

A CRITIQUE OF MATERIALISM

Editor of the NEW PHILOSOPHY:

In the January–March 1959 issue I endeavored to solve the paradox involved in the fact of creation appearing to contradict both the general laws of conservation and the more specific laws, which I had suggested, of closed systems of conservation in each of the major strata of reality (p. 10). I suggested that “in the four-dimensional course of process the routine laws of nature, *without being abrogated*, must have direction imposed upon them by the laws of creation” (p. 11). In other words, I argued that, as the law of least action imposes direction on the law of conservation of energy plus mass, by analogy we can assume that the laws of creation impose direction on the combined effect of the laws of conservation and of least action; and, moreover, that this imposition of direction *suffices* to explain all phenomena. This is where I almost certainly went too far. I was, in fact, hypnotized by my own idea!

I have now come to the conclusion that if the laws of creation only had the effect of imposing direction on the laws of conservation and of least action, they would not suffice to explain all the phenomena. I still argue that this effect exists. We must, however, in addition allow for creative causation, i.e. deeper levels of purposive causation, being able to bring about the transfer, conversion or transmutation of substance and of energy from one stratum of reality to another.

Since Descartes enunciated the theory that the quantity of movement in the universe remains constant, i.e. the law of the conservation of momentum, the world of science has treated the various laws of conservation as axiomatic and inviolable. I myself have tended to treat them as such. But Einstein’s formula for the equivalence of mass and energy should have given us, and myself in particular, a warning that yet another of the principles of classical physics was subject to exceptions.

Once we accept the fact that the universe was created, the obvious exception to the inviolability of the laws of conservation is creation itself; involving, in the first instance, the finiting of infinity, and then the creation of the spiritual universe, followed by that of the material universe—conceptions which are, of course, wholly devoid of meaning to the materialist. As the substances

of these universes came into being, so did the particular forms of order characterizing the major strata of reality as they successively came into being. We express these forms of order in the form of laws, and think of the laws as regulating and determining the flow of process. They are, of course, nothing of the sort: they are mere descriptions of the nature of order, as we more or less incompletely understand it. Something more than a hint of this seems to be expressed in this statement from TCR 33: "One thing was formed from another, and thence degrees were made."

An example in the opposite direction—that is, of the spiritualizing and, in this special case, the making Divine of matter—was the resurrection of the Lord. For, according to TCR 170: "When He rose He took from the sepulchre His whole human body, both the flesh and the bones"; and it was obviously no longer material. (Cf. also TCR 109.) No doubt the following statement applied to His body as well as to the elements of personality inherited from Mary: "The Lord altogether changed (*mutavit*) His human state into the Divine" (AC 3296e).

Remarkable evidence corroborating this has been produced by Dr. Pierre Barbet from his examination of what is known as "The Holy Shroud," in his book translated under the title *The Passion of Our Lord Jesus Christ* (Clonmore and Reynolds Ltd., Dublin, 1954). From an examination of the dried clots of blood on the linen sheet, and from experiments which he carried out, he proved that the body which left those traces disintegrated *completely* before a trace of corruption had set in, that is, within 36 hours. (See pp. 29–35.) I accept Dr. Barbet's evidence as conclusive—as conclusive as physical evidence can possibly be—that the body that lay in that shroud was none other than that of Jesus Christ, and that it became separated from the clots of blood formed on the shroud by no less delicate a process than the dematerialization of the body.

A rather different process of dematerialization has become well known to physicists: when an electron and a positron collide, they disappear as substance, producing radiant energy in its place. It is no doubt this that Sir Cyril Hinshelwood, President of the Royal Society, had in mind when, in today's *Sunday Times*, he wrote that "mass dematerializes into energy."

My conclusion, therefore, is that deeper levels of purposive causation—which it might be convenient to call creative causation—

control lower levels of causation in two ways, with and without overriding the laws of conservation.

We are, however, without any evidence as to the conditions under which creative causation comes into action, and particularly under what conditions the barriers between different strata of reality cease to act as barriers. We would expect particularly deep causation to come into action on such occasions; but the dematerialization of mass into energy when an electron and a positron collide would hardly fit in with such an hypothesis.

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PHILOSOPHICAL NOTES

On Motion as a Cause

For many years Swedenborg's *Principia* was unique in that only in its pages could be found an explanation of the substantial particles in terms of motion. For example, the existence of the first finite is given in terms of the motion of first natural points. Today it has become commonplace among modern physicists to attribute the existence of particles to motion, and, further, to ascribe mass to the particles as due to this motion.

For example, in an article in the *Scientific American* for July, 1957, on "Elementary Particles" by Gell-Mann and Rosenbaum we read: "The photon always travels with the velocity of light (denoted by the letter C); it can never be at rest. Because of its motion it possesses energy. It therefore also possesses mass, according to the famous relation $E = mc^2$. But the mass exists only by virtue of the motion. The electron, proton and neutron, on the contrary, can be at rest. Each has a mass when at rest and a corresponding rest energy. (When in motion, of course, they have additional energy and mass.)"

"Our Principia in a Nutshell"

In his *Principia* Swedenborg says: "I would observe, then, that in every bubble of water is contained all that had previously existed from the first simple; every genus of finites, actives and ele-