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What We Know and Don't Know

An embarrassing proportion of key decisions in the government, from the negotiation of treaties to the management of resources, are made on the basis of insufficient information and unproved assumptions. And this is not so different from the way we conduct our private affairs. We do not know what lies beyond the horizon, and science can only map the boundaries of our ignorance. But since science is in part responsible for some of the greatest ills that now beset us, there is a feeling that it can also help us effect their cure. The government has been acquiring scientific advisory bodies, and the belief that the public is entitled to its own counsel from an independent source is gaining adherents. One move to provide such counsel is to be found in the proposals offered recently by the AAAS Committee on Science in the Promotion of Human Welfare.

In the 8 July issue of this journal the committee speaks of bringing together appropriate technical experts to discuss certain problems, and of reporting the results of such deliberations to the scientific community. The results would also be reported to the general public, in a form not only digestible but palatable. The range of topics is broadly conceived, but some of the reports would analyze the benefits and hazards of scientific and technological advances and thus provide a basis for intelligent appraisal by scientist and layman. The committee does not explore in detail suitable problems for such analyses, but it does offer a few examples of what it has in mind. These range from the more specific, such as methods to prevent air pollution resulting from car exhaust, to the more general, such as the implications of the "new capabilities for direct control of social and economic processes" resulting from "progress in the science of cybernetics and the development of automation techniques."

An article on radioactive fallout which appeared early this year in the *New York Times* magazine was given the subtitle "What We Know and Don't Know." And perhaps reports analyzing the social effects of scientific developments might also appropriately be so subtitled. The relative proportion of material in the two categories would differ for different problems. For one problem, much might be known, and the needed research, once public interest was alerted to dangers, might consist only in finding the most economical method for manufacturing some device. For another problem, so little might be known that it would be difficult to state just how investigators would go about finding a scientific basis for possible public action.

The success of the projected program of analyses will depend in part on the care with which the first problems for study are selected. It goes without saying that a problem chosen for study should concern a matter of some urgency. But in the early stages of a new program, when there are no models to follow and it is important to gain widespread support, there is another factor to consider. A report with a solid amount of information to convey is going to be less difficult to prepare, and is going to impress the scientific community and the general public more favorably, than a report that must, out of ignorance, be an extended plea for more research.—J.T.