

Further, workers on this border-land can apply the rigid methods of the exact sciences only to a limited extent; they are everywhere led, by observation as well as reflection, into departments where rigid definition is impossible; especially the medical teacher is many times obliged—as Du Bois Reymond himself has honestly confessed—to teach things which he does not know. Like all practical professions, the medical profession embraces a totality of things, many of which are matters of conjecture rather than knowledge. Thus it comes about that philosophical speculations issuing from naturalists are in the same degree more intelligible to the popular mind as they are unsatisfactory to those who start with mechanical or mathematical notions and habits of thought on the one side, or with exclusively psychological and subjective notions on the other. For the former complain that the naturalist uses many words and terms not in a rigidly scientific sense, and the latter complain that he deals with purely psychical phenomena by analogy with external processes which are not really analogous, and give only a semblance of insight.

As stated above, it has taken thousands of years before such terms as matter, force, energy, potential and actual, have been sufficiently cleared of their purely subjective attributes to enable them to be mathematically defined. In the literature of the naturalist, the physiologist, and psychologist, these terms, however, still occur in a wider sense and are indispensable, denoting something additional and different from the restricted sense in which they occur in the purely exact sciences. In addition to these terms we have others like sub-

41.
Loose use
by natural-
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physical
concepts.