ing several hundred reprint requests to the wastebasket leaves a sense of guilt at frustrating legitimate attempts by scientists to cover the world literature. It is interesting to note that the number of requests per paper correlates with the number of key words in its title and not its length. Please accept this letter as my personal apology for discourtesy engendered by circumstances which may not be peculiar to our Institute.

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Art in Science: Another Protagonist

The letters on the subject of art in science (20 May, 11 March, and 10 December) point up the abysmal ruts into which the concept of art is being channeled these days. To equate a mechanically derived photograph of a natural phenomenon with art reveals a basic misconception of what we call art.

We have gone a long way from such narrow opinions as propounded by such men as Aristotle or Tolstoy who held the view that imitation of nature is the highest aim of art, or that a work of art must be sugarcoated to be beautiful. The imitation of an apple or a tree as seen by the naked eye, or the path of an electron in a cloud chamber as revealed by the electron microscope, can never be more than mere facts of nature. The reasons why similarities exist between the appearance of an amoeba or an exploding galaxy and certain forms that appear in abstract paintings are twofold: either the abstract artist became acquainted with certain forms as revealed by the microscope or telescope and used them as raw materials in the same way as the general lines of the human body or as the arrow were used by artists of Paleolithic times; or else, the artists in their search for rhythmically related forms have discovered and predicted the existence of such forms in nature unperceived by the naked eye. In either case, the creative effort consists not in the forms employed but in the design of a rhythmic configuration so organized as to constitute an esthetic unity. The accidental apparent unities which are sometimes found in nature such as driftwood, stone, or photomicrographs, must never be confused with works of art, which are man's effort to recreate and give meaning to life experience.

The aim that art and science have in common, though they take different paths to accomplish it, is to create order out of chaos. The Albany Exhibit would have been far more instructive and much less confusing to the general public if the mechanically derived works were separated from man's efforts to create works of art. The mechanically derived photographic works could stimulate and inspire artists in their creative efforts and would therefore be of value, especially to those who have little access to scientific journals or books.

I have derived much esthetic pleasure and stimulation from many of the photographs that have appeared in *Science*. To mention a few, I would like to point out the cover designs, Fibrillar Nylon (31 Dec.), Alaskan Island, aerial view (15 April), and Lightning (28 Jan.), the photograph of a particle of interplanetary dust (7 Jan., p. 36), and chemiluminous trails (20 May, p. 1020).

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Automotive Watchdog

It is with great surprise that I watch the continuation of the debate on Nader's *Unsafe at Any Speed* (Letters, 21 Jan. and 25 Mar.), especially the letters from scientifically trained readers. . . . anyone who has followed "Uncle" Tom McCahill in *Mechanics Illustrated* for the last 20 years will find nothing new or surprising in *Unsafe at Any Speed*. Other automotive reporters say much the same but without "Uncle Tom's" humor. Year after year McCahill is given access to the automobile company proving grounds and latest model cars. He tests and reports on each, carefully telling what dealer options and private modifications would make the car more safe operationally. He reports statements from engineers who repeatedly show bad sales data on models where engineering took precedence over styling. He is bitterly critical of automobile company management, but admits that they have little choice. An interview with Tom McCahill would be most enlightening.

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