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CRITIQUES OF RESEARCH  
IN THE SOCIAL SCIENCES: II

'An Appraisal of Frederick C. Mills'  
*The Behavior of Prices*

BY

RAYMOND T. BYE

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SOCIAL SCIENCE RESEARCH COUNCIL

230 PARK AVENUE • NEW YORK

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With a rejoinder by Frederick C. Mills,  
a panel discussion, and a commentary  
by Read Bain

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SOCIAL SCIENCE RESEARCH COUNCIL

230 PARK AVENUE • NEW YORK

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*The Social Science Research Council was organized in 1923 and formally incorporated in 1924, composed of representatives chosen from the seven constituent societies and from time to time from related disciplines such as law, geography, psychiatry, medicine, and others. It is the purpose of the Council to plan, foster, promote, and develop research in the social field.*

#### **CONSTITUENT ORGANIZATIONS**

*American Anthropological Association*

*American Economic Association*

*American Historical Association*

*American Political Science Association*

*American Psychological Association*

*American Sociological Society*

*American Statistical Association*

## FOREWORD

THE SOCIAL SCIENCE RESEARCH COUNCIL, in seeking to discover and define its proper role of usefulness for the seven disciplines represented in its membership, is laying increasing emphasis on intellectual leadership toward improving the quality of social science research and in promoting better organization among scholars for carrying out such work. In pursuing the first of these objectives, improvement in the quality of research, the Council in September 1937 set up an Appraisal Committee charged with the task of seeing what might be done toward ascertaining and explicitly setting forth the standards which are currently applied by professional workers in these fields, with a view to their reexamination, reformulation, and more effective use. The Committee embarked on an exploratory program designed "to see whether objective standards can be inductively arrived at for judging research product and for putting such standards to practical use." Such standards, it was postulated, "should be tentative and growing, not rigid and pontifical."

In accordance with the inductive procedure which the Appraisal Committee adopted, it sought to place the responsibility for defining and defending standards of work on social scientists, reflecting as widely as possible current thought and practice in this field of work. The first step was to get a representative group in each of the seven disciplines to list the publications which have been most generally accepted as "outstanding contributions" by American authors since the World War. On the basis of this poll, though not necessarily limiting its considerations to the numerical vote, the

Committee selected a volume for intensive study by some competent individual, who was commissioned to prepare an appraisal report in which he should scrutinize the author's ways of working, with a view to identifying more or less standard procedures, modifications of standard methods, and distinctive innovations; evaluating the appropriateness of such methods to the particular material in hand or objectives sought; and appraising their trustworthiness, fruitfulness, and possible range of application in other studies. In case some years have elapsed since the publication of the research study, it might be possible to present evidence that the distinctive methods of the given worker had, by others following in the pioneer worker's footsteps, been found stimulating and helpful or perchance had led to results which were either sterile or harmful.

With this appraisal essay in hand, the next step was to assemble a small group of highly competent specialists to give intensive consideration to the issues raised by the appraisal essay and by the principal reviewers of the given book. After a full day devoted to such discussion, the stenotyped record of the conference was to be edited for brevity and coherence, summarized, and printed, along with the appraisal, rejoinder, and significant reviews.

The first of these undertakings to be completed in accordance with this procedure was an appraisal of Thomas and Znaniecki's *The Polish Peasant in Europe and America*. The product appeared as a bulletin of the Social Science Research Council on July 30, 1939. In the *Foreword* to that publication, President Edmund E. Day, first chairman of the Appraisal Committee, called attention to the twofold problem that confronts research. We need to allow the lively curiosity of the human mind to range freely enough so that we may be assured of the widest range of observation and investiga-

tion of phenomena which may ultimately be found to have social significance. But at the same time, we must find ways of reducing the raw data thus amassed to manageable dimensions and of so manipulating them that their significant characteristics and interrelationships may be discovered, effectively set forth, and, so far as possible, reduced to quantitative expression.

For many large areas of knowledge, he said, answers to questions as to the bearings of new information on existent knowledge and questions as to how or whether a particular body of new material adds to what we already know,

can be attempted only by those who belong to the select company of the expert. . . . Under these circumstances what is to prevent the development of a self-contained and self-recruiting cult perpetuating inquiries and reports of no substantial social value, either in promise for the future or relevance for the present? . . . The solution of the problem raised by this question would appear to lie in the acceptance by the experts of two fundamental propositions:

First, inquiry in any field should recognize the necessity of continuous appraisal of the nature of the knowledge being acquired. Does it consist of the record of observed uniques the reappearance of which cannot be anticipated, or does it at least suggest generalizations which may be expected to illuminate and to some extent make more manageable later experience under similar circumstances? Is one of the primary purposes of inquiry to reach such generalizations, or is this a matter of indifference? Questions such as these should be answered by those in the particular field of investigation.

Second, the experts are under obligation to communicate to the public, in language the educated lay public can understand, the answers to questions such as those just stated. The lay public cannot be expected to follow the intricacies of technique necessary for practically all fields of specialized scholarly and scientific endeavor, but it can be led to understand the ends which are sought by the workers in a given field, as well as the nature of the results that are being obtained. The public is entitled to know on what basis the experts distinguish between success and failure, between the good and the bad, in their own work.

But if the public is to be enlightened as to the basis on which experts distinguish between success and failure in the task of giving a scientifically rigorous quality rather than

mere irresponsible ingenuity to the product of research activity—which today makes increasing demands upon our time and our funds—the so-called experts must come to reasonable agreement, or at least moderately limited and specifically defined disagreements, as to their own ways of working and the criteria which they find it useful and necessary for each to apply to the work of others if he is to use their product in his own subsequent endeavors.

At the meetings of the Social Science Research Council at Skytop in September 1937, Dr. Day threw fairly at the feet of his colleagues the challenge whether they had any clearly defined idea of what social *science* really is—or should we say, would be?—and whether they were making any sustained, systematic, or comprehensive effort to find out. While we do not wish to claim more than is justified for the exploratory ventures being conducted by the Appraisal Committee, they at least represent a succession of “trial borings” in different parts of the field, designed to shed light on the different ways which scholars have devised in seeking to distil truth from the observed phenomena of human beings associated in society.

In our initial venture—in the field of sociology—the material concerning the Polish peasant was so subjective, imponderable, and evanescent that quantitative procedures were essentially inapplicable. Indeed, the problems of deciding even whether particular material was to be admitted in evidence, or how it was to be classified, evaluated, and generalized emphasized the importance of previous technical training, wide experience, and personal aptitudes on the part of the preparator and clinical researcher rather than the usefulness and reliability of teachable techniques or mechanical devices for manipulating the material once it had been amassed. To the Committee, it seemed that the title *Insight*

*and Proof* would have been an illuminating and proper descriptive title of that volume, serving to focus attention on one distinctive aspect of social studies. But this designation was not found acceptable by the author and by some of the participants in the conference. Hence it was dropped.

Even had we attempted to discover some apt characterization of the issues raised and discussed in each of our successive explorations, we should have been hard put to it to phrase the label with which our second study should be tagged. The book selected was Mills' *Behavior of Prices*—rating high in the poll of both economists and statisticians. In taking it for study, therefore, the Committee was mindful of the original and continuing interest of the Council in interdisciplinary studies. At the same time, it raised questions of procedure sharply in contrast to those raised in the study of *The Polish Peasant*.

The data with which Mr. Mills was dealing are among the most concrete and superficially precise with which the student of social phenomena is ordinarily confronted. Wholesale prices are quoted in cents or fractions of cents down even to one-hundredths. The layman is constantly reading them from his newspaper, trade journal, call board, or ticker tape and being guided by them in the conduct of his business affairs. But to manipulate such data in sufficient mass and with sufficient precision to answer the questions which the social scientist considers significant and even vital presents grave difficulties. Quotations of individual prices have long ago been sublimated into the unreal form of indexes, and these index figures have been standardized into certain patterns of presentation. As Thomas and Znaniecki turned to psychology for the checking, verification, or refutation of their concepts of "social becoming," so Mills turned to the techniques of statistics—enriched by his own skill and in-



genuity—to answer certain questions of “price behavior” in which, as an economist, he was deeply concerned.

How far the result was a significant addition to human knowledge or merely to the burden of scholarship is a question on which only trained experts can have an intelligible opinion, and, at the frontiers of knowledge, even the best of doctors disagree. Such disagreement, however, should fall within certain fairly well defined limits. The disagreement of doctor with doctor is something quite different from the divergence of thought between doctor and layman. And effort may be directed toward the clarification of differences between professionals and further analysis of the bases on which they rest, with a view toward maximizing the area of agreement as rapidly as possible.

This appraisal study would seem clearly to indicate (if the conferees are a fair sample) the agreement of economists and statisticians on the complementary relationship of inductive and deductive method. Perhaps also it reveals substantial agreement as to the impossibility of making any mere manipulation of empirical data without benefit of antecedent theory yield a strictly inductive generalization. At the same time, there was refusal to admit that useful theory must be limited to propositions amenable to quantification. Likewise, dissent was registered against the proposition that statistics has no role other than the ancillary task of verification, refutation, or some less conclusive type of illumination of hypotheses originated by some different order of thinkers known as “theorists.”

While a great deal of time was consumed in getting the conferees aligned in the positions which they in fact accept or assert with reference to the interplay of deductive formulation and inductive buttressing, refutation, and reformulation of theory, substantial consensus resulted. Would it not be possible to set forth this position in the space of a paragraph

as something accepted as "known" by a large majority of workers? Would this not afford a definite base from which the divergence of the minority could be measured or at least the character of this divergence clearly perceived?

Had this been done prior to *The Behavior of Prices* conference or in the first few minutes of discussion, it would probably have been easier to focus attention on whether Mills started from a body of knowledge generally regarded as established, to the effect that prices are not discrete phenomena but are enmeshed in a comprehensive set of systemic relationships. Presumably, nothing more than lay observation would be necessary as an adequate foundation for such a hypothesis and it would then have been possible to proceed with mutual understanding to examine the techniques which Mills employed to discover the nature of certain of these relationships. I do not find in the transcript any evidence of doubt on the part of any of the conferees that the method selected by Mills and elaborated by his own inventive genius yielded results which are accepted as making definite accretions to the existing store of knowledge about price relationships. On the other hand, no one seemed to find it desirable or possible to summarize precisely the nature and extent of the new knowledge won through this arduous undertaking.

One is moved to wonder, therefore, whether the progress of knowledge in the field of economics (and in other social sciences as well) would be promoted by the attempt to formulate more sharply the precise tasks undertaken in the various research projects and the claims made for results, to be submitted to some formally constituted agency within the profession for the purpose of ascertaining what consensus may be secured among at least such specialized groups as are working in a particular field. Are the materials and the methods used in this social science field so different in character from those of the natural sciences that it is not possible to arrive

at any reasonable consensus among workers on any point? Is some such formulation necessary if the character, point of departure, and bearing of new hypotheses are to be clearly recognized and evidence in support of them as effectively presented as in the natural sciences?

This conference illustrates with painful clarity the fact that the difficulty of arriving at consensus with reference to the validity and value of any original contribution to our store of knowledge is involved with the looseness of our current practice with reference to the definition of concepts and the verbal symbols that we attach to them. It was hardly possible for the several participants to make sure that they were talking about the same thing when they were discussing price "systems," "behavior," "stability," "institutionalism," "normal," or "equilibrium." How complacent are economists or how complacent should they be permitted to be about going on in the present rugged individualism in which each writer uses these terms in his own particular and often unclarified meaning? Is consensus as to the meaning of such verbal symbols possible? Would it be desirable? Or would "standard usage" in the social sciences be a bar to creative genius in this field of endeavor? Is ours a literary game of coining new words and creating new meanings for familiar words with such speed and ingenuity as to baffle intellectual pursuit?

In the quotation from Edmund Day we are warned against the danger of becoming a self-contained cult. If our practices tend to shrink the bounds of that cult to narrower and narrower limits till the lone worker becomes a cult unto himself, the danger is great indeed. Nor is this a purely imaginary danger today. If the growth of knowledge is to be as healthy and vigorous as possible, the individual mind must be allowed to range as widely and freely as it may be moved to do by its quest for truth; but if it is to make these explora-

tions fruitful for society, the product of such untrammelled thinking must be put in a form that is intelligible to one's fellows. If we wish to refer to our fields of study as "disciplines," it is perhaps worth while to consider the nature of the intellectual discipline which such professional groups should exercise on the practices of members in the preparation and issue of "scientific findings" for current circulation by a public who, in the nature of the case, are incapable of measuring "weight and fineness."

In raising here the question of the possible usefulness of some kind of consensus procedure, there is no intimation that the Appraisal Committee contemplates turning its efforts in this direction. It is merely a possibility occurring to an individual after contemplating the work of a particular conference. The Committee has simply been following one line of experimentation, which in time may yield suggestions for other and perhaps more fruitful lines of attack. The course which will be followed (including perhaps abandonment of the whole undertaking) will depend ultimately on the response of the profession as a whole. Opinion is still divided as to the value of the steps thus far taken. It remains to be seen how much attention will be paid by the rank and file of the respective professional groups to the material which is being prepared for them and submitted to them by the Committee. If anything useful is to be accomplished in this direction, the Committee should have the guidance of explicit expressions from those who find these conferences and the ensuing publications stimulating and useful, those who regard them as a waste of time and effort, and those who derive from them or are provoked by them into suggestions of a more fruitful direction of the Committee's efforts.

EDWIN G. NOURSE

*November 22, 1939*

## PUBLICATION OF THE BEHAVIOR OF PRICES

*The Behavior of Prices was published by the National Bureau of Economic Research in December 1927. No attempt was made to find a commercial publisher since the National Bureau itself publishes all of its researches. The Behavior of Prices was the eleventh monograph the Bureau had published since its organization January 29, 1920. Since 1927, some thirty additional volumes have been published.*

*An edition of 2100 copies was printed. The price was \$7.00 per copy. Except for the small number of copies which the Bureau has kept in reserve, the edition was exhausted in 1932 and has not been reprinted. Most of these copies were purchased by libraries and scholars here and abroad. The book has exerted considerable influence upon both the methodology and theoretical point of view of scholars working in this particular field of research. It is probably also true that it has had some effect upon the trend of research in economics outside the price field.*

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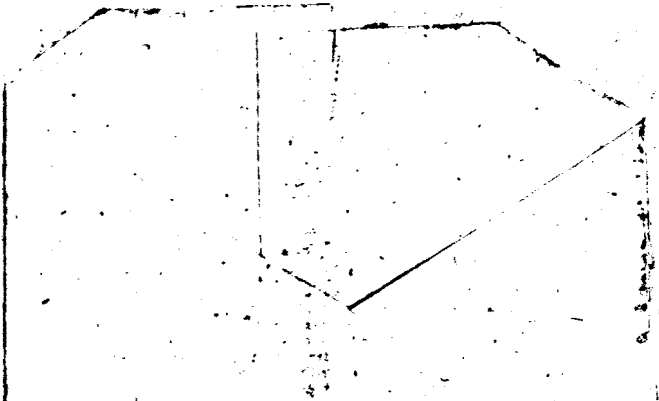
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