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Book Review: Barry Commoner,
The Closing Circle: Nature, Man and Technology*

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Barry Commoner, The Closing Circle:
Nature, Man, and Technology
(A. Knopf, New York, 1971)
by
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Among the hundreds of books, articles, and anthologies published in the last five years on ecology, environment, and pollution, Barry Commoner's new work, The Closing Circle, undoubtedly stands out as a landmark. Here, at last, is not only a comprehensive study of specific environmental problems but, more important, a convincing explanation of their causes and some extremely illuminating chapters on the relationship of environmental deterioration to technological and economic success.

Starting with a brilliant depiction of biochemical evolution and the nature of the ecosphere Commoner proceeds to define four basic laws of ecology. He then devotes a chapter each to a major environmental problem: radioactive pollutants, Los Angeles smog, Lake Erie water, and Illinois soil, repeatedly stressing the difficulty of finding a simple cause-effect relationship when dealing with pollutants because of their synergistic nature. (Incidentally, one of R.C.S.I.'s contributions to save the environment is mentioned by Commoner on p. 203 in the book.)

Most significant are chapters nine and twelve. Commoner is the first ecologist to comprehensively develop a theory about the relationship of technological success to environmental failure; the real cause of our predicament is not overpopulation, nor overconsumption, nor affluence, but the environmental failure of much post-World War II technology: inefficient high-compression car engines run at low speed; natural cycles and balances damaged by the use of high nitrogen fertilizers and pesticides so that in the end the farmer becomes increasingly dependent on them; synthetic materials causing considerable thermal and chemical pollution when produced, whose very economic and technological success is one of their environmental failures (i.e. they don't deteriorate).

Since our wealth is based on the earth, we must change our production technology and agricultural practices so that they conform to ecological laws; we must encourage the use of natural products, of recycling. If we don't, Commoner estimates we have about twenty-five years before damage to our environment will have become irreparable. He estimates that the cost of such a technological change will be 40 billion annually in 1958 dollars.

I would encourage every R.C.S.I. member to read this book, substantial parts of which first appeared in the September 25th and October 2nd issues of The New Yorker.