

1. *Government agencies with important policy and regulatory missions generally tend to neglect their research missions, and agencies with small policy missions tend to overemphasize their research functions, at least in relative terms.*

Public managers are quite naturally inclined to put the emphasis on their policy mission if it is of any significance and to devote most of their attention and money to it rather than to their research mission, which is always risky and in any case not likely to yield practical results for several years. This natural psychological preference helps to explain why such federal agencies as the Department of National Health and Welfare, the Department of Finance, the Department of Transport, the Department of Indian and Northern Affairs, the Department of Justice, Central Mortgage and Housing Corporation, and the CBC, which all have important federal policy missions, have not developed their research operations. On the other hand, federal agencies responsible for academic research, atomic energy, and renewable and non-renewable resources generally have no important policy mission. Their natural tendency is to become research organizations and, like all other organizations, their basic objective is to expand and to grow.

Agencies in the first group tend to neglect their research mission, those in the second group to overemphasize that function. The result is a marked imbalance in the federal government's total science effort. Science activities are underdeveloped in sectors where the federal government has an important policy mission and over-expanded in sectors where it has little or none. Thus specific science policies as defined by individual government agencies tend to be seriously distorted in the wrong direction, and the whole system has an inherent bias against the topics of most direct interest to the federal government.

2. *In a system relying exclusively on specific and isolated policies the inevitable compartmentalization of the federal administration is itself another cause of gaps.*

It is obviously impossible to assign each problem requiring the attention of government exclusively to one agency. There will always be government-wide questions for which no single agency—or no agency at all—is responsible. Important problems of the post-industrial society, such as pollution, poverty, and urban congestion are in that category. Although the solution of these problems and the science activities connected with it may have a high priority for society and the government as a whole, they may be of only