

sufficient to leave this essential factor in a shadowy background, as Schelling did with his "Absolute," Hartmann with his "Unconscious," and Herbert Spencer with his "Unknowable."¹ The term must have a deeper meaning, and this meaning must be founded on some subjective or psychical experience accessible to every thinking person, and possessing as much immediate evidence and intuitive certainty as those fundamental data—such as space, time, motion, and mass—upon which exact science builds up her theories.

¹ To this we might add Haeckel's "Law of Substance"—which as a cosmological first principle includes the conservation of matter and energy—were it not for the fact that this contains really no new idea, but reminds us only of Spinoza and other precursors (such as Büchner) whose opinions Haeckel partially adopts. It may here be remarked that it is not pre-eminently among such natural philosophers as define and handle the fundamental principles of the mechanical view with the greatest accuracy and efficiency that we find the materialistic view of the world prominently put forward. It is rather by those thinkers—notably biologists—who are forced by training and habit to use such terms as mass, force, energy, cause, and purpose in a wider and more pregnant sense than a purely mechanical definition would permit, that we find these conceptions employed to explain both mechanical and mental phenomena and the claim put forward to establish a monistic creed. Mathematicians such as Gauss, Cauchy, Kelvin, Hertz, and others have always laid down their mechanical principles with the greatest caution, indicating or distinctly expressing the conviction that the

phenomena of life and mind belong to an entirely different sphere of thought and research. A remarkable expression in this direction will be found in H. Hertz's posthumously published 'Principles of Mechanics' (1894): "It is certainly a justified caution with which we confine the realm of mechanics expressly to inanimate nature and leave the question open how far its laws can be extended beyond. In truth, the matter stands thus, that we can neither maintain that the internal phenomena of animated beings obey the same laws nor that they follow other laws. Appearance and common-sense favour a fundamental difference. And the same feeling which induces us to relegate as foreign to the mechanism of the lifeless world every purpose, every sensation of pleasure and pain, the same feeling makes us hesitate to deprive our view of the animated world of these richer and more varied attributes. Our principle, sufficient perhaps to describe the motion of lifeless matter, appears at least *prima facie* to be too simple and limited to describe the manifoldness of even the lowest phenomena of life" (p. 45).