

OUR LIFE

For more than a century afterwards, from the middle of the eighteenth until the middle of the nineteenth century, medicine and (especially) physiology were dominated by the old idea that a certain number of the vital processes may be traced to physical and chemical causes, but that others are the outcome of a special vital force which is independent of physical agencies. However much scientists differed in their conceptions of its nature and its relation to the "soul," they were all agreed as to its independence of, and essential distinction from, the chemico-physical forces of ordinary "matter"; it was a self-contained force (*archaeus*), unknown in inorganic nature, which compelled ordinary forces into its service. Not only the distinctly psychical activity, the sensibility of the nerves and the irritability of the muscles, but even the phenomena of sense activity, of reproduction, and of development seemed so wonderful and so mysterious in their sources that it was impossible to attribute them to simple physical and chemical processes. As the free activity of the vital force was purposive and conscious, it led, in philosophy, to a complete *teleology*; especially did this seem indisputable when even the "critical" philosopher Kant had acknowledged, in his famous critique of the teleological position, that, though the mind's authority to give a mechanical interpretation of all phenomena is theoretically unlimited, yet its actual capacity for such interpretation does not extend to the phenomena of organic life; here we are compelled to have recourse to a *purposive*—therefore *supernatural*—principle. This divergence of the *vital* phenomena from the *mechanical* processes of life became, naturally, more conspicuous as science advanced in the chemical and physical explanation of the latter. The circulation of the blood