

empty, and therefore without a void there could be no motion:—and, on the other hand, there is no void, for the interval between bodies are filled with air, and air is something. These opinions had even been supported by reference to experiment. On the one hand, Anaxagorus and his school had shown, that air, when confined, resisted compression, by squeezing a blown bladder, and pressing down an inverted vessel in the water; on the other hand, it was alleged that a vessel full of fine ashes held as much water as if the ashes were not there, which could only be explained by supposing void spaces among the ashes. Aristotle decides that there is no void, on such arguments as this:<sup>7</sup>—In a void there could be no difference of up and down; for as in nothing there are no differences, so there are none in a privation or negation; but a void is merely a privation or negation of matter; therefore, in a void, bodies could not move up and down, which it is in their nature to do. It is easily seen that such a mode of reasoning elevates the familiar forms of language and the intellectual connections of terms, to a supremacy over facts; making truth depend upon whether terms are or are not privative, and whether we say that bodies fall *naturally*. In such a philosophy every new result of observation would be compelled to conform to the usual combinations of phrases, as these had become associated by the modes of apprehension previously familiar.

It is not intended here to intimate that the common modes of apprehension, which are the basis of common language, are limited and casual. They imply, on the contrary, universal and necessary conditions of our perceptions and conceptions; thus all things are necessarily apprehended as existing in Time and Space, and as connected by relations of Cause and Effect; and so far as the Aristotelian philosophy reasons from these assumptions, it has a real foundation, though even in this case the conclusions are often insecure. We have an example of this reasoning in the eighth Book,<sup>8</sup> where he proves that there never was a time in which change and motion did not exist; “For if all things were at rest, the first motion must have been produced by some change in some of these things; that is, there must have been a change before the first change;” and again, “How can *before* and *after* apply when time is not? or how can time be when motion is not? If,” he adds, “time is a numeration of motion, and if time be eternal, motion must be eternal.” But he sometimes intro-

<sup>7</sup> Physic. Ausc. iv. 7, p. 215.

<sup>8</sup> Ib. viii. 1, p. 258.