Preface

A Historial Note on Social Indicators

Although initiated as part of an effort to appraise the social impact of outer space exploration, the focus of this volume is nothing less than "the entire set of social indicators used in our society."[1]

If I were not myself a contributor to this volume, I should be tempted to herald it as a major contribution to man's efforts to find out where he has been, where he is, and where he is going.

In my role as commentator on the entire volume, however, it is more appropriate to point out its historic roots, thereby emphasizing continuity as well as discontinuity.

First, this volume is a continuation of the great information-gathering tradition of Western civilization, particularly of the United States.

Second, it is a symptom of a widespread rebellion against what has been called the "economic philistinism" of the U.S. government's present statistical establishment.

Third, as with all proposals that involve going beyond established practices, the book will inevitably produce misunderstandings among both supporters and adversaries.

Finally, from a still broader viewpoint, it may be regarded as a humanist effort to develop more open spaces (not merely on the moon or beyond) in the minds of people on this planet.

The significance of these points is partially suggested by the fact that the ideas generated by its production have already moved more rapidly than the processes of final drafting and printing. Some of the basic proposals and viewpoints contained in it are already being considered by the President and Vice-President of the United States and by national leaders in France, India, Canada, and England. Drafts of various chapters have been carefully studied by officials of the United Nations, and previews have appeared in popular articles. As a result, new research efforts have already been stimulated in both government and academe.

[1] Raymond A. Bauer, Chapter 1.

Let me now touch briefly upon each of the four points mentioned above.

The Bible, the Constitution, and "Economic Indicators"

In the long history of Western civilization progress is repeatedly associated with efforts to obtain new kinds of information. Thus, in the Old Testament, Joseph's forecast of the seven fat years and the seven lean years was based upon an interpretation of Pharaoh's dream. Yet, it led to a careful measurement of all the lands in Egypt, so that the corn produced by one-fifth of the land could be stored in Joseph's "ever-normal granary."[2] Shortly after the Hebrews left Egypt, the Lord commanded Moses to take the first recorded census. A major purpose was to count "all that were able to go forth to war."[3] Another purpose was to determine the basis of taxation. As governments grew in size and scope, census operations became increasingly significant. We learn from the New Testament that Mary and Joseph went to Bethlehem for enumeration purposes. Because all the inns were filled with people waiting to be counted, they had to stay overnight in a stable.

During the Middle Ages, as Biderman points out in Chapter 2, the Latin phrase *ratio status* (the predecessor of the word "statistics") was used to refer to the factual study of politics and government. With the Renaissance and the Enlightenment, the idea of number was freed from the classical Euclidean confines of spatial boundaries and directly perceived magnitudes. Descartes and Leibniz opened up new worlds of points, functions, transformations, the infinitesimal calculus, and infinity. Western civilization entered an era in which time was measured out by mechanical clocks[4] but in which the prime symbol was pure and limitless space. Western political leaders and intellectuals started the endless process of collecting information on the "states of nations." As Biderman points out, the term *statistic* was first coined in German to refer to "the political science of the several countries." It first appeared in English in a 1770 translation from the German.

In the United States, the Founding Fathers — led by enthusiasts of the Enlightenment — wrote a constitution that was, in the words

[2] *Genesis,* XLI.

[3] *Numbers,* I.

[4] As one contemplates the long history of tower clocks and pocket watches in Europe one cannot help but wonder whether modernization (which seems to require a certain approach to temporal indicators) would not be advanced in the villages of Asia and Africa by a combined program of watchtowers and wristwatches.

of the French statistician Moreau de Jonnes, "without parallel in all history." The reference was to the provisions for a decennial census in Article I, Section 2. As Moreau de Jonnes pointed out in wonderment, this was a phenomenon of "a people who instituted the statistics of the country on the very day when they founded their government and regulated by the same instrument the census of inhabitants, their civil and political rights and the destinies of the nation."[5] It is also interesting to note that James Madison and Thomas Jefferson both took quick steps to have the constitutional mandate extended through legislative interpretation. Madison was "successful in 1790 in getting Congress to break down the 'Free White Male' population into '16 years and over' and '16 years and younger' — a category not required for the Constitutional enumeration, but certainly valuable for a new nation ready to start about its business." Jefferson went still further. In 1800, as President of the American Philosophical Society, he asked Congress for a further breakdown of population "by age, by native-born and foreign-born, by occupation (including 'paupers')." But, as often happens with Presidents and intellectuals who breed ideas before their time, Jefferson was turned down. His proposed breakdowns were not included in a federal census until twenty years later.[6]

But Moreau de Jonnes, interested primarily in the *production* of statistics, did not notice the Constitutional provision that touches upon their *distribution* as well. Article II, Section 3, provides that the President "shall from time to time give to the Congress information of the state of the Union." The framers of the Constitution hereby recognized the informational function of government, one that has until recently been neglected by political scientists. They sensed the power — for good or evil — of the Presidency as a disseminator of information. They saw the political significance of information being made available to Congress rather than being carefully guarded by executive officials.

As Biderman points out, Presidents have tended to include more and more statistical information in their State of the Union messages. But these messages themselves are no longer single documents. They are part of a remarkably sophisticated and rapidly evolving information system operating at the pinnacle of government. The State of the Union message is now closely integrated with two back-up messages: the *Budget Messages,* started under

[5] Quoted in Ben J. Wattenberg, *This U.S.A.* (New York: Doubleday & Company, Inc., 1965), pp. 13–14.
[6] Ibid., pp. 15–16.

the Budget and Accounting Act of 1921, and the *Economic Report,* set up by the Employment Act of 1946. This trio is followed by a long series of fact-packed Presidential messages and reports, including the annual *Manpower Report* (under the Manpower Development and Training Act of 1962). Then there are scores of annual reports of the cabinet departments and independent agencies. These contain an almost unbelievable wealth of detailed data. Finally, there is the modern version of the farmers' almanac, *The Statistical Abstract of the United States.*

Although there are elements of *disorder* in this vast output of information, the most impressing thing about it is the *order* established by "one of the great social inventions of the modern world," national economic accounting. As I explain in Chapter 3, national economic accounting plays important roles, both analytical and social, in modern society. During the twenty-year period from 1946 to 1966 these roles have increased in significance. This increase is best illustrated by the importance of the *Economic Report of the President,* with the accompanying detailed report of the Council of Economic Advisers. Structured around the national income accounts, this report finds its way to the desks of the major elites of the country. Thus, in 1965, in addition to the free copies sent to members of Congress, government officials, the press, and depositary libraries, the Superintendent of Documents sold more than fifty thousand copies of the *Economic Report,* and this figure has risen every year. In addition, the Council's monthly *Economic Indicators,* a carefully organized set of thirty-seven charts with tables, has become the basis whereby people "in the know" keep their fingers on the pulse of the economy.

From "Economy" to "Society"

> The Great Society looks beyond the prospects of abundance to the problems of abundance. . . . Everywhere there is growth and movement, activity and change. But where is the place for man? . . . The task of the Great Society is to ensure our people the environment, the capacities, and the social structures which will give them a meaningful chance to pursue their individual happiness. . . . Thus the Great Society is concerned not with how much, but how good — not with the quantity of our goods but the quality of our lives.[7]

As suggested in Chapter 3, President Johnson's "Great Society" program is responsive to the new political situation created by the

[7] Richard N. Goodwin, address to visiting foreign students at the District of Columbia Armory, July 20, 1965.

transformation of an advanced industrial society into the world's first example of "postindustrialism."

Yet during the initial processes of transformation, it is interesting to note, both the President and his key advisers are forced to rely upon concepts and data that have decreasing relevance to the new national goals. If we examine the President's major policy documents, particularly the *Economic Report* and the *Budget Message,* we find practically no information whatsoever on "social structures." We find that the major indicators deal not with how good but how much, not with the quality of our lives but rather with the quantity of goods and dollars. This continuation of "economic Philistinism" is exacerbated by the increasing emphasis upon "cost-benefit analysis" (often used as a way of releasing resources for Great Society programs), operating on the premise that any meaningful benefits from government programs can be expressed in dollars and cents.

Fortunately, there has long been a tradition of trying to obtain information on the society as a whole, not merely on that part of society called the "economy." One of the first efforts along these lines was made by President Hoover's Research Committee on Social Trends, whose influential report, *Recent Social Trends in the United States,* was published in 1943. Considerable influence in this direction was also exercised by the expert committee appointed by the Social Science Research Council and the American Statistical Association. During the subsequent quarter century, great progress was made in carrying out the proposals not only of this expert committee but of a host of specialized committees subsequently established under the Budget Bureau's office of statistical standards. Under the pressure of complex economic problems associated with prewar depression, wartime mobilization, and postwar reconversion, most of the new statistical indicators turned out to be economic in character. This, of course, is what made it possible to produce increasingly sophisticated economic reports and economic indicators. These developments unquestionably contributed — although to an extent that cannot be statistically measured — to the avoidance of the widely anticipated postwar depression and the subsequent "miracle" of sustained economic growth in the 1960's.

A major broadening step was undertaken at the beginning of the Kennedy administration when Wilbur J. Cohen (now Undersecretary of Health, Education and Welfare) initiated the annual HEW *Trends* and the monthly HEW *Indicators.* These valuable

publications are becoming increasingly comprehensive, intensive, and sophisticated. They may one day parallel the *Economic Report* and *Economic Indicators.* Indeed, a new Presidential mandate to move more rapidly in this direction has recently been announced:

> Through the programs entrusted to its care, the Department of Health, Education and Welfare exercises continuing concern for the social well-being of all our people. Already, as I have indicated in this message, it has become possible to set ambitious goals for the future.
>
> To improve our ability to chart our progress, I have asked the Secretary to establish within his office the resources to develop the necessary social statistics and indicators to supplement those prepared by the Bureau of Labor Statistics and the Council of Economic Advisers. With these yardsticks, we can better measure the distance we have come and plan for the way ahead.[8]

In still broader terms President Johnson has instituted a new "Planning-Programing-Budgeting System" requiring every government agency to relate carefully selected information on the cost of inputs to outputs of service (including financial aid, advice, and regulation) provided by government and private programs, and appraise them in terms of the resulting benefits provided, directly or indirectly, to various beneficiaries. The new interest in information on direct and indirect benefits (and disbenefits) to different groups or beneficiaries is already leading to a search for better social indicators.

A call for more ambitious government action has been issued by the National Commission on Technology, Automation and Economic Progress. The Commission's final report points out that our ability to chart social change has lagged seriously behind our ability to measure economic change. Without reservations the members of the Commission called unanimously for some system of social accounts that would broaden our concept of costs and benefits and put economic accounting into a larger framework. Specific emphasis was placed on the measurement of the utilization of human resources in four areas:

1. The measurement of social costs and net returns of innovations.
2. The measurement of social ills (e.g., crime, family disruption).

[8] President Lyndon B. Johnson, Message to the Congress on domestic health and education, March 1, 1966.

3. The creation of "performance budgets" in areas of defined social needs (e.g., housing, education, and welfare).
4. Indicators of economic opportunity and social mobility.[9]

Outside of government all sorts of pioneering ventures are beginning to get under way. At the Russell Sage Foundation, Eleanor Sheldon and Wilbert Moore are fashioning new techniques for "monitoring social change" in selected fields. Syracuse University's Maxwell School, in cooperation with the Newhouse Communications Center, will bring out next year a special volume of *The Annals* of the American Academy of Political and Social Science on "Social Goals and Indicators for a Great Society." This volume will deal with such vital subjects as the reduction of poverty, freedom from discrimination, social and political participation, civil liberties and the administration of justice, art and culture, employment and leisure, learning and education, health and well-being, the production of knowledge, the natural environment, the urban environment, and the mass media.

The present volume, however, is the first occasion on which the entire field has been surveyed and a comprehensive set of proposals, based upon careful analysis, has been developed. It may well be expected to contribute not only to the acceleration of the developments referred to but to periodic reviews of progress made toward the development and use of social indicators.

Inevitable Misunderstandings

Because the subject is complex and the treatment somewhat sophisticated, the contents of this volume are bound to be misunderstood. In fact, each author surely expects the misunderstandings to grow in direct proportion to the progress made in developing social indicators; nonetheless, there is some merit in warning against the most obvious ones.

The first misunderstanding is the idea that in advocating *social* indicators, the authors are depreciating the value of *economic* indicators. Yet the distinction between *economic* and *social* — while having many uses — cannot be carried too far. Although economic information deals completely with nothing, it tends to touch everything, often significantly. There are few social ends to which scarce economic resources do not need to be allocated. Moreover, creative economists are among the most effective opponents of "economic

[9] Report of National Commission on Technology, Automation and Economic Progress (Washington, D. C.: Government Printing Office, January 1966).

Philistinism." They have repeatedly ventured beyond the more narrow confines of traditional economic analysis and have developed new economic measures in such traditionally *social* fields as income distribution, education, and health. Still more important, as stated in a penetrating U.N. report, *Methods of Determining Social Allocations,* rational policy decisions require "the development of a comprehensive set of criteria that will take account of both economic and social considerations, not by forcing the one kind into the mould of the other, but by integrating them at a higher level of abstraction."[10] Indeed, "social accounting" may well be regarded as referring to this very integration at a higher level of abstraction. In this context "social" may be taken to mean "societal" or "pertaining to the social system." Social accounting then refers to an ordered set of relevant indicators, without particular reference to how they may have been traditionally labeled.

Second, some people will get the impression that the authors of the volume are attacking the use of statistics. After all, considerable attention is given to the inaccuracy of much statistical data, built-in distortions, widespread misinterpretations, and increasing manipulability. Almost every chapter is based upon the well-supported premise that we now live in an era in which it is scarcely worth while to lie without statistics. Yet the skepticism pervading the volume is also based upon the premise that better information on the quality of life requires improvements in both the quantity and the quality of statistics. The emphasis is placed upon the need for a greater variety of regularly collected data and special *ad hoc* inquiries and for significant improvements in the way in which data are collected, processed, interpreted, and used. Indeed, it is recognized that at the present state of the art, the first efforts to collect new kinds of data will be seriously defective. Here the conclusion seems to be that rather than do nothing it is preferable to start out with bad data, warn everyone about the defects and limitations, and aim at gradual 'improvement through use."

Third, still more people may get the impression that in asking for social indicators the authors are guilty of the "fallacy of misplaced concreteness" and are trying to extend the modern "numbers game" to areas still untouched by the manipulations of statisticians. Others may feel that if the viewpoint of the book were widely adopted,

[10] Report of the Secretary-General to the Sixteenth Session of the Social Commission, Economic and Social Council, *Methods of Determining Social Allocation* (March 31, 1965), p. 10.

a second-order consequence — whether the authors foresee it or not — would be to "dehumanize" life by reducing more and more of human values to "cold statistics." So far as the book's intent is concerned, this would be a clear-cut example of misunderstanding. Social indicators may be "soft" as well as "hard," qualitative as well as quantitative, ordinal as well as cardinal quantities, but whether statistical or not, they are not necessarily "cold." No matter what we do, all of them — as suggested by Biderman in Chapter 2 — will be used by human beings in the heat of human combat as vindicators, indictors, and certifiers. Nor is it at all clear that "dehumanization" would necessarily be promoted if our information on culture and the enjoyment of human rights became as good as that on cows and corporate profits.

As one of the authors, however, I must confess that in favoring greater awareness of second-order consequences, we have not fully explored the second-order consequences of such awareness. Perhaps *we* are the ones who misunderstand. But to throw more light on this question, we need something more than personal expressions of humanistic intent, deferential obeisance to something called "human values," and routinized attacks on the tendencies toward dehumanization in modern society. We need more efforts to understand our society, efforts based upon the collection and interpretation of whatever information may be relevant. This, of course, is exactly what we are advocating. The view that "dehumanization" would be the result of a system of social indicators is in itself a second-order consequence of the program that we are advocating. If not a misunderstanding, it is a prophetic warning, a warning that — by alerting us to dangers in the situation — may hopefully serve as a self-defeating prophecy.

From Limited to Broader Agendas

The economist, Kenneth E. Boulding, has recently issued the following warning:

> There seems to be a fundamental disposition in mankind to limit agenda, often quite arbitrarily, perhaps because of our fears of information overload. We all suffer in some degree from agoraphobia, that is, the *fear of open spaces,* especially *open spaces* in the mind. As a result, we all tend to retreat into the cosy closed spaces of limited agendas and responsibilities, into tribalism, nationalism, and religious and political sectarianism and dogmatism. . . . It is our attempt to defend ourselves against information overload which forces us into malevolence, prisoners'

dilemmas, arms races, price wars, class wars, schisms, feuds and divorces. . . .[11]

It is interesting to note that Boulding warns particularly that "the quantification of value functions into value indices, whether this is money or whether it is more subtle and complicated measures of payoff, introduces elements of ethical danger into the decision-making process, simply because the clarity and apparent objectivity of quantitatively measurable subordinate goals can easily lead to a failure to bear in mind that they are subordinate." He illustrates the point by referring to profit-and-loss bookkeeping, which can lead businessmen to neglect "such things, for instance, as morale, loyalty, legitimacy, and intimacy and complexity of personal relations."

Boulding's conclusion is that we need a widening of agendas, an opening up of our minds to a greater variety of information. This means combating information overload not by narrowing our sphere of attention but by improving our capacity to handle a larger variety of information. "It may be," Boulding speculates, "that the horizons of the power of ethical ideas may be substantially extended by the development of improved methods of information processing by the individual and by the organization."[12]

In my judgment, this volume supports the speculation. Indeed, the kinds of social indicators called for in it require an abandonment of the Ptolemaic perspective with which people see the world rotating around ourselves. They demand a kind of Copernican revolution through which we may better "regard our decisions as involving the total social system, and not only that part of it which revolves around our own persons."[13] It may well be that during the coming decades, as man at last escapes the confines of the earth and explores the solar system, he will at the same time discover and explore as yet unknown vistas in the human mind.

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[11] Kenneth E. Boulding, "The Ethics of Rational Decision," *Management Science, 12* (February 1966), 161–169.
[12] Ibid., p. 167.
[13] Ibid., p. 168.