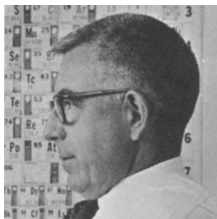




THE INDIVIDUAL'S ROLE IN A COMPLEX SOCIETY



Has our society become so complex that certain functions previously performed by individuals must now be performed by a team? If so, are we training team workers?

In this issue William A. Higinbotham, in his interesting review of Calder's *Unless Peace Comes*, states: "It is too much for any one person to comprehend the technical situation and possibilities, much less to understand all the political and human factors which relate to conflict and to conflict resolution and which are intertwined with the arms race."

At first that was frightening, especially considering the context. It reminded us of a question we had posed recently¹: "Do you get the feeling that man has lost control of 'the system' to an impersonal, automatic, and highly complex force that might be called simply 'civilization'?" That is to say, is civilization *per se* becoming a Frankenstein, and, if so, can we stop it?

However, reflection on Dr. Higinbotham's sentence reveals that it contains within itself an answer to the question it raises. To say that "it is too much for any one person to comprehend the technical situation" is not to say that loss of man's control is inevitable. It is not necessarily axiomatic that something too complex to be completely understood by a single individual is beyond control by a group of individuals with appropriately varied talents. If one accepts the premise that it is possible for an appropriately constituted group to control a situation that cannot be completely comprehended by any one individual,^a then at least two consequences immediately follow.

The first is that when an organizational unit has become too complex for any one individual to understand it completely, the individual leader should be replaced by a committee whose members collectively possess the requisite abilities. A committee, with an odd number of members and a periodically rotating chairmanship, need not be as cumbersome and unwieldy as the picture commonly evoked today by the mere mention of that word.

The second consequence is that if a collection of individuals with widely varying training and experience is going to be required to run organizations of the future, perhaps one of the most important functions of educational institutions will be to achieve and maintain a greater degree of interdisciplinary appreciation and cooperation than obtained 30 years ago. By this we don't mean that the nuclear physicist should be content to know some organic chemistry or that the biologist should pride himself on his mathematical skill. We mean that the physics major should be led to a real appreciation of psychology, the chemist should feel at home in sociology, and the mathematician should be able to converse intelligently with the law student, and vice versa. This, of course, is easier said than done, but it would be wishful thinking to expect an easy solution to so difficult a problem as that of promoting real understanding. Some will point out that in this day of necessary specialization, four years is already too short a time for a basic college education. Perhaps so. Perhaps even five years is too short for the kind of training we should give our young people.

Louis G. Stang, Jr.

REFERENCE

1. LOUIS G. STANG, Jr., "The System", *Nucl. Appl.*, 5, 2 (1968).

^aAcceptance of this premise implies assent to two prior premises: One is that true and proper control of something requires at some stage an understanding of the thing being controlled. The other is that human situations require some kind of human control. Both may be controversial, but fuller discussion is beyond the scope of this.