asked what species of frog was used; his answer, "I don't know, they were bought from some supply house"; (vi) a predoctoral graduate student in biophysics, supported by a large government stipend, declaring that his only wish was to see a protein molecule divide under a microscope (light); (vii) the teaching in many universities that viruses are organisms and bridge the gap between living and nonliving phenomena; (viii) financial support for "breakthrough" areas rather than additive areas of varying magnitude; and (ix) obsession with confidence limits and evaluations. I am certain that any reader can compile an even longer list.

We might learn a lesson from physics, where the mother-child relationship has not been so prodigal. The wave and corpuscular theories of light are still used and found necessary to explain certain phenomena, notwithstanding the quantum theory. I think Commoner has done a great service to all biologists in making a plea for the integrity of traditional and modern disciplines. Furthermore, it is my belief that the bewildered mother would receive again her fast-talking child, and would even take on some of the child's habits, should the road be made open and should agreement be reached as to what each was examining.

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I believe that most of Asimov's remarks require no comment beyond what has already been said in my original article. However, one of his statements tends to give the reader a misleading idea of the content of my article, which I should like to correct.

With respect to the distinctions between living and other forms of matter, Asimov states: "Scientists who labor to make these artificial partitions between the arbitrary divisions impenetrable and unsurmountable are doing science a great disservice. Nor are they truly serving their own fields by their careful shielding of them from all contact with outside thought."

In the second of the foregoing sentences Asimov has precisely reversed the main point of my article—which is that the real distinction between life and nonlife ought to be recognized *so that physics and chemistry can be more effectively applied to biological problems.* Far from avoiding "contact with outside thought," my article consists of arguments in support of the uniqueness of life which are derived *from* physical and chemical principles.

In the first of the quoted sentences, Asimov has also misinterpreted that part of my article which deals with the significance, for biology, of the principle of complementarity put forward by Bohr. Bohr points out that for reasons which are fundamental to the present structure of quantum physics, a subatomic particle can be described, at any one time, by either its corpuscular or its wave properties, but never by both together. He suggests—and I support this view—that a similar complementarity governs the relationship between two features exhibited by living organisms—the manifest living state and the physicochemical events which go on within it. Asimov is at liberty to regard this proposal as an "artificial partition between the arbitrary divisions" of life and nonlife. But in that case he ought, in the name of logic, to say the same about the distinction between the corpuscular and wave properties of subatomic particles. Yet, much of modern physics has been founded on this distinction.

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Daedalus and Minos

Dedijer's very interesting article "Why did Daedalus leave?" [*Science* **133**, 2047 (1961)] leaves open a tantalizing question: How about the fate of Minos? In those countries in which the social and political environment is unfavorable to the development of science, does not the return of the Daedali deeply threaten the social system which led to their flight? Would not their return and creation of new traditions necessary to their existence construct a bath to scald Minos to death? And is not Minos, unconsciously perhaps, behaving in his own self-interest in putting last on his priority list "a quantity of problem-solving Daedali?"

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