COMMENTARY

THE PRICE OF BIGNESS

We are becoming concerned about a situation that can pose a serious problem for scientific research and development in proportion to the extent to which that situation exists. We refer to what might be termed the "awkward size".

Years ago all scientific endeavor was carried out on a very small scale—one man, with or without an assistant, working in his own laboratory, exchanging letters with contemporary scientists, but nevertheless operating virtually independently. In the last two or three decades one has grown accustomed to the idea of the opposite extreme, although the magnitude of that extreme continues to grow in a fascinating way. Research and development efforts that cost tens and hundreds of millions of dollars and require the coordinated efforts of a proportionately large number of people are now taken for granted.

However, as the two extremes move farther apart, we worry about the fate of the research and development efforts, the size of which lies somewhere in between the two extremes. It is not too difficult to perceive the emergence of a situation in which such efforts fail to receive financial support merely because they are of an awkward size and entirely without regard to the scientific merits of the work in question. For example, what happens to a proposal that is not expensive enough to constitute a "line item" in someone's budget and yet is too expensive to be lumped into some kind of miscellaneous category? Such work may very well be impossible to carry out except through the coordinated efforts of more than a couple of people and may, therefore, be of a size too large to be supported out of some general purpose fund. At the same time those who must approve its support may not consider that they can take the time to justify it simply because of the sheer contrast in the size of the request relative to projects that cost 100 to 1000 times as much. An unfavorable decision may be based on the nuisance involved in bothering with a comparatively small proposal and without regard for the true worth in terms of its relative increase in man's knowledge or benefits.

Thus, projects of an awkward size can be expected to die out from financial strangulation resulting from the realities of the problems of "practical administration". When this happens, one might be philosophical and argue that something had to give and that probably not all really worthwhile endeavors could be supported anyway. If this were the only criticism of such a situation, one might acquiesce on the theory that this may be as good a way as any to decide how our finite funds should be apportioned among the seemingly infinite number of worthwhile proposals.

However, unfortunately there is danger in the inherent corollary. This kind of situation promotes the idea that somehow bigness is to be equated with value. Think big. If it costs that much, it must be important. Ask for more than you need, and, if you get it, worry later about how to spend it all.

We hold it to be axiomatic that to the extent that this kind of notion is fostered, even if only subconsciously or unwittingly, and to the extent that more worthwhile but less spectacular efforts are terminated for what amounts to administrative convenience—to that extent science and our civilization, which depends on that science, are in serious trouble.

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