

a tacit assumption that they have not been let in.

There is a similar tacit assumption in treatises on Physics and Chemistry ; viz., that the laws of automatic nature shall be allowed unrestricted and unaided play, that nothing shall intervene in any operation from start to finish save mechanical sequent and antecedent,—that it is permissible in fact to exercise abstraction, as usual, to the exclusion of agents not necessarily connected with the problem, and not contemplated by the equations.

In text-books of Dynamics and in treatises of Natural Philosophy that is a perfectly legitimate procedure ;¹ but when later on we come to philosophise, and to deal with the universe as a whole, we must forgo the ingrained habit of abstraction, and must remember that for a *complete* treatment *nothing* must permanently be ignored.

¹ It is on a similar basis that there is a science of rigid dynamics, with elasticity and fluidity excluded ; and thus also can there be a hydrodynamics in which the consequences of viscosity are ignored.