A Management Scientist's Unfashionable Concept of Change

However, in different ages and different cultures, human beings have tended to satisfy the need for heroism in different ways. It takes a great deal of vision and insight to see the connection between this need and apparently unrelated behavior.

by Sasan Rahmatian

It has become increasingly fashionable to dramatize the reality of societal change and our diminishing capability in coping with its accelerating pace. This change is often believed to follow a "life-cycle" pattern, notably in terms of the products we consume, the technologies we utilize, and the institutions with which we deal. These are perceived to be imbued with some kind of organic attribute, in the sense that they are "born", they "grow" and "mature", and they finally "die".

What is more interesting is that our ideas, concepts, and theories for dealing with the complexities of the world are themselves seen subject to such life-cycles. Concepts become fads and gain the status of "ideas in good currency" and ideas "whose time has come", only to mature and ultimately die—like anythng else governed by the dynamics of the "life-cycle" pattern. Similarly, techniques and methodologies rooted in those concepts—often christened by dazzling acronyms—become subject to these powerful forces. Yesterday MBO (Management By Objectives) was the fad, today it is PM (Participative Management), and tomorrow perhaps something else. Likewise, MIS (Management Information System) used to be fashionable but, ever since its premature death, DSS (Decision Support System) has been growing in popularity, and that too will undoubtable one day succumb to the claws of death!

In our fascination with change and its underlying pattern of "life-cycle", we seem to have forgotten that there are certain fundamental truths which are rooted in the very nature of the human condition. These principles and insights, both philosophical and practical at the same time, have guided ingenious human conduct for thousands of years. The kinds of change they have been subject to have had more to do with the refinement of their formulation than with their basic essence. For instance, Confucious—the great management scientist of the ancient world—said, "for one who has no objective, nothing is relevant". This is as pertinent today as it was two thousand years ago. In fact, it is perhaps more pertinent today than it was in the distant past, for it provides us with a profound guiding principle in coping with the increasing complexities of change. For instance, one immediate implication of the above statement would be that the so-called "objective facts" acquire relevance only in the light of the purposes we desire to pursue. Therefore, contrary to certain methodologies preached in textbooks, the effective problem-solver never starts solving problems by "gathering the facts" but by

determining his or her objectives.

Behind and beneath any change, there are layers of permanence which ought to be identified, acknowledged, and utilized constructively if we are to cope with that change intelligently. Specifically, the roots of permanence must be found in the human condition—a condition characterized by the human pursuit of ideals and by efforts aimed at approaching an ideal society. It has been argued (Ackoff, 1967) that four very general functions are required for the pursuit of the ideal society. First, the politico-economic function (the pursuit of plenty) which involves providing all individuals with instruments that are perfectly efficient in the pursuit of their objectives. Second, the techno-scientific fuction (the pursuit of truth) which involves developing the instruments, and identifying the means, by which objectives can be obtained with maximum efficiency. Third, the ethico-moral function (the pursuit of good) which involves removing conflict of objectives within individuals (i.e., producing peace of mind) and between individuals (i.e., producing peace among people). Finally the aesthetic function (the pursuit of beauty) which involves enabling every individual to enlarge the range of his objectives through the conceptualization of new desirable states.

From this fundamental scheme, we can derive a classification of the functions of our specific social institutions; and this amounts to exploring the basic human needs which characterize the human condition. For instance (Ackoff, 1972), the quest for plenty entails, among other things, the assurance of continued availability of a resource to an individual using that resource. The various types of enemies against whom these resources must be maintained are:

- Others in the same community. This gives rise to the need for legal and police institutions.
- Other communities. This gives rise to the need for military institutions.
- Accidental or natural damage. This gives rise to the need for accident prevention/damage minimization, such as fire departments, flood control agencies, and health departments. To the extent that damage is incurred, there is a need for retribution, which gives rise to the function of insurance.

The above framework suggests that, on a high level of abstraction, there do exist needs of a general, permanent, and even perennial nature. What, then is subject to change is *not* the existence of these needs, but the specific *ways* in which we go about fulfilling them, and the specific forms they take in different socio-cultural settings. These perennial needs sometimes take forms that are too subtle to be recognized at first glance. For instance, there has always been and there will always be, a need for heros and heroism which relates to the aesthetic function (which, it will be recalled, has to do with the conceptualization of new desirable states, thus enlarging the range of the feasible). However, in different ages and different cultures, human beings have tended to satisfy the need for heroism in different ways. It takes a great deal of vision and insight to see the connection between this need and apparently unrelated behavior. This point is brought home to us by Mitroff (1983) in a provocative discussion of archetypes and their role in shaping human behavior. He points out that modern computers, which usually symbolize impersonality, are a vehicle for the expression of archetypes deep within us.

> Archetypes are not dead, as by definition they could never be. They just crop up in the strangest of places. They are alive . . . and functioning on the computer. However, if this is the case, then it explains all too well the deep fascination and appeal such "games" have for "kids" of all ages. No wonder it is so easy to get hooked on video and computer games. The addicting quality is within all of us. As a result, it is impossible, in the extreme,

> to ban all such games. They will merely come back in another form. Indeed, if there is a serious and legitimate debate that deserved to be held, it should be over which *forms* of archetypes are acceptable to us as a society, not their ultimate restriction (Mitroff, 1983, p. 107).

Mitroff then turns explicitly to the archetypal myth of the hero:

> This archetype is so predominately featured in the current rash of movies that it would be almost impossible to list them all. A few of the ones that come most easily to mind are *Clash of the Titans, Excalibur, Star Trek, Star Wars,* and *Superman.* In every case, there is a central figure who typifies the primary features of the "myth or story of the hero". Indeed, this myth is one of the most stylized archetypes to which one can point (Mitroff, 1983, p. 109).

This is to illustrate that, again, what is subject to change is not so much the basic nature of human needs as the specific ways in which we go about fulfilling them.

What is more interesting is that, in some instances, even the specific ways in which we go about fulfilling these needs have remained unchanged. The following observations are offered by a prominent management scholar in his research on the realities of the manager's job:

> I was struck during my study by the fact that the executives I was observing—all very competent by any standard—are fundamentally indistinguishable from their counterparts of a hundred years ago (or a thousand years ago, for that matter). The information they need differs, but they seek it in the same way—by word of mouth. Their decisions concern modern technology, but the procedures they use to make them are the same as the procedures of the ninetheenth-century managers. Even the computers, so important for the specialized work of the organization, have apparently had no influence on the work procedures of general managers (Mintzberg, 1975, P. 54).

This was reported as recently as 1975. One would naturally expect that, with the tremendous flourishing of the minicomputer, things have changed a great deal since then, although it remains to be seen whether for the better or for the worse!

Human needs can be identified at different levels of generality, some more specific than others, and yet all general enough to serve as useful means of providing continuity in understanding human behavior. For instance, one of the most familiar of all perennial needs is the need for information. On a lower level of abstraction, this need translates into more specific perennial needs such as information generation, information processing, information reception, information analysis and information dissemination. On still lower levels of abstraction, each of these translates into even more specific perennial needs. For example, the need for information dissemination translates into still more concrete perennial needs such as the need for information dissemination techniques and the need for information dissemination tools. The photocopying machine, so popular today, *happens* to be only one form that information dissemination tools have taken in our society. This particular kind of tool did not exist fifty years ago and will probably become obsolete within the next fifty years. However, amidst all this variety and change, one thing has remained invariant, namely the perennial need for information and (even more specifically) for information dissemination tools. Products (i.e., need-satisfying tools) may be subject to life-cycle patterns; perennial human needs are not. And this brings us to a very important perennial need: the need for management science.

Management science is often viewed as a collection of mathematical tools and techniques that can aid the manager in making optimal decisions in rather structured situations. Underlying such loosely-connected techniques is a view of the world commonly known as the "systems ap-

proach". This approach is at one and the same time an approach to describing how things are, explaining why things are the way they are, formulating how things should be, and prescribing how to translate this vision of the desirable future into action.

Contrary to a common belief, there is very little new about this approach. Our failure to see the historic roots of the systems approach is just that: a failure of vision. We should abandon the logic according to which things are valuable because they are new, and replace it by the more common-sensical logic that things are valuable because they have been tested time and time again and have been found to really work. Contrary to the spirit of many television commercials to which we are exposed, "new" does not necessarily imply "better"; if anything, it implies "more risky". Likewise, the value of the systems approach does not lie in its being new, modern, and state-of-the-art. Commerce may thrive on the deliberate illusion that new—solely by virtue of being new—is *necessarily* superior to the old. Science, let us remind ourselves, is not commerce. But even in commerce, we are beginning to see a trend away from the new-therefore-better mentality in television commercials. For instance, a recent commercial emphasizes—and takes pride in—the fact that the product being advertised is not new and that is is not improved; for, by subtle implication, it has always been excellent. The message, of course, is that "we have not ceen fooling you all along!"

> When the systems approach first appeared in the literature, I had a great deal of difficulty understanding the concept; and my confusion increased until I started asking people this question: "What would an executive do differently if he were to adopt the systems approach in place of the traditional one?". . .
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> Without exception the replies I received made assumptions about the traditional approach that simply are not valid. For example, some assumed that the executive perceives his organization as static; others, that he fails to consider the interaction of related variables. In other words, the replies were predicated on an incompetent, even a stupid, executive.
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> . . . good managers follow the systems approach because this approach is merely the ancient art of management.
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> . . . The systems approach is precisely what every good manager has been using for centuries. The systems approach may be new to science and to weapons acquisition, but it is certainly not new to business administration (Dearden, 1972, p. 95)

The systems approach, therefore, stems not from the distinction between old and new management but between effective and ineffective management. To insist that the administrative issues/problems or our age are totally unique to us and that the managerial successes and failures of the past bear no useful lessons for us today would be an invitation to arrogance, blindness, and disaster. We need to go beyond the sham controversy of whether or not the systems approach is a modern invention, and post the fundemental question: Given that the systems approach and effective management are essentially synonymous, what are the elements common to both? In other words, what are the elements constituting the essence of the systems approach for the effective manager?

The systems approach must not be regarded as a fashionable idea because, in Santayana's words, "for an idea to be fashionable is ominous since it must afterwards be always old-fashioned." On the contrary, the systems approach must be regarded as a response to the most perennial of all perennial human needs, namely the need for effective problem-solving. No matter what need one desires to fulfill, one is always faced with the need of finding effective and efficient means of fulfilling it, i.e., the need for problem-solving. Let us help the systems approach—regardless of

the fashionable acronyms by which we choose to refer to it—not become "afterwards always old-fashioned." That way, we may even generate an unintended by-product: The suspicious practicioner's sense of confusion and awe giving way to a felling of trust and understanding.

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