

as was probably intended, because it appeals to familiar ideas and employs current phrases; but also, as it turned out in the sequel, because it is easily translated into other civilised tongues. It was published at a time when the materialistic controversy was at its height, with Carl Vogt and Jacob Moleschott on the one side, and Rud. Wagner and Liebig on the other. It is important to note that this controversy arose within the regions of the newly developed science of physiology, which at that time, through the labours of chemists and anatomists, was just adopting the experimental methods and mechanical conceptions which had been elaborated and firmly established in the sciences of dynamics and mathematical physics. It was especially the vague idea of a vital force which had to be combated and expelled from physiological inquiries. This was done in a masterly manner by Lotze¹ in his articles on "Vital Force"

¹ Although Lotze is by far the most thorough critic of the principles which lie at the foundation of the materialistic view, his writings (see a list of them *supra*, p. 6, note) did not create at the time the impression they deserved. He was frequently misunderstood, and only that part of his criticism was assimilated by contemporary thought in which he successfully combated the conception of a vital force. Accordingly we find that in the 'History of Materialism' of F. A. Lange (first edition, 1866)—already frequently referred to—little notice is taken of the important part which Lotze's writings played in that controversy. "It is Lotze—one of the acutest, and in scientific criticism one of the surest, philosophers of our day—who did this

involuntary service to Materialism. The article 'Vital Force' in Wagner's 'Handwörterbuch,' and his 'General Pathology and Therapeutic as Mechanical Sciences,' annihilated the phantom of a vital force, and introduced some degree of order into the lumber-room of superstition and confusion of ideas that medical men called Pathology. Lotze had trodden the right path; for, in fact, it is amongst the tasks of philosophy, while making a critical use of the facts supplied by the positive sciences, to react upon them, and to exchange for the gold of special research the results of a wider survey and a more rigid logic. He would no doubt have met with more recognition in this course if Virchow had not simultaneously appeared as practical reformer of