

[1962. *Science and Causality, Christianity Today Apr 27*). - *A response to letters to the editor regarding Clark's "Bultmann's Three-Storied Universe" including one from Vivian Dow, Professor of Philosophy at Boston Conservatory of Music*]

Vivacious Miss Dow, who so admirably stood up in a philosophic association and very cleverly told off those who were impugning Christianity, proposes to date the death of causality in 1930 and the death of mechanism in 1860. But here quotation from Barnett does not quite imply these dates.

First of all, she and I may not have the same idea of causality. It is a highly ambiguous term. I take causality to be a necessary connection between one particular event and a second. The first is said to make the second occur. Mechanism, on the other hand, is the regularity of mathematical law. Sometimes confusion arises. Even Max Planck (the Concept of Causality, p. 121), when he makes accurate prediction, or mechanism, an infallible criterion of a causal relationship, but refuses to make them synonymous, fails to distinguish the latter from the former.

Now, Berkeley and Hume argued against necessary connection. Kant tried to reinstate it, but he failed to carry the whole nineteenth century with him. Ernst Mach (The Science of Mechanics, pp. 482 ff.) seems to discard causality along with Hume. And in any case, Newton and Planck ... made no use of it in their scientific formulations. The law of the freely falling body, the planetary laws, and the law of gravitation do not show *what makes* a body fall; at best they merely describe *how* a body falls. The scientific law is a statement of regularity. Therefore I think I am amply justified in saying that science dropped the idea of cause more than a hundred years ago, and not just with the introduction of quantum theory.

But mechanism continued. True, it was questioned by Charles Peirce. Nor do I claim that mechanism is dead. My statement was very modest: the indeterminacy principle and the attempt to reduce physical law to statistics seriously called in question the regularity of mathematical law. I cannot agree with Miss Dow that mechanism was abandoned over a hundred years ago. After all, Jacques Loeb published *The Mechanistic Conception of Life* in 1912. And C.T. Ruddick defended mechanism against Heisenberg in the thirties.

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