

Books

The Scientists

by Eleazar Lipsky

Appleton-Century-Crofts, Inc. . . \$4.95

Reviewed by Robert S. Edgar

In the last few years, achievements in the domain of science and technology, and our keen competition with the Russians in this area, have made the scientist much more important as a public figure. At the same time, much has been written and said about the public's misconception of the scientist as an ivory-tower misfit. In spite of — or perhaps because of — this notoriety, few scientists, and even fewer convincing ones, have lived in the pages of the novel.

The battle of Biocin

A novel dealing with scientists has appeared at this propitious time and, significantly, been selected by the Book-of-the-Month Club. The book, *The Scientists*, focuses attention on a lawsuit between David Luzzatto, an impetuous young geneticist, and his rather weird professor, Victor Ullman. David, during his graduate student days, had discovered a mutation inhibitor called "Biocin" which, for reasons unconvincing to this reader, increases the effectiveness of all antibiotics. Ullman contests David's rights to the large royalties from Biocin. Thus David's reputation, and that of the college which has capitalized on his rising prestige, are in jeopardy. Nearly everyone who becomes involved in the ensuing complications — the sly, fence-sitting president of the college; the frightened or calculating faculty members; David; Ullman; and the reader — comes out soiled by the experience.

Movie material?

Although the spirit of science does occasionally enter, it is of little consequence to the central theme of the book which, following a recent and popular literary trend, manages to convey that money is money, work is the manipulation of one's colleagues, and the scientist and the Madison Avenue ad-man are brothers under the skin. The book will probably make a successful movie.

Robert S. Edgar, research fellow in biophysics, received his BS from McGill University, Canada, in 1953, and his PhD from the University of Rochester in 1957. He is working at Caltech on the genetics of bacteriophage.

The Search

by C. P. Snow

Charles Scribner's Sons \$3.95

"Most writers write about scientists as if they were either men from Mars or earnest boy scouts intent on a meaningless task which may nevertheless blow us all sky high. Snow's characters are gifted human beings with every degree of commitment to the enterprise of discovering new knowledge."

This is the distinguished physicist, I. I. Rabi, commenting on *The Search*. First published in 1934, this novel has maintained a certain reputation over the years for its sensible and accurate treatment of science and scientists. Now it has been revised and reissued.

"It made a deep impression on me," says Rabi, "as a novel which described the world of science as lived by scientists from the inside. I have since recommended it as the one novel which I knew which was really about scientists living as scientists . . . It is even more timely now than it was when first published."

The Search is not only a good novel about science — it's a good story too. As a result, it ought to give a lot of laymen some idea of what a scientist's life is like.

C. P. Snow should know. He was trained as a physicist and did some research at Cambridge before he started on what has now become a distinguished literary career. In an impressive introductory note to this new edition of *The Search* he gives some of his reasons for writing this kind of book:

"We are living," he says, "in the middle of two cultures which have scarcely any contact at all — the traditional non-scientific culture and an up-and-coming scientific one. They are startlingly different, not only in their intellectual approach, but even more so in their climate of thought and their moral attitudes. This divide exists not only in the U.S. and Great Britain but all over the Western world . . .

" . . . It is mildly funny to observe the stereotypes which each side has of the other. The scientists' stereotype of the literary culture: defeatist, unvirile, profoundly selfish, unconcerned about their brother men, indifferent to the social condition, intellectually un-

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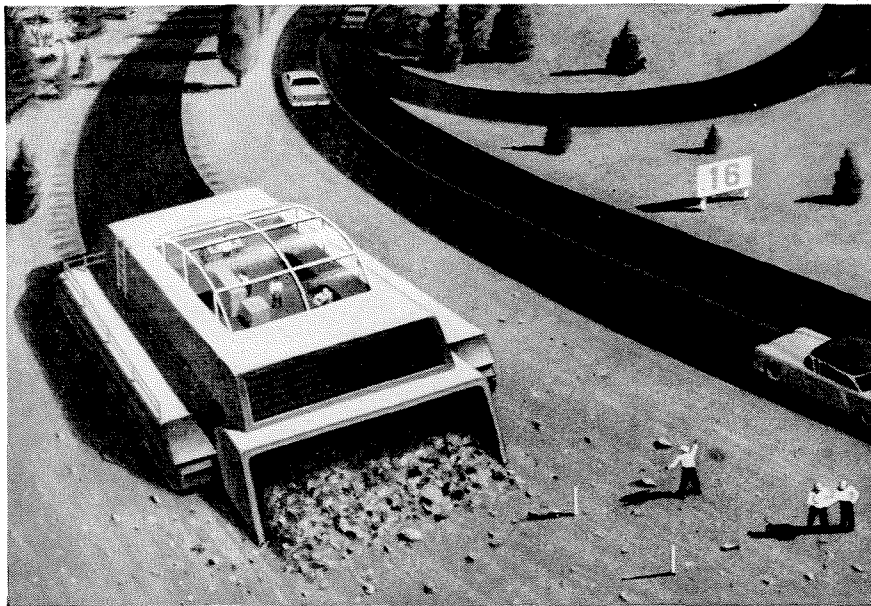
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Tomorrow's roads may be squeezed out like toothpaste, but outstanding ideas for tomorrow are still produced in the old-fashioned, painstaking, human way. And only professionals know how the best in drafting tools can smooth the way from dream to practical project.

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truthful. The literary culture's stereotype of the scientist: brash, shallowly optimistic, indifferent to the individual condition, lacking all sense of tragedy, unemotional naive, asexual. Well, we could laugh that off if it didn't mean a lack of communication at a much deeper level. That is, however, precisely what it does mean. . . . This is serious. It is hard to believe that a society whose intellectual life is so deeply split can be healthy for long.

"What can we do about it? There is only one answer, and it is a prosaic one: sensible education. Nearly all intelligent people can learn something about science and scientists if they are brought up against them properly. It is very stupid to attempt to make everybody into technologists; but it is essential that everybody, including the technologists themselves, should understand something of the intellectual and human meaning of what the technologists are about. I don't think that that task is beyond us, though it will need a drastic rethinking about education, both in the U.S. and Great Britain.

A basic difficulty

"There is just one basic difficulty. All children have a dash of the scientist in them . . . The urge to investigate . . . isn't anything very special or academic . . . But all children are not mathematicians, and that is the core of the difficulty. I don't know how many people are mathematically blind to the extent that some of us are tone deaf, but I suspect a larger proportion than the educational psychologists usually allow. Thinking of twenty acquaintances, who have all done pretty well in various sorts of intellectual life, I should say that at least five were, if not mathematically blind, at least grossly deficient in mathematical sense. That means that though, sensibly educated, they could have got a good working idea of how physical science goes about its business, they would never have reached the fundamental concepts. I suggest we have got to accept the fact that, for a lot of people of high intelligence and imagination, this is as near as they are going to come to the real stuff. It is much better than nothing, but there are limits, and it is just as well to be clear-sighted about them in advance.

"Don't we know enough now of the way different kinds of intelligence work? Oughtn't we to be able to construct an education from which anyone of ability can get enough not to feel that the scientific experience is alien to him for ever?"