cloven* or split in such directions as to lay bare their peculiar primitive or fundamental forms (which lay concealed within them, as the statue might be conceived encrusted in its marble envelope),—from that moment, mineralogy ceased to be an unmeaning list of names, a mere laborious cataloguing of stones and rubbish, and became, what it now is, a regular, methodical, and most important science, in which every year is bringing to light new relations, new laws, and new practical applications.

(68.) Experience once recognised as the fountain of all our knowledge of nature, it follows that, in the study of nature and its laws, we ought at once to make up our minds to dismiss as idle prejudices, or at least suspend as premature, any preconceived notion of what might or what ought to be the order of nature in any proposed case, and content ourselves with observing, as a plain matter of fact, what *is*. To experience we refer, as the only ground of all physical inquiry. But before experience itself can be used with advantage, there is one preliminary step to make, which depends wholly on our-

\* Maskelyne's.