

Science and the Problematique

The quality of life, unlike that of mercy, is strained. That gentle rain, like the rest of our environment, has become tainted—a result of those very processes which have raised most of us to the degree of affluence which permits the contemplation of poetry and what else it is that we have wrought. That contemplation is what we offer you at our 141st Annual Meeting in New York City. A contemplation of the enormous complex of issues—energy, ecology, food, population, health, education, transportation—so interrelated and intertwined that a change in one results in a change in some other—a constellation that is more than the sum of its parts and one that has even been given a name—the *problematique*.*

The *problematique*, the essence of our collective life-styles, is the substance of our meeting theme, "Science and the Quality of Life," and is the issue discussed, in much of its manifold complexity, in the many symposia grouped into our four principal subthemes: "Science and Human Health," "Science and Human Imagination," "Science and Human Environment," and "Science and the Metropolis." To trace this constellation through only one of the many possible routes appearing throughout our program, let us consider only a few of the 122 symposia and the nine public lectures.

Energy and transportation are discussed from the point of view of travel behavior, industrial siting, commuting, urban policy, and the future of the automobile as the keystone of American society. Energy, transportation, and ecology are confronted in the problem of auto emissions and in the impact of shortages on behavioral patterns. Food and ecology are the topics in the discussion of agricultural versus nonagricultural uses of land and in the discussion of the environmental hazards of modern agricultural and food-production techniques, as well as in the question

of the foreign-policy implications of the food-energy relationship.

Food and population are discussed from the point of view of the food habits of developing countries and the limitation of our resources of land, water, energy, environment, and logistics in feeding the world's people; from the engineering problems involved in increasing food production and in finding new food sources and new potential harvests; as well as through a consideration of the impacts of food-safety regulations. Population and education are addressed through a discussion of the means for informing people and changing their behavior regarding population problems, as well as through the use of new techniques for population control and of the impacts of economic change on family size.

Education and health are considered from the point of view of teaching those habits which help maintain health, as well as in understanding the role of the family and the community in health care. Health and ecology are addressed through a discussion of the effects of pollutants and of trace elements both as hazards to health and as essential elements in nutrition.

In addition to the explicit discussion of the interrelationships between the elements of the constellation, many of

the symposia focus on the understanding of only one element at a time and others explore the needs for informed policy and the informed participation of our citizenry in formulating policy to render the *problematique* somewhat less problematical, in view of the high financial, political, and public-forbearance costs involved.

This need for an informed citizenry, as well as the techniques and problems involved in achieving that goal, is a leitmotif of the meeting program. From a lecture and a symposium concerned with the "demystification" of science to a whole series devoted to understanding the functions, methods, and results of science—from the development of the solar system to the quantitative methods of biology—science as a *human* enterprise is paraded before us for our understanding and our use, a use that requires our continuing assessment to ensure that these fruits of our highest imagination contribute to the resolution of the *problematique* and not to its further growth.

Of course, there is much more—in all 184 sessions with about 1000 speakers. Several thousand will attend, many united not only by a common interest in science and technology, but also by a deep belief in their role in dealing with our global problems. We urge you to come and participate in a like spirit.

—ARTHUR HERSCHMAN

Registration forms can be found in the 25 October issue of *Science*, pages 346 and 347.



Fish killed when sewage disposal sludge dykes broke at Lake Waubesa, 23 April 1970. [*The Capital Times*, Madison, Wis.]

* See David J. Rose, *Daedalus* 103 (3), 149 (summer 1974).