

nology, Automation, and Economic Progress. Although this report dissented from the "almost" * * * commonplace (opinion) that the world is experiencing a scientific and technological revolution" of sufficient power "to make our economic institutions and the notion of gainful employment obsolete," it proposed serious consideration of development of a computerized "system of social accounts" capable of analyzing accurately in advance the benefits and costs of any sociopolitical experiment. Such a system theoretically could grapple competently with complex problems such as water and air pollution, urban blight, the transportation tangle, integration of the Negro into American society, and the continuing spread of crime.

The Presidential Commission report defined the phrase, "system of social accounts," to include mixtures of systems analysis, simulation, and operations research in proportions required for particular cases. Systems analysis and operations research are now in wide employment in military planning and extraterrestrial space exploration. Simulation techniques are part of current plans for global weather observation and forecasting.

How close are we to a workable "system of social accounts"?

One of the best informed men on earth on the subject of computer development is Dr. Cuthbert Hurd, chairman of the board of Computer Usage Co., Inc. In addressing the National Automation Conference of the American Bankers Association in Chicago last month, Dr. Hurd observed that no computed manufacturer today markets an "operating system" flexible enough to apply all the diverse talents of computing machines to any complex problem.

"I suppose," Dr. Hurd told the bankers, "that as much as 200 man-years of effort might be required to produce a modern operating system, costing say \$5 million."

If such a system were to be perfected, Dr. Hurd said, "it is still unclear whether proprietorship (of the system) could be maintained under the existing patent or copyright laws."

There are two ways, then, to state the challenge of computerized society. One was succinctly put in a recent issue of the American Scholar by Lynn White, Jr., professor of history at the University of California in Los Angeles: "Must the miracle of the person succumb to the order of the computer?" The other statement comes from Paul Baran: "What a wonderful opportunity awaits us to become involved in such problems as to exercise a new social responsibility."