

with the material world is impossible, in spite of their clamorous experience to the contrary (or else, on the strength of that experience, to conceive that there is something the matter with the formulation of physical and dynamical laws), is because all such interference is naturally and necessarily excluded from scientific methods and treatises.

In pure Mechanics, "force" is treated as a function of configuration and momentum : the positions, the velocities, and the accelerations of a conservative system depend solely on each other, on initial conditions, and on mass ; or, if we choose so to express it, the co-ordinates, the momenta, and the kinetic energies, of the parts of any dynamical system whatever, are all functions of time and of each other, and of nothing else. In other words, we have to deal, in this mode of regarding things, with a definite and completely determinate world, to which prediction may confidently be applied.

But this determinateness is got by refusing