

recognise order in two forms—viz., Order as a fixed arrangement, and Order in change or motion. The principle of the first seems to reduce itself to repetition, regularity, imitation or sameness of position, by whatever term we may prefer to express this simplest form of order, which is the form that children are first made acquainted with in play or in lessons.

A second form of Order meets us when we come to change or motion, and here the new concept of Direction comes in. So long as we do not go beyond these simple relations of position in space and time and of motion, we seem to have the phenomena of the outer world completely under our control so far as the understanding of them is concerned; and a great many practical applications are entirely dependent on this understanding.

If we are willing to take a purely mechanical view of the actual world and reduce all phenomena to modes of motion, whether cosmical, molar, molecular, atomic, or corpuscular, we seem to possess a complete grasp of the outer world; for in this case we have the mechanical principles of the conservation of Mass, the conservation of Energy, and the conservation of Momentum—the latter principle being expressed in one of the laws of motion: that every body if left to itself and not influenced by any external force will continue to move in a straight line with undiminished velocity. In this rule there is contained a difficulty—viz., the difficulty of the definition of a straight line. But as we have, for all practical purposes, arrived at the means of measuring Mass, Time, and Direction, there seems no hindrance in our way to completely