ing is also in progress which provides a physical picture of wave function improvements and electron correlation as produced by added optimal configurations (*13*).

This work contains the development of a new tool, namely, the synthesis of programming skill, high-speed digital computers, and linked analog devices into a medium capable of efficiently communicating certain types of new information. Since many of us involved in large-scale computational efforts are often swamped by our own computer output and are able to competently analyze only a small fraction of the potentially useful information we have generated, this problem of communication is well worth consideration.

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NEWS AND COMMENT

New York's New Mayor Enlists a Panel of Scientific Advisers

New York, N.Y.—In addition to noise, clotted traffic, filthy air, grime, a rising crime rate, and other accepted burdens of city life, New Yorkers in the recent past have experienced a water shortage; an outbreak of violence in the long, hot summer of '64 that approached civil insurrection; a series of strikes that at different times banished newspapers, shut the schools, and paralyzed public transport; and, of course, the big blackout. They also held an election which resulted in an upset victory in the mayoralty race, attributable, in a degree nobody will ever calculate, to voter exasperation over these vicissitudes.

The new mayor, Republican John V. Lindsay, occupies office in a splendid isolation produced by the ticket splitting which left him to preside over an administration in which the other elected officials are mostly Democrats. Lindsay, on top of everything else, is mayor of a city afflicted with a continuing and serious financial crisis. The new mayor's resourcefulness is, therefore, being put to a stern test, and one of his innovations has been creation of a Scientific and Technical Advisory Council.

The existence of such a council has the double advantage of making outside expert advice available on scientific and technical matters and, because of its stellar membership, of providing Lindsay with a link to major corporations, universities, and foundations in the city.

Lindsay announced formation of the council in December, while still mayor-elect. The publicity release at the time noted, "The work of the council will be primarily aimed at attracting and assisting science-oriented industry into the City's future economy." Lindsay said he also expected the council to advise him on the city's massive problems of health, air and water pollution, and transportation.

As a congressman with a liberal voting record through three and a half terms of service in Washington, Lindsay reflects a view of the dynamics of economic development which has become almost standard in Congress in the last few years.

In announcing formation of the council he combined an expression of this view with the rhetoric expected of a newly elected official when he observed that "our industries must be kept informed of technological innovation and prepare themselves for fruitful participation. Our educational and training programs must be constantly reviewed and revised and brought into line with changing developments. Our work force must seize novel challenges with new enlightenment and our financial institutions must embrace bold concepts of creative capitalism."

Going on to cite the benefits of science-oriented industry, Lindsay struck another familiar chord when he noted that federal expenditures for science have soared and that "many communities across the country have benefited immensely from this massive injection of federal funds." But, he said, "New York City has been short-changed. New York City—which has half the manufacturing employees in the State—has not received its fair share of federal expenditures."

The inspiration and model for the new council, not surprisingly, were also Washingtonian. The concrete proposal for creation of the council came from Detlev W. Bronk, president of the Rockefeller University, and in conjunction with John R. Dunning, dean of the school of engineering and applied science at Columbia, both of whom are very familiar with the corridors of scientific advice in Washington. Lindsay immediately took up the idea and appointed both to the council. Dunning serves as chairman.*

The council is intended to be, not a task force, but, rather, a continuing entity. Its method of operation will take some time to evolve, however, and it is, of course, too early to predict how effective the group will be.

The new council can be said to have had an antecedent in a science advisory committee to the New York State legislature, on which both Dunning and Bronk served. This committee was conceived when a Republican majority controlled the legislature, and it withered from a lack of funds when the Democrats won control in the 1964 election and then indulged in a long factional falling out over organizing the legislature. It is possible that the science-advice idea will be revived.

Finances surely will be a factor determining effectiveness of the new mayor's advisory council. The city's present tight financial situation makes any immediate extensive underwriting of council activities by the city very unlikely. As one city official put it, "Money is a dirty word." Even should fiscal problems ease, it remains to be seen how the mayor's projects will fare in a budget-making process in which partisan considerations are hardly ever ignored.

If the experience of the President's Science Advisory Committee (which it seems is the direct model for the new mayor's council) is taken as a guide, effectiveness depends on a capacity to fund serious studies and to maintain a permanent staff. The role of the President's science adviser was enhanced in the late 1950's with the growth of a staff in the Executive Office of the President, and the apparatus was further strengthened early in the Kennedy administration with the creation of the Office of Science and Technology, whose functions included service as a secretariat for PSAC.

No matter how able and expert members of a group such as the mayor's advisory council are, they are part-timers who are extremely busy with other things. Unless a competent staff is on hand to perform the spadework and follow-up chores for the council, the scope of effective action will be limited. This seems to be generally recognized by the members of the new council, and the initial aims are modest ones.

The full council is to hold regular meetings once a month. Three meetings of the full committee have been held, which the mayor attended, plus several subcommittee meetings.

The link between the council and the mayor's office is James B. Kelley, a deputy city administrator, whose chief duty it is to coordinate the scientific and technical activities of various city departments. His purview is a broad one, taking in aspects of the work of the departments which deal with water supply, public works, highways, air pollution, sanitation, health, and public safety. Kelley, who has an education in physics, is, in effect, executive secretary of the new council, but so far he has no special staff.

At a meeting last week the council identified two "problem areas" in which it may become active. The first is environmental health, and studies of pollution and ways to abate it may be undertaken.

The second is education, with attention focused on seeking better ways to upgrade people and prepare them for better jobs. The council has specifically in mind the "disadvantaged," and such an effort would be relevant not only to industrial development but also to the city's grand-scale social problems.

To train workers and foster economic development, answers are needed to basic questions such as what sort of industry New York has, which industries are doing well, and which are doing poorly. And on these points full answers are not readily available.

The state of statistics for the city, it seems, is nowhere sadder than in respect to manpower. Information on the supply of scientifically and technically trained manpower, although it may exist scattered in the files of a number of departments and agencies, is simply not available in useful, comprehensive form.

A new group, the Economic Development Council of New York City, a nonprofit organization formed to do what its name implies, is making repair of these statistical deficiencies one of its first projects. The council is a private group with a charter allowing 50 institutional members. So far 27 leading business and financial institutions belong, and membership is expected to reach the full 50 before long.

Statistics are a necessity, but getting them may be a much less delicate job than, for instance, carrying through an air-pollution study which could conceivably lead to a code change demanding an electrostatic precipitator on every smokestack. This is the sort of activist role some partisans of the council envision for it.

The idea of a science advisory council below the federal level is not a novel one. The governors of a number of states, including New York, have the equivalent. Some of these groups have value chiefly in terms of public relations. Some are informal groups called on for off-the-cuff advice or for counsel on a single problem such as water resources. In many cases their effectiveness is limited because the advisory council is a square peg in the round holes of the state bureaucracy.

New York City itself has used outside experts to advise, on a regular basis, on scientific and technical questions. A mayor's committee on radiation safety, for example, was formed by Lindsay's predecessor, Mayor Robert Wagner, in one of his earlier terms.

Certainly the science advisory council will become more common as scientific and technical activities in local and state governments grow and become more clearly recognized. Not only will elected officials appreciate the "free" advice but, as politicians, they will not ignore the lightning-rod advantage of having a panel of distinguished and objective experts line up behind a decision on a controversial subject—say, for example, the location and design of a nuclear power plant.

In New York it is hard to know how long the public will tolerate an environment that seems to be deteriorating at a rapid rate. The blackout was a severe shock in many ways to many New Yorkers. One of them said last week that the thing he remembered best about the blackout was sitting on the front steps of an apartment after midnight, with the city dark, the plants shut down, and few cars moving, seeing the moon bright in the clear skies and, for the first time since he had lived in the city, smelling autumn in the air.

New York and many other cities need help. A lot of urban ills should yield to scientific solutions. And the scientists could help if, like Archimedes pondering another sort of possibility, they could find a way to exert some leverage.—JOHN WALSH

* Other members of the council are Dr. Leona Baumgarter, former commissioner of the New York City Department of Public Health and now at Cornell Medical School of Public Health, New York; Paul Busse, executive vice president, Economic Development Council of New York City, Inc.; W. Donham Crawford, vice president for research, Consolidated Edison Corporation; Keith Glennan, president, Associated Universities, Inc.; Dr. George J. Harrar, president, Rockefeller Foundation; Frank L. Horsfall, Jr., director, Sloan-Kettering Institute for Cancer Research; Birny Mason, Jr., president, Union Carbide; the Reverend George J. McMahon, dean of engineering, Fordham University; Lawrence T. O'Neill, director of the Electronics Research Laboratory, Columbia University; Jack S. Parker, vice president for aerospace and defense, General Electric Company; Dr. Emanuel R. Piore, vice president, International Business Machines Corporation; Richard Tatlow, vice president, Engineers' Joint Council, and president, Abbott, Merkt & Company; Walter N. Thayer, president, New York *Herald Tribune*; John G. Truxal, vice president for educational development, Brooklyn Polytechnic Institute; and Rawleigh Warner, president, Socony Mobile Oil Corporation.