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Social foundations

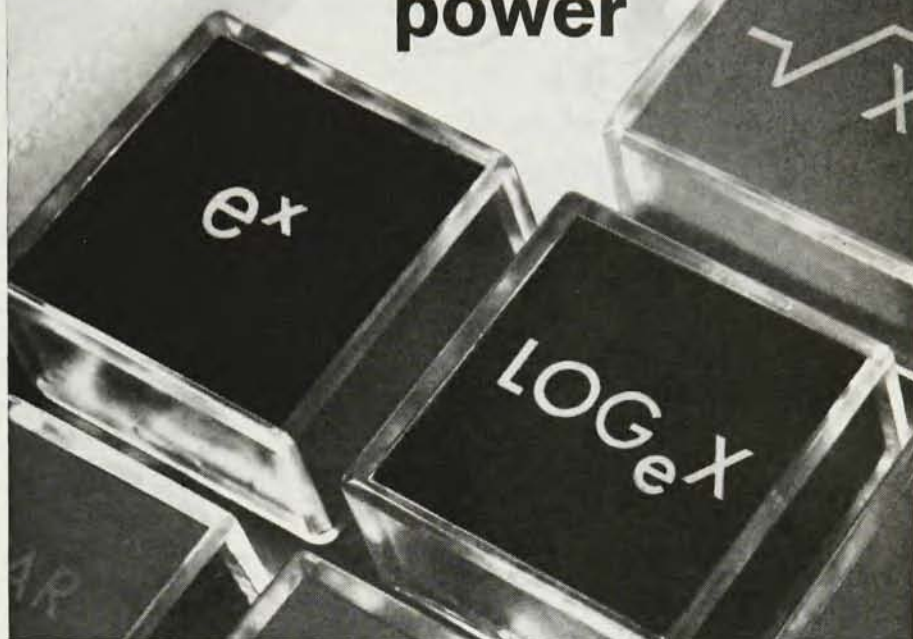
THE ORGANIZATION OF INQUIRY. By Gordon Tullock. 232 pp. Duke U. Press, Durham, N. C., 1966. \$5.50

by Donald J. Montgomery

"Practical Suggestions" for improving the organization of science are offered in the final chapter of Gordon Tullock's analysis. This chapter is incisive and provocative, and many a physicist will come out fighting. For, though a physical scientist may find himself in agreement with the arguments on the impossibility of stopping scientific progress or on the undesirability of transferring resources from physical sciences to social studies, he is not so likely to embrace the implication that the scientist's pleading for additional funds is not much more than bureaucratic backscratching. Limitations of space preclude stating the details of the author's comments on the case for financial prizes and awards for scientific discovery, the role of teaching versus that of research in universities, desirability of restricting large organizations to cataloging knowledge and supporting only grandiose scientific projects, skepticism about the value of academic tenure, virtue of amateur science. Few readers will find themselves neutral on most of these items.

Most of the points raised by Tullock in this final chapter merit looking into, and certainly the physical scientist will be chastened upon gleaning some idea of how he is viewed by students from other fields. The stated theme of the book, however, is not so exciting. The description on the dust jacket asks

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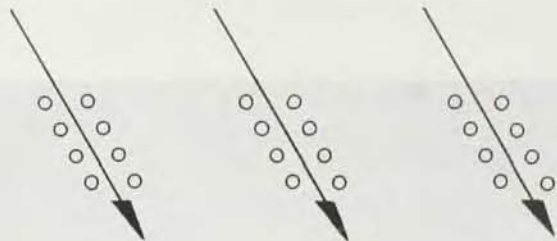
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"How can the output of a large number of highly individualistic researchers from a coordinated pattern?" The purpose of the work, it continues, is to explain the apparent paradox. I maintain that this phenomenon is as much and as little a paradox as the same phenomenon in regard to highly individualistic farmers, stock-market players, Frenchmen, shopkeepers, or street walkers. Of course there is a mechanism to be studied, but it is hardly worth dignifying as paradoxical, except perhaps in the contrived sense of the dialectical materialist. To be sure, the author's analysis is not without value, notably that on the sanctions of publication. The physical scientist may or may not enjoy the sacred-cow dissection, but he certainly will be enlightened by it, and, I should hope, provoked into reflection on improvements. In a subsequent section, the insights into the reasons for differences in the success of the natural sciences vis-à-vis that of the social sciences are stimulating and rewarding.

I have saved for last my mention of what I think is the least attractive part of the book, namely its philosophical base. The genesis of the book lay in the author's exposure to philosophy of science. This circumstance is as acceptable as the next one as an inspiration for beginning a manuscript. But the case for including these tired ideas in the finished book is more debatable. The soundness of these excursions into philosophy is not a fit matter to argue in the pages of this journal, but their cogency is. I submit that physical scientists will be baffled or bored, and nonscientists misled, by statements like that at the end of the following passage: "Recently astronomers and physicists became much interested in the discovery of bright and temporary red spots on the surface of the moon. These were thought to indicate some sort of volcanic activity. Clearly the presence or absence of volcanos on the moon is a particular fact, albeit one of considerable interest. Nevertheless, most scientists, most of the time, are searching for general truths, not specific truths." [Emphasis supplied]. I'm not in position to deny the final sentence, for I've been too embarrassed to go into most laboratories to inquire of my colleagues as to the generality of the truth they're searching for. They would just smile and say "More general than yours, old man, and probably more truer." Oh, well!

In sum: Tullock's insight as a psychologist and political scientist is educative, penetrating and stimulating. His analysis as an economist is instructive though less than exciting. His essay at philosophy is perhaps once more a demonstration of the necessity of inoculating students with philosophy during their undergraduate days; like mumps, it's not serious in youth, but it can be devastating in maturity. Yet some of the book is worth reading—it makes one aware of the need for continual examination of the social foundations of our disciplines.

* * *

A professor of physics and of engineering at Michigan State University, Donald J. Montgomery has had extensive concern with university, governmental and industrial activities. He has also spent some time in interaction with social scientists.

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