The various schools of or approaches to management theory that I identified nearly two decades ago, and called “the management theory jungle,” are reconsidered. What is found now are eleven distinct approaches, compared to the original six, implying that the “jungle” may be getting more dense and impenetrable. However, certain developments are occurring which indicate that we may be moving more than people think toward a unified and practical theory of management.

Nearly two decades ago, I became impressed by the confusion among intelligent managers arising from the wide differences in findings and opinions among academic experts writing and doing research in the field of management. The summary of these findings I identified as “the management theory jungle” [Koontz, 1961]. Originally written to clarify for myself why obviously intelligent academic colleagues were coming up with such widely diverse conclusions and advice concerning management, my summary was published and widely referred to under this title. What I found was that the thinking of these scholars fell into six schools or approaches in their analysis of management. In some cases, it appeared that, like the proverbial blind men from Hindustan, some specialists were describing management only through the perceptions of their specialties.

Judging by its reception over the years, the article and the concept of the “jungle” must have filled a need. In fact, so many inquiries have been made over the intervening years as to whether we still have a “management theory jungle” that I now believe the “jungle” should be revisited and reexamined. What I now find is that, in place of the six specific schools identified in 1961, there are at least eleven approaches. Thus, the jungle appears to have become even more dense and impenetrable. But various developments are occurring that might in the future bring a coalescence of the various approaches and result in a more unified and useful theory of management.

The Original Management Theory Jungle

What I found nearly two decades ago was that well-meaning researchers and writers, mostly from academic halls, were attempting to explain the nature and knowledge of managing from six different points of view then referred to as “schools.” These were: (1) the management process school, (2) the empirical or “case” approach, (3) the human behavior school, (4) the social system school, (5) the decision theory school, and (6) the mathematics school.

These varying schools, or approaches (as they are better called), led to a jungle of confusing thought, theory, and advice to practicing managers. The major sources of entanglement in the jungle were often due to varying meanings given common words like “organization,” to differences in defining management as a body of knowledge, to widespread casting aside of the findings of early practicing managers as being “armchair” rather than what they were — the distilled experience and thought of perceptive men and women, to misunderstanding the nature and role of principles and theory, and to an inability or unwillingness of many “experts” to understand each other.

Although managing has been an important human task since the dawn of group effort, with few exceptions the serious attempt to develop a body of organized knowledge — science — underpinning practice has been a product of the present century.
Moreover, until the past quarter century almost all of the meaningful writing was the product of alert and perceptive practitioners — for example, French industrialist Henry Fayol, General Motors executive James Mooney, Johns-Manville vice-president Alvin Brown, British chocolate executive Oliver Sheldon, New Jersey Bell Telephone president Chester Barnard, and British management consultant Lyndall Urwick.

But the early absence of the academics from the field of management has been more than atoned for by the deluge of writing on management from our colleges and universities in the past 25 years. For example, there are now more than 100 (I can find 97 in my own library) different textbooks purporting to tell the reader — student or manager — what management is all about. And in related fields like psychology, sociology, system sciences, and mathematical modelling, the number of textbooks that can be used to teach some aspect — usually narrow — of management is at least as large.

The jungle has perhaps been made more impenetrable by the infiltration in our colleges and universities of many highly, but narrowly, trained instructors who are intelligent but know too little about the actual task of managing and the realities practicing managers face. In looking around the faculties of our business, management, and public administration schools, both undergraduate and graduate, practicing executives are impressed with the number of bright but inexperienced faculty members who are teaching management or some aspect of it. It seems to some like having professors in medical schools teaching surgery without ever having operated on a patient. As a result, many practicing managers are losing confidence in our colleges and universities and the kind of management taught.

It is certainly true that those who teach and write about basic operational management theory can use the findings and assistance of colleagues who are especially trained in psychology, sociology, mathematics, and operations research. But what dismays many is that some professors believe they are teaching management when they are only teaching these specialties.

What caused this? Basically two things. In the first place, the famous Ford Foundation (Gordon and Howell) and Carnegie Foundation (Pearson) reports in 1959 on our business school programs in American colleges and universities, authored and researched by scholars who were not trained in management, indicted the quality of business education in the United States and urged schools, including those that were already doing everything the researchers recommended, to adopt a broader and more social science approach to their curricula and faculty. As a result, many deans and other administrators went with great speed and vigor to recruit specialists in such fields as economics, mathematics, psychology, sociology, social psychology, and anthropology.

A second reason for the large number of faculty members trained in special fields, rather than in basic management theory and policy, is the fact that the rapid expansion of business and management schools occurred since 1960, during a period when there was an acute shortage of faculty candidates trained in management and with some managerial experience. This shortage was consequently filled by an increasing number of PhD's in the specialized fields noted above.

The Continuing Jungle

That the theory and science of management are far from being mature is apparent in the continuation of the management theory jungle. What has happened in the intervening years since 1961? The jungle still exists, and, in fact, there are nearly double the approaches to management that were identified nearly two decades ago. At the present time, a total of eleven approaches to the study of management science and theory may be identified. These are: (1) the empirical or case approach, (2) the interpersonal behavior approach, (3) the group behavior approach, (4) the cooperative social system approach, (5) the sociotechnical systems approach, (6) the decision theory approach, (7) the systems approach, (8) the mathematical or “management science” approach, (9) the contingency or situational approach, (10) the managerial roles approach, and (11) the operational theory approach.

Differences Between the Original and Present Jungle

What has caused this almost doubling of approaches to management theory and science? In the first place, one of the approaches found nearly two decades ago has been split into two. The original “human behavior school” has, in my judg-
ment, divided itself into the interpersonal behavior approach (psychology) and the group behavior approach (sociology and cultural anthropology). The original social systems approach is essentially the same, but because its proponents seem to rest more heavily on the theories of Chester Barnard, it now seems more accurate to refer to it as the cooperative social systems approach.

Remaining essentially the same since my original article are (1) the empirical or case approach, (2) the decision theory approach, and (3) the mathematical or “management science” approach. Likewise, what was originally termed the “management process school” is now referred to more accurately as the operational theory approach.

New approaches that have become popular in the past two decades include the sociotechnical systems approach. This was first given birth by the research and writings of Eric Trist and his associates in the Tavistock Institute in 1951, but did not get many followers to form a clear-cut approach until the late 1960s. Also, even though the systems approach to any science or practice is not new (it was recognized in the original jungle as the “social systems” approach), its scholarly and widespread approach to management theory really occurred in the 1960s, particularly with the work of Johnson, Kast, and Rosenzweig [1963].

The managerial roles approach has gained its identification and adherents as the result of the research and writing of Henry Mintzberg [1973, 1975], who prefers to call this approach the “work activity school.”

The contingency or situational approach to management theory and science is really an outgrowth of early classical, or operational, theory. Believing that most theory before the 1970s too often advocated the “one best way”, and often overlooking the fact that intelligent practicing managers have always tailored their practice to the actual situation, a fairly significant number of management scholars have begun building management theory and research around what should be done in various situations, or contingencies.

Many writers who have apparently not read the so-called classicists in management carefully have come up with the inaccurate shibboleth that classical writers were prescribing the “one best way.” It is true that Gilbreth in his study of bricklaying was searching for the one best way, but that was brick-laying and not managing. Fayol recognized this clearly when he said “principles are flexible and capable of adaptation to every need; it is a matter of knowing how to make use of them, which is a difficult art requiring intelligence, experience, decision, and proportion” [1949, p. 19].

The Current Approaches to Management Theory and Science

I hope the reader will realize that, in outlining the eleven approaches, I must necessarily be terse. Such conciseness may upset some adherents to the various approaches and some may even consider the treatment superficial, but space limitations make it necessary that most approaches be identified and commented on briefly.

The empirical or case approach The members of this school study management by analyzing experience, usually through cases. It is based on the premise that students and practitioners will understand the field of management and somehow come to know how to manage effectively by studying managerial successes and failures in various individual cases.

However, unless a study of experience is aimed at determining fundamentally why something happened or did not happen, it is likely to be a questionable and even dangerous approach to understanding management, because what happened or did not happen in the past is not likely to help in solving problems in a most certainly different future. If distillation of experience takes place with a view to finding basic generalizations, this approach can be a useful one to develop or support some principles and theory of management.

The interpersonal behavior approach This approach is apparently based on the thesis that managing involves getting things done through people, and that therefore the study of management should be centered on interpersonal relations. The writers and scholars in this school are heavily oriented to individual psychology and, indeed, most are trained as psychologists. Their focus is on the individual, and his or her motivations as a socio-psychological being. In this school are those who appear to emphasize human relations as an art that managers, even when foolishly trying to be amateur psychiatrists, can understand and practice. There are those who see the manager as a leader and
may even equate managership and leadership — thus, in effect, treating all “led” activities as “managed.” Others have concentrated on motivation or leadership and have cast important light on these subjects, which has been useful to managers.

That the study of human interactions, whether in the context of managing or elsewhere, is useful and important cannot be denied. But it can hardly be said that the field of interpersonal behavior encompasses all there is to management. It is entirely possible for all the managers of a company to understand psychology and its nuances and yet not be effective in managing. One major division of a large American company put their managers from top to bottom through sensitivity training (called by its critics “psychological striptease”) only to find that the managers had learned much about feelings but little about how to manage. Both research and practice are finding that we must go far beyond interpersonal relations to develop a useful science of management.

The group behavior approach This approach is closely related to the interpersonal behavior approach and may be confused with it. But it is concerned primarily with behavior of people in groups rather than with interpersonal behavior. It thus tends to rely on sociology, anthropology, and social psychology rather than on individual psychology. Its emphasis is on group behavior patterns. This approach varies all the way from the study of small groups, with their cultural and behavioral patterns, to the behavioral characteristics of large groups. It is often called a study of “organization behavior” and the term “organization” may be taken to mean the system, or pattern, of any set of group relationships in a company, a government agency, a hospital, or any other kind of undertaking. Sometimes the term is used as Chester Barnard employed it, meaning “the cooperation of two or more persons,” and “formal organization” as an organization with conscious, deliberate, joint purpose [1938, p. 65]. Chris Argyris has even used the term “organization” to include “all the behavior of all the participants” in a group undertaking [1957, p. 239].

It is not difficult to see that a practicing manager would not likely recognize that “organizations” cover such a broad area of group behavior patterns. At the same time, many of the problems of managers do arise from group behavior patterns, attitudes, desires, and prejudices, some of which come from the groups within an enterprise, but many come from the cultural environment of people outside of a given company, department, or agency. What is perhaps most disturbing about this school of thought is the tendency of its members to draw an artificial and inaccurate line between “organization behavior” and “managing.” Group behavior is an important aspect of management. But it is not all there is to management.

The cooperative social system approach A modification of the interpersonal and group behavior approaches has been the focus of some behavioral scientists on the study of human relationships as cooperative social systems. The idea of human relationships as social systems was early perceived by the Italian sociologist Vilfredo Pareto. His work apparently affected modern adherents to this school through his influence on Chester Barnard. In seeking to explain the work of executives, Barnard saw them operating in, and maintaining, cooperative social systems, which he referred to as “organizations” [1938, pp. 72-73]. He perceived social systems as the cooperative interaction of ideas, forces, desires, and thinking of two or more persons. An increasing number of writers have expanded this concept to apply to any system of cooperative and purposeful group interrelationships or behavior and have given it the rather general title of “organization theory.”

The cooperative social systems approach does have pertinence to the study and analysis of management. All managers do operate in a cooperative social system. But we do not find what is generally referred to as managers in all kinds of cooperative social systems. We would hardly think of a cooperative group of shoppers in a department store or an unorganized mob as being managed. Nor would we think of a family group gathering to celebrate a birthday as being managed. Therefore, we can conclude that this approach is broader than management while still overlooking many concepts, principles, and techniques that are important to managers.

The sociotechnical systems approach One of the newer schools of management identifies itself as the sociotechnical systems approach. This development is generally credited to E. L. Trist and his associates at the Tavistock Institute of England. In
studies made of production problems in long-wall coal mining, this group found that it was not enough merely to analyze social problems. Instead, in dealing with problems of mining productivity, they found that the technical system (machines and methods) had a strong influence on the social system. In other words, they discovered that personal attitudes and group behavior are strongly influenced by the technical system in which people work. It is therefore the position of this school of thought that social and technical systems must be considered together and that a major task of a manager is to make sure that these two systems are made harmonious.

Most of the work of this school has consequently concentrated on production, office operations, and other areas where the technical systems have a very close connection to people and their work. It therefore tends to be heavily oriented to industrial engineering. As an approach to management, this school has made some interesting contributions to managerial practice, even though it does not, as some of its proponents seem to believe, encompass all there is to management. Moreover, it is doubtful that any experienced manager would be surprised that the technology of the assembly line or the technology in railroad transportation or in oil companies affects individuals, groups, and their behavior patterns, the way operations are organized, and the techniques of managing required. Furthermore, as promising and helpful as this approach is in certain aspects of enterprise operations, it is safe to observe that there is much more to pertinent management knowledge than can be found in it.

The decision theory approach This approach to management theory and science has apparently been based on the belief that, because it is a major task of managers to make decisions, we should concentrate on decision making. It is not surprising that there are many scholars and theorists who believe that, because managing is characterized by decision making, the central focus of management theory should be decision making and that all of management thought can be built around it. This has a degree of reasonableness. However, it overlooks the fact that there is much more to managing than making decisions and that, for most managers, the actual making of a decision is a fairly easy thing — if goals are clear, if the environment in which the decision will operate can be fairly accurately anticipated, if adequate information is available, if the organization structure provides a clear understanding of responsibility for decisions, if competent people are available to make decisions, and if many of the other prerequisites of effective managing are present.

The systems approach During recent years, many scholars and writers in management have emphasized the systems approach to the study and analysis of management thought. They feel that this is the most effective means by which such thought can be organized, presented, and understood.

A system is essentially a set or assemblage of things interconnected, or interdependent, so as to form a complex unity. These things may be physical, as with the parts of an automobile engine; or they may be biological, as with components of the human body; or they may be theoretical, as with a well-integrated assemblage of concepts, principles, theory, and techniques in an area such as managing. All systems, except perhaps the universe, interact with and are influenced by their environments, although we define boundaries for them so that we can see and analyze them more clearly.

The long use of systems theory and analyses in physical and biological sciences has given rise to a considerable body of systems knowledge. It comes as no surprise that systems theory has been found helpfully applicable to management theory and science. Some of us have long emphasized an arbitrary boundary of management knowledge — the theory underlying the managerial job in terms of what managers do. This boundary is set for the field of management theory and science in order to make the subject "manageable," but this does not imply a closed systems approach to the subject. On the contrary, there are always many interactions with the system environment. Thus, when managers plan, they have no choice but to take into account such external variables as markets, technology, social forces, laws, and regulations. When managers design an organizational structure to provide an environment for performance, they cannot help but be influenced by the behavior patterns people bring to their jobs from the environment that is external to an enterprise.

Systems also play an important part within the area of managing itself. There are planning systems, organizational systems, and control systems. And, within these, we can perceive many sub-
systems, such as systems of delegation, network planning, and budgeting.

Intelligent and experienced practicing managers and many management writers with practical experience, accustomed as they are to seeing their problems and operations as a network of interrelated elements with daily interaction between environments inside or outside their companies or other enterprises, are often surprised to find that many writers regard the systems approach as something new. To be sure, conscious study of, and emphasis on, systems have forced many managers and scholars to consider more perceptively the various interacting elements affecting management theory and practice. But it can hardly be regarded as a new approach to scientific thought.

The mathematical or “management science” approach There are some theorists who see managing as primarily an exercise in mathematical processes, concepts, symbols, and models. Perhaps the most widely known of these are the operations researchers who have often given themselves the self-annointing title of “management scientists.” The primary focus of this approach is the mathematical model, since, through this device, problems — whether managerial or other — can be expressed in basic relationships and, where a given goal is sought, the model can be expressed in terms which optimize that goal. Because so much of the mathematical approach is applied to problems of optimization, it could be argued that it has a strong relationship to decision theory. But, of course, mathematical modelling sometimes goes beyond decision problems.

To be sure, the journal Management Science, published by the Institute of Management Sciences, carries on its cover the statement that the Institute has as its purpose to “identify, extend, and unify scientific knowledge pertaining to management.” But as judged by the articles published in this journal and the hundreds of papers presented by members of the Institute at its many meetings all over the world, the school seems to be almost completely preoccupied with mathematical models and elegance in simulating situations and in developing solutions to certain kinds of problems. Consequently, as many critics both inside and outside the ranks of the “management scientists” have observed, the narrow mathematical focus can hardly be called a complete approach to a true management science.

No one interested in any scientific field can overlook the great usefulness of mathematical models and analyses. But it is difficult to see mathematics as a school of management any more than it is a separate school of chemistry, physics, or biology. Mathematics and mathematical models are, of course, tools of analysis, not a school of thought.

The contingency or situational approach One of the approaches to management thought and practice that has tended to take management academicians by storm is the contingency approach to management. Essentially, this approach emphasizes the fact that what managers do in practice depends on a given set of circumstances — the situation. Contingency management is akin to situational management and the two terms are often used synonymously. Some scholars distinguish between the two on the basis that, while situational management merely implies that what managers do depends on a given situation, contingency management implies an active interrelationship between the variables in a situation and the managerial solution devised. Thus, under a contingency approach, managers might look at an assembly-line situation and conclude that a highly structured organization pattern would best fit and interact with it.

According to some scholars, contingency theory takes into account not only given situations but also the influence of given solutions on behavior patterns of an enterprise. For example, an organization structured along the lines of operating functions (such as finance, engineering, production, and marketing) might be most suitable for a given situation, but managers in such a structure should take into account the behavioral patterns that often arise because of group loyalties to the function rather than to a company.

By its very nature, managerial practice requires that managers take into account the realities of a given situation when they apply theory or techniques. It has never been and never will be the task of science and theory to prescribe what should be done in a given situation. Science and theory in management have not and do not advocate the “best way” to do things in every situation, any more than the sciences of astrophysics or mechanics tell an engineer how to design a single best instrument for all kinds of applications. How theory and science
are applied in practice naturally depends on the situation.

This is saying that there is science and there is art, that there is knowledge and there is practice. These are matters that any experienced manager has long known. One does not need much experience to understand that a corner grocery store could hardly be organized like General Motors, or that the technical realities of petroleum exploration, production, and refining make impracticable autonomously organized product divisions for gasoline, jet fuel, or lubricating oils.

The managerial roles approach Perhaps the newest approach to management theory to catch the attention of academics and practitioners alike is the managerial roles approach, popularized by Henry Mintzberg [1973, 1975]. Essentially this approach is to observe what managers actually do and from such observations come to conclusions as to what managerial activities (or roles) are. Although there have been researchers who have studied the actual work of managers, from chief executives to foremen, Mintzberg has given this approach sharp visibility.

By systematically studying the activities of five chief executives in a variety of organizations, Mintzberg came to the conclusion that executives do not act out the traditional classification of managerial functions — planning, organizing, coordinating, and controlling. Instead they do a variety of other activities.

From his research and the research of others who have studied what managers actually do, Mintzberg has come to the conclusion that managers act out a set of ten roles. These are:

A. Interpersonal Roles
   1. Figurehead (performing ceremonial and social duties as the organization’s representative)
   2. Leader
   3. Liaison (particularly with outsiders)

B. Informational Roles
   1. Monitor (receiving information about the operation of an enterprise)
   2. Disseminator (passing information to subordinates)
   3. Spokesperson (transmitting information outside the organization)

C. Decision Roles
   1. Entrepreneur
   2. Disturbance handler
   3. Resource allocator

4. Negotiator (dealing with various persons and groups of persons)

Mintzberg refers to the usual way of classifying managerial functions as “folklore.” As we will see in the following discussion on the operational theory approach, operational theorists have used such managerial functions as planning, organizing, staffing, leading, and controlling. For example, what is resource allocation but planning? Likewise, the entrepreneurial role is certainly an element of the whole area of planning. And the interpersonal roles are mainly aspects of leading. In addition, the informational roles can be fitted into a number of the functional areas.

Nevertheless, looking at what managers actually do can have considerable value. In analyzing activities, an effective manager might wish to compare these to the basic functions of managers and use the latter as a kind of pilot’s checklist to ascertain what actions are being overlooked. But the roles Mintzberg identifies appear to be inadequate. Where in them does one find such unquestionably important managerial activities as structuring organization, selecting and appraising managers, and determining major strategies? Omissions such as these can make one wonder whether the executives in his sample were effective managers. It certainly opens a serious question as to whether the managerial roles approach is an adequate one on which to base a practical theory of management.

The operational approach The operational approach to management theory and science, a term borrowed from the work of P. W. Bridgman [1938, pp. 2-32], attempts to draw together the pertinent knowledge of management by relating it to the functions of managers. Like other operational sciences, it endeavors to put together for the field of management the concepts, principles, theory, and techniques that underpin the actual practice of managing.

The operational approach to management recognizes that there is a central core of knowledge about managing that exists only in management: such matters as line and staff, departmentation, the limitations of the span of management, managerial appraisal, and various managerial control techniques involve concepts and theory found only where managing is involved. But, in addition, this approach is eclectic in that it draws on pertinent knowledge derived from other fields. These include
the clinical study of managerial activities, problems, and solutions; applications of systems theory; decision theory; motivation and leadership findings and theory; individual and group behavior theory; and the application of mathematical modeling and techniques. All these subjects are applicable to some extent to other fields of science, such as certain of the physical and geological sciences. But our interest in them must necessarily be limited to managerial aspects and applications.

The nature of the operational approach can perhaps best be appreciated by reference to Figure 1. As this diagram shows, the operational management school of thought includes a central core of science and theory unique to management plus knowledge eclectically drawn from various other schools and approaches. As the circle is intended to show, the operational approach is not interested in

Operational management science and theory is that part of the diagram enclosed in the circle. It shows how operational management science and theory has a core of basic science and theory and draws from other fields of knowledge pertaining to management. It is thus, in part, an eclectic science and theory.

**Figure 1**
The Scope of Operational Science and Theory
all the important knowledge in these various fields, but only that which is deemed to be most useful and relevant to managing.

The question of what managers do day by day and how they do it is secondary to what makes an acceptable and useful classification of knowledge. Organizing knowledge pertinent to managing is an indispensable first step in developing a useful theory and science of management. It makes possible the separation of science and techniques used in managing and those used in such nonmanagerial activities as marketing, accounting, manufacturing, and engineering. It permits us to look at the basic aspects of management that have a high degree of universality among different enterprises and different cultures. By using the functions of managers as a first step, a logical and useful start can be made in setting up pigeonholes for classifying management knowledge.

The functions some theorists (including me) have found to be useful and meaningful as this first step in classifying knowledge are:

1. Planning: selecting objectives and means of accomplishing them.
2. Organizing: designing an intentional structure of roles for people to fill.
3. Staffing: selecting, appraising, and developing people to effectively fill organizational roles.
4. Leading: taking actions to motivate people and help them see that contributing to group objectives is in their own interest.
5. Controlling: measuring and correcting activities of people to ensure that plans are being accomplished.

As a second step in organizing management knowledge, some of us have found it useful to ask basic questions in each functional area, such as:

1. What is the nature and purpose of each functional area?
2. What structural elements exist in each functional area?
3. What processes, techniques, and approaches are there in each functional area and what are the advantages and disadvantages of each?
4. What obstructions exist in effectively accomplishing each function?
5. How can these obstructions be removed?

Those who, like me, subscribe to the operational approach do so with the hope of developing and identifying a field of science and theory that has useful application to the practice of managing, and one that is not so broad as to encompass everything that might have any relationships, no matter how remote, to the managerial job. We realize that any field as complex as managing can never by isolated from its physical, technological, biological, or cultural environment. We also realize, however, that some partitioning of knowledge is necessary and some boundaries to this knowledge must be set if meaningful progress in summarizing and classifying pertinent knowledge is ever to be made. Yet, as in the case of all systems analyses where system boundaries are set, it must be kept in mind that there is no such thing as a totally closed system and that many environmental variables will intrude on and influence any system proposed.

The Management Theory Jungle: Promising Tendencies Toward Convergence of Theories

As can be seen from the brief discussions above of the schools and approaches to management theory and science, there is evidence that the management theory jungle continues to flourish and perhaps gets more dense, with nearly twice as many schools or approaches as were found nearly two decades ago. It is no wonder that a useful management theory and science has been so tardy in arriving. It is no wonder that we still do not have a clear notion of the scientific underpinnings of managing nor have we been able clearly to identify what we mean by competent managers.

The varying approaches, each with its own gurus, each with its own semantics, and each with a fierce pride to protect the concepts and techniques of the approach from attack or change, make the theory and science of management extremely difficult for the intelligent practitioner to understand and utilize. If the continuing jungle were only evidence of competing academic thought and research, it would not much matter. But when it retards the development of a useful theory and science and confuses practicing managers, the problem becomes serious. Effective managing at all levels and in all kinds of enterprises is too important to any society to allow it to fail through lack of available and understandable knowledge.

At the same time, there appears to be some reason to be optimistic, in that signs exist indicating tendencies for the various schools of thought to coalesce. Although the convergence is by no
means yet complete, there is reason to hope that, as scholars and writers become more familiar with what managers do and the situations in which they act, more and more of these schools or approaches will adopt, and even expand, the basic thinking and concepts of the operational school of management.

While acknowledging that these are only indications and signs along the road to a more unified and practical operational theory of management, and that there is much more of this road to travel, let us briefly examine some of these tendencies toward convergence.

**Greater Emphasis on Distillation of Basics within the Empirical Approach**

Within the many programs utilizing cases as a means of educating managers, there are indications that there now exists a much greater emphasis on distilling fundamentals than there was two decades ago. Likewise, in the field of business policy, by which term most of these case approaches have tended to be known, there has been increased emphasis in teaching and research toward going beyond recounting what happened in a given situation to analyzing the underlying causes and reasons for what happened. One major result of all this has been a new emphasis on strategy and strategic planning. This has been nowhere more noteworthy than at the Harvard Business School, which is regarded as the cradle of the case approach. This has led many empiricists to come up with distilled knowledge that fits neatly into the operational theorist’s classification of planning.

**Recognizing that Systems Theory Is Not a Separate Approach**

When systems theory was introduced into the management field some two decades ago, it was hailed by many as being a new way of analyzing and classifying management knowledge. But in recent years, as people have come to understand systems theory and the job of managing better, it has become increasingly clear that, in its essentials, there is little new about systems theory and that practicing managers as well as operational theorists had been using its basics (although not always the jargon) for a number of years. Nonetheless, as those in the field of operational management theory have more consciously and clearly employed the concepts and theory of systems, their attempts at developing a scientific field have been improved.

**Recognizing that the Contingency Approach Is Not a New or Separate Approach**

Although perceptive and intelligent managers and many management theorists have not been surprised by the realization, it is now clear that the contingency view is merely a way of distinguishing between science and art — knowledge and practice. As I pointed out earlier, these are two different things, albeit mutually complementary. Those writers and scholars who have emphasized contingency approaches have, to be sure, done the field of management theory and practice a great service by stressing that what the intelligent manager actually does depends on the realities of a situation. But this has long been true of the application of any science.

That contingency theory is really application in the light of a situation has been increasingly recognized, as is evidenced by a recent statement by one of its founders. Jay Lorsch recently admitted that the use of the term “contingency” was “misleading” [1977, pp. 2-14]. He appeared to recognize that an operational management theorist would necessarily become a situationalist when it came to applying management concepts, principles, and techniques.

**Finding that Organization Theory Is Too Broad an Approach**

Largely because of the influence of Chester Barnard and his broad concept of “organization” as almost any kind of interpersonal relationships, it has become customary, particularly in some academic circles, to use the term “organization theory” to refer to almost any kind of interpersonal relationships. Many scholars attempted to make this field equal to management theory, but it is now fairly well agreed that managing is a narrower activity and that management theory pertains only to theory related to managing. Management theory is often thought of as being a subset of organization theory and it is now fairly well agreed that the general concept of organization theory is too broad.

This sign offers hope of clearing away some of the underbrush of the jungle.

**The New Understanding of Motivation**

The more recent research into motivation of
people in organizational settings has tended to emphasize the importance of the organizational climate in curbing or arousing motives. The oversimplified explanations of motives by Maslow and Herzberg may identify human needs fairly well, but much more emphasis must be given to rewards and expectations of rewards. These, along with a climate that arouses and supports motivation, will depend to a very great extent on the nature of managing in an organization.

Litwin and Stringer [1968] found that the strength of such basic motives as needs for achievement, power, and affiliation, were definitely affected by the organizational climate. In a sample of 460 managers, they found a strong relationship between highly structured organizations and arousal of the need for power, and a negative relationship with the needs for achievement and affiliation. Likewise, in a climate with high responsibility and clear standards, they observed a strong positive relationship between this climate and achievement motivation, a moderate correlation to power motivation, and an unrelated to negatively related relationship with affiliation motivation.

The interaction between motivation and organizational climate not only underscores the systems aspects of motivation but also emphasizes how motivation depends on what managers do in setting and maintaining an environment for performance. These researches move the problem of motivation from a purely behavioral matter to one closely related to and dependent on what managers do. The theory of motivation, then, fits nicely into the operational approach to management theory and science.

The melding of motivation and leadership theory Another interesting sign that we may be moving toward a unified operational theory of management is the way that research and analysis have tended to meld motivation and leadership theory. Especially in recent years, leadership research and theory have tended to emphasize the rather elementary propositions that the job of leaders is to know and appeal to things that motivate people and to recognize the simple truth that people tend to follow those in whom they see a means of satisfying their own desires. Thus, explanations of leadership have been increasingly related to motivation.

This melding of motivation and leadership theories has also emphasized the importance of organization climate and styles of leaders. Most recent studies and theories tend to underscore the importance of effective managing in making managers effective leaders. Implied by most recent research and theory is the clear message that effective leaders design a system that takes into account the expectancies of subordinates, the variability of motives between individuals and from time to time, situational factors, the need for clarity of role definition, interpersonal relations, and types of rewards.

As can be readily seen, knowledgeable and effective managers do these things when they design a climate for performance, when goals and means of achieving them are planned, when organizational roles are defined and well structured, when roles are intelligently staffed, and when control techniques and information are designed to make self-control possible. In other words, leadership theory and research are, like motivation, fitting into the scheme of operational management theory, rather than going off as a separate branch of theory.

The New Managerially Oriented “Organization Development”

Both “organization development” and the field ordinarily referred to as “organization behavior” have grown out of the interpersonal and group behavior approaches to management. For a while, it seemed that these fields were far away and separate from operational management theory. Now many of these scientists are seeing that basic management theory and techniques, such as managing by objectives and clarifying organization structure, fit well into their programs of behavioral intervention.

A review of the latest organization behavior books indicates that some authors in this field are beginning to understand that behavioral elements in group operations must be more closely integrated with organizational structure design, staffing, planning, and control. This is a promising sign. It is a recognition that analysis of individual and group behavior, at least in managed situations, easily and logically falls into place in the scheme of operational management theory.

The Impact of Technology: Researching an Old Problem

That technology has an important impact on organizational structure, behavior patterns, and other
aspects of managing has been recognized by intelligent practitioners for many years. However, primarily among academic researchers, there has seemed to be in recent years a “discovery” that the impact of technology is important and real. To be sure, some of this research has been helpful to managers, especially that developed by the sociotechnical school of management. Also, while perceptive managers have known for many years that technology has important impacts, some of this research has tended to clarify and give special meaning to this impact.

The impact of technology is easily embraced by operational management theory and practice. And it should be. It is to be hoped that scholars and writers in the area of technological impacts will soon become familiar with operational management theory and incorporate their findings and ideas into that operational framework. At the very least, however, those who subscribe to the operational approach can incorporate the useful findings of those who emphasize the impact of technology.

Defections Among “Management Scientists”

It will be recalled that in the discussion of schools or approaches to management, one of them is identified as the mathematical or “management science” approach. The reader has also undoubtedly noted that “management science” was put in quotation marks; the reason for so doing is that this group does not really deal with a total science of management but rather largely with mathematical models, symbols, and elegance.

There are clear signs among the so-called management scientists that there are defectors who realize that their interests must go far beyond the use of mathematics, models, and the computer. These especially exist in the ranks of operations researchers in industry and government, where they are faced daily with practical management problems. A small but increasing number of academics are also coming to this realization. In fact, one of the leading and most respected academics, one widely regarded as a pioneer in operations research, C. West Churchman, has (in conversations with me) been highly critical of the excessive absorption with models and mathematics and, for this reason, has even resigned from the Operations Research Society.

There is no doubt that operations research and similar mathematical and modeling techniques fit nicely in the planning and controlling areas of operational management theory and science. Most operational management theorists recognize this. All that is really needed is for the trickle of “management science” defectors to become a torrent, moving their expertise and research more closely to a practical and useful management science.

Clarifying Semantics: Some Signs of Hope

One of the greatest obstacles to disentangling the jungle has long been, and still is, the problem of semantics. Those writing and lecturing on management and related fields have tended to use common terms in different ways. This is exemplified by the variety of meanings given to such terms as “organization,” “line and staff,” “authority,” “responsibility,” and “policies,” to mention a few. Although this semantics swamp still exists and we are a long way from general acceptance of meanings of key terms and concepts, there are some signs of hope on the horizon.

It has become common for the leading management texts to include a glossary of key terms and concepts and an increasing number of them are beginning to show some commonality of meaning. Of interest also is the fact that the Fellows of the International Academy of Management, composed of some 180 management scholars and leaders from 32 countries of the world, have responded to the demands of its members and have undertaken to develop a glossary of management concepts and terms, to be published in a number of languages and given wide circulation among many countries.

Although it is too early to be sure, it does appear that we may be moving in the direction necessary for the development of a science — the acceptance of clear definitions for key terms and concepts.

The Need for More Effort In Disentangling the Jungle

Despite some signs of hope, the fact is that the management theory jungle is still with us. Although some slight progress appears to be occurring, in the interest of a far better society through improved managerial practice it is to be hoped that some means can be found to accelerate this progress.

Perhaps the most effective way would be for leading managers to take a more active role in narrowing the widening gap that seems to exist
between professional practice and our college and university business, management, and public administration schools. They could be far more vocal and helpful in making certain that our colleges and universities do more than they have been in developing and teaching a theory and science of management useful to practicing managers. This is not to advocate making these schools vocational schools, especially since basic operational management theory and research are among the most demanding areas of knowledge in our society. Moreover, these schools are professional schools and their task must be to serve the professions for which they exist.

Most of our professional schools have advisory councils or boards composed of influential and intelligent top managers and other leading citizens. Instead of these boards spending their time, as most do, in passively receiving reports from deans and faculty members of the “new” things being done, these boards should find out more of what is going on in managerially related teaching and research and insist that some of these be moved toward a more useful operational science of management.

REFERENCES


Harold Koontz is Mead Johnson Professor of Management Emeritus, Graduate School of Management, University of California, Los Angeles, and Chancellor of the International Academy of Management.

Received 5/25/79