It is true that Government is getting a great deal of advice, and some information, from the legions of advisory bodies which it creates. I am much less clear on what happens to the advice or who is listening. I do know that very little of the advice from most Presidential advisory bodies ever seeps through to the President himself. Most of it is lost through evaporation, some leaks out on staff advisors to the President, and no one can say with certainty how much of it feeds into policy decisions.

In my experience, nothing was simpler than to set up an advisory group. It started wheels turning, it bought time, it was a surrogate for action, and it produced a kind of structural grandeur. It implied that someone was taking charge of the problem, and perhaps that things would work out. This is the way of governments.

—William D. Carey, former assistant director of the Bureau of the Budget, in Congressional testimony.
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Confidentiality

The existence of the national science advisory establishment is hardly a secret. Indeed, administration spokesmen never tire of reminding the public that their agencies have consulted with eminent experts on every issue a citizen could conceivably worry about. Whenever the public appears insufficiently impressed, a new advisory committee is appointed. The tremendous quantity of this advice and the quality of the advisors is even more visible to the scientific community, where virtually all scientists are aware of established colleagues, some of them quite eminent, who serve as government advisors. Very seldom, however, are outsiders able to catch a glimpse of the advice itself or to see how it relates to the actions taken by the government (i.e., executive-branch) officials who are its recipients.

By strongly enforced custom, the relationship between a science advisor and governmental advisee is confidential. The purpose of this confidentiality is to leave the government official free to accept or reject advice without political embarrassment. This is nice for the official, but it often leaves Congress and the public in the dark. Advisory reports prepared for administration officials are often the only authoritative assessments of relevant technical issues. If these are not available to Congress and the public, then policy making for technology is not subject to ordinary democratic safeguards. In fact, even the internal executive-branch decision-making process suffers because the same confidentiality which keeps important technical information from the public also makes it less accessible to other parts of the executive branch—even the President.

Advisory confidentiality often extends far beyond the requirements of military security or even the legal limits on governmental reticence specified in the Freedom of Information Act. Consequently political and legal pressure can, if exerted with enough persistence, eventually result in the release of important documents. Or the documents can be “leaked.” Such documents form the basis for the case studies presented in Chapters 4 through 7: the SST (again), the antiballistic missile (ABM) debate, the safety of defoliants, and the banning of cyclamates from food. In each of these cases, advice was disregarded and advisory reports were suppressed. The confidentiality of the advisory system allowed it to be used not merely to inform government officials but also to mislead Congress and the public.
**Advising or Legitimizing?**

Government officials are often under strong pressure to defend political and bureaucratic interests. They receive almost instantaneous feedback when their decisions appear to conflict with these interests, while the public interest has few spokesmen who can reach them even indirectly. The Watergate scandal has made it perfectly clear that government officials may sometimes find it expedient to respond to motivations other than the public interest. It is not surprising that officials should wish to use the advisory apparatus to hide their true motivations and give what are actually political decisions the appearance of being technical—i.e., political.

In spite of such propaganda, final decisions on these matters are of necessity always political. Science advisors can help to estimate the costs and benefits of proposed courses of action, but such analyses are usually not decisive. (In this respect the comprehensive SST reviews commissioned by President Nixon in early 1969, in which the "costs" overwhelmingly outweighed the benefits, were atypical.) The political process must determine the relative weight which is to be accorded to each "cost" and each benefit. There is no other way in which, for example, the time saved for the passengers in an airplane may be compared to the annoyance caused to those living near airports by the engine noise. In a democracy the political process should reflect as accurately as possible the informed preferences of the people who are going to have to live with the decisions. Insulating government officials from public accountability behind a shield of silent "experts" does not place policy above politics. It simply subjects it to the narrower political considerations that prevail within the administration.

If an administration spokesman wishes the outside world to believe that a policy was adopted for technical rather than political reasons, the fact that his agency has consulted some of the most eminent experts will tend to persuade government officials may sometimes find it expedient to respond to motivations other than the public interest. It is not surprising that officials should wish to use the advisory apparatus to hide their true motivations and give what are actually political decisions the appearance of being technical—i.e., political.

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If an administration spokesman wishes the outside world to believe that a policy was adopted for technical rather than political reasons, the fact that his agency has consulted some of the most eminent experts will tend to persuade Congress, the public, and even other government agencies to accept the policy. The mere existence of the advisory system can be used for this "legitimizing" function even when the decisions being defended fly in the face of the information and analyses the advisors have provided—as long as the advice itself is kept confidential.

The most frequent means by which the public is misled is through the incomplete statement. Typically, an administration spokesman says that his agency, after consulting the greatest authorities, has decided to do X. The spokesman neglects to mention, however, that the experts have given mostly reasons why X might be a bad idea. Concerned citizens cannot check what the experts actually said, because their reports are kept secret.

The case studies in Chapters 4 through 7 illustrate the spectrum of other devices by which the federal executive branch's science advisory system has been abused:

1. Officials can selectively make public only advisory committee reports that present positive terms in a cost-benefit calculation. This happened in connection with the noise suppressors for the SST. The government

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neglected to mention that their weight would be comparable to the total payload of the aircraft.

- Advisory committee reports that are made public may be so written that they are seriously misleading, at least to the press; and political and institutional pressures may prevent the issuance of a proper clarification. This happened with a National Academy of Sciences report on damage from SST sonic booms. (Both of these cases are discussed in Chapter 4.)

- Sometimes government spokesmen don't content themselves with half-truths; they simply lie. William Magruder's statement (quoted in the preceding chapter) that the scientific authorities who counseled the government had agreed that the SST will have no significant adverse environmental effects was a lie. Similar misrepresentations occurred in public statements about the effectiveness of the Safeguard ABM system. (This case is discussed in Chapter 5.)

- When the government has exclusive access to certain information about a public health hazard, it can simply suppress it instead of acting on it. This occurred in connection with the defoliant 2,4,5-T, which causes birth defects (Chapter 6).

- An advisory committee can be manipulated so that it adopts its advice to the political needs of the official being advised. This happened in the controversy that erupted after it was learned that cyclamates can cause cancer, when officials tried to allow cyclamate-sweetened foods to be sold as "nonprescription drugs" (Chapter 7).

These have been more controversial than most technical issues, but they do not appear to be unrepresentative of the manner in which the executive branch treats technical advice when major government or industrial interests are at stake. But even if these cases were unrepresentative, they would still be of sufficient importance in themselves to justify a reappraisal of the advisory system.

**Preventing Advisory Abuses**

In September 1972 Congress passed the Federal Advisory Committee Act, after several years of Congressional hearings on advisory committee abuses. The new law represented Congress's recognition of the importance of ensuring that advisory committees are not used to undermine the processes of democratic government. The net effect of this act is mainly to make explicit the applicability to advisory committees of the Freedom of Information Act. In accordance with the new law, many advisory committees that formerly met behind closed doors are now announcing their meetings and conducting at least part of their business in public. But unfortunately the same exemptions which have weakened the Freedom of Information Act also apply to the Advisory Committee Act. And the largest science advisory organization of all—the
National Academy of Sciences—appears to be entirely exempt from this law, along with all other advisory agencies that work on contract. (The impact of the Advisory Committee Act is discussed in more detail in Chapter 9).

Quite apart from the new law, individual science advisors have occasionally been willing to bring to public attention important information and analyses that they felt were being disregarded in the executive branch. For example, as we mentioned in Chapter 2, Richard Garwin acceded to several requests to appear before Congressional committees and give his views on the SST despite the fact that he had chaired President Nixon’s technical advisory committee on the SST. (Most Presidential advisors in Garwin’s position would have claimed Executive privilege and refused to testify.) A year earlier, in 1969, Garwin had taken it upon himself to write to every member of the Senate, and to meet privately with many Senators, in order to explain to them the technical and strategic defects of the proposed ABM system. During this same period, Garwin was a member of the elite President’s Science Advisory Committee (PSAC), having previously served on PSAC under Presidents Kennedy and Johnson and been reappointed to a second term by President Nixon. Despite the fact that all PSAC members except the chairman (the President’s science advisor) were prominent non-governmental scientists who devoted only a few days each month to their advisory duties, PSAC was expected to support the President and Dr. Garwin’s lack of “loyalty” to the Nixon administration reportedly angered key White House officials. They were presumably further displeased when the White House was forced by a suit under the Freedom of Information Act to release the long-suppressed report of Garwin’s SST advisory panel, which had recommended termination of Boeing’s contract.

Abolish Science Advisors?

Frustration with science advisors like Dr. Garwin was partially responsible for the Nixon administration’s decision in early 1973 to abolish the entire White House science advisory apparatus—PSAC, the Office of Science and Technology, even the position of Presidential science advisor. (The numerous lower-level science advisory committees were not directly affected.) The official explanation for this change was that outside science advice was no longer needed at the Presidential level, but could instead be provided through the various federal departments and agencies—in particular, the National Science Foundation. This argument of course ignores one of the principal rationales for setting up the Presidential science advisory system in the first place: the President’s need for technical analyses unbiased by bureaucratic self-interest.

Few scientists—even the most unreserved critics of the executive branch’s science advisory establishment—greeted the news of PSAC’s demise with rejoicing. The abuses of the advising system arise out of its political exploitation,

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and the White House appears to have abolished PSAC precisely because it was not exploitable enough. The political advantages expected from tactics such as public endorsement of the SST and ABM projects by President Nixon’s science advisors never materialized—or were offset by the activities of more independent advisors like Garwin.

The advisory system has legitimate informational and political functions to perform, and it is likely that some sort of Presidential science advisory structure will eventually be reestablished. What can it realistically be expected to accomplish? The goals and limitations of science advising in the executive branch are the subject of the following chapter.

References

2. The Freedom of Information Act [5 United States Code 552], which was enacted in 1967 after eleven years of studies and Congressional hearings, requires that all government documents be available for public inspection. Nine categories of documents are excepted, including national security secrets, trade secrets, personnel files, and “inter-agency or intra-agency memorandums or letters which would not be available by law to a party other than an agency in litigation with the agency.” Unfortunately, the Act specifies no penalties for delay, and executive branch agencies have frequently succeeded in withholding information from Congress and the public until it was no longer timely. We give several such examples in the chapters which follow.