

a closeness of agreement, which can hardly leave any reasonable doubt of their ultimate coincidence in one common phenomenon, the vibratory motion of an elastic medium. If it be allowed to pursue our illustration from chemistry, and to ground its application, not on what has been, but on what may one day be, done, it is thus that the general family resemblance between certain groups of bodies, now regarded as elementary (as nickel and cobalt, for instance, chlorine, iode and brome), will, perhaps, lead us hereafter to perceive relations between them of a more intimate kind than we can at present trace.

(86.) On those phenomena which are most frequently encountered in an analysis of nature, and which most decidedly resist further decomposition, it is evident that the greatest pains and attention ought to be bestowed, not only because they furnish a key to the greatest number of inquiries, and serve to group and classify together the greatest range of phenomena, but by reason of their higher nature, and because it is in these that we must look for the direct action of causes, and the most extensive and general enunciation of the laws of nature. These, once discovered, place in our power the explanation of all particular facts, and become grounds of reasoning, independent of particular trial: thus playing the same part in natural philosophy that axioms do in geometry; containing, in a refined and condensed state, and as it were in a quintessence, all that our reason has occasion to draw from experience, to enable it to follow out the truths of physics by the mere application of logical argument. Indeed, the axioms of geometry themselves may be regarded as in some sort an appeal to experience, not corporeal, but mental. When we say, the whole is greater than its part, we announce a general fact, which rests, it is true, on our ideas of whole and part, but, in abstracting these notions, we begin by considering them as subsisting in space, and time, and body, and again, in linear, and superficial, and solid space. Again, when we say, the equals of equals are equal, we mentally make comparisons, in equal spaces, equal times,